DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

33 CFR Part 328

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 120

[EPA–HQ–OW–2021–0602; FRL–6027.4–01–OW]

RIN 2040–AG19

Revised Definition of ''Waters of the United States''

AGENCY: Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) and the Department of the Army (''the agencies'') are finalizing a rule defining the scope of waters protected under the Clean Water Act. In developing this rule, the agencies considered 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.''

This final rule advances the objective of the Clean Water Act and ensures critical protections for the nation's vital water resources, which support public health, environmental protection, agricultural activity, and economic growth across the United States.

DATES: This action is effective on March 20, 2023.

ADDRESSES: The agencies have established a docket for this action under Docket ID No. EPA–HQ–OW–2021–0602. All documents in the docket are listed on the *https://www.regulations.gov/* website. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Whitney Beck, Oceans, Wetlands and Communities Division, Office of Water (4504–T), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: (202) 564–2281; email address: *CWAwotus@epa.gov,* and Stacey Jensen, Office of the Assistant Secretary of the Army for Civil Works, Department of the Army, 108 Army Pentagon, Washington, DC 20310–0104; telephone number: (703) 459–6026; email address: *usarmy.pentagon.hqda-asa-cw.mbx.asa-cw-reporting@army.mil.*

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Executive Summary

Congress enacted the Federal Water Pollution Control Act Amendments of 1972, Public Law 92–500, 86 Stat. 816, as amended, 33 U.S.C. 1251 *et seq.* (Clean Water Act or Act) ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'' 33 U.S.C. 1251(a). In doing so, Congress performed a ''total restructuring'' and ''complete rewriting'' of the then-existing statutory framework, designed to ''establish an all-encompassing program of water pollution regulation.'' *City of Milwaukee* v. *Illinois,* 451 U.S. 304, 317–18 (1981) (citation omitted). Congress thus intended the 1972 Act to be a bold step forward in providing protections for the nation's waters.

Central to the framework and protections provided by the Clean Water Act is the term ''navigable waters,'' [1] defined broadly in the Act as ''the waters of the United States, including the territorial seas.'' 33 U.S.C. 1362(7). This term is relevant to the scope of

[1] To avoid confusion between the term ''navigable waters'' as defined in the Clean Water Act and its implementing regulations, 33 U.S.C. 1362(7); 33 CFR 328.3 (2014), and the use of the term ''navigable waters'' to describe waters that are, have been, or could be used for interstate or foreign commerce, 33 CFR 328.3(a)(1) (2014), this preamble will refer to the latter as ''traditional navigable waters'' or waters that are ''navigable-in-fact.''

most Federal programs to protect water quality under the Clean Water Act—for example, water quality standards, permitting to address discharges of pollutants, including discharges of dredged or fill material, processes to address impaired waters, oil spill prevention, preparedness and response programs, and Tribal and State water quality certification programs—because the Clean Water Act uses the term ''navigable waters'' in establishing such programs.

As a unanimous Supreme Court concluded decades ago, Congress delegated a ''breadth of federal regulatory authority'' in the Clean Water Act and expected the Environmental Protection Agency (EPA) and the Department of the Army (''the agencies'') to tackle the ''inherent difficulties of defining precise bounds to regulable waters.'' *United States* v. *Riverside Bayview Homes,* 474 U.S. 121, 134 (1985) (''*Riverside Bayview*''). The Supreme Court noted that ''[f]aced with such a problem of defining the bounds of its regulatory authority, an agency may appropriately look to the legislative history and underlying policies of its statutory grants of authority.'' *Id.* at 132. The Court went on to state that ''[p]rotection of aquatic ecosystems, Congress recognized, demanded broad federal authority to control pollution, for '[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.' '' *Id.* at 132–33 (citations omitted). The Supreme Court has twice more addressed the complex issue of Clean Water Act jurisdiction over ''waters of the United States.'' *Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers,* 531 U.S. 159 (2001) (''*SWANCC*''); *Rapanos* v. *United States,* 547 U.S. 715 (2006) (''*Rapanos*'').

This rule takes up that multi-faceted challenge. In developing this rule, the agencies considered 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' experience includes more than a decade of implementing those regulations consistent with the Supreme Court's decisions in *Riverside Bayview, SWANCC,* and *Rapanos.* The agencies also considered the extensive public comments on the proposed rule.

This rule establishes limits that appropriately draw the boundary of waters subject to Federal protection. When upstream waters significantly affect the integrity of waters for which the Federal interest is indisputable—the traditional navigable waters, the territorial seas, and interstate waters—this rule ensures that Clean Water Act programs apply to protect those paragraph (a)(1) waters by including such upstream waters within the scope of the ''waters of the United States.'' Where waters do not significantly affect the integrity of waters for which the Federal interest is indisputable, this rule leaves regulation exclusively to the Tribes and States.[2] Additionally, it is important to note that the fact that a water is one of the ''waters of the United States'' does not mean that no activity can occur in that water; rather, it means that activities must comply with the Clean Water Act's permitting programs, and those programs include numerous statutory exemptions and regulatory exclusions.

EPA and the Corps have separate regulations defining the statutory term ''waters of the United States,'' but their interpretations were substantially similar and remained largely unchanged between 1977 and 2015. *See, e.g.,* 42 FR 37122, 37144 (July 19, 1977); 44 FR 32854, 32901 (June 7, 1979). This rule is founded on that familiar pre-2015 definition that has bounded the Clean Water Act's protections for decades, has been codified multiple times, and has been implemented by every administration in the last 45 years.[3] The pre-2015 regulations are commonly referred to as ''the 1986 regulations,'' and this preamble will refer to them as such, but the agencies note that ''the 1986 regulations'' have largely been in place since 1977 and were also amended in 1993 to add an exclusion.[4]

Since 2015, the agencies have finalized three rules revising the definition of ''waters of the United States.'' *See* 80 FR 37054 (June 29, 2015); 84 FR 56626 (October 22, 2019); 85 FR 22250 (April 21, 2020). The most recent rule, the 2020 ''Navigable Waters Protection Rule'' (''2020 NWPR''), substantially departed from prior rules defining ''waters of the United States.'' On January 20, 2021, President Biden signed Executive Order 13990, entitled ''Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,'' directing all executive departments and agencies to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions that conflict with national policies of science-based decision making in order to improve public health, protect our environment, and ensure access to clean air and water. 86 FR 7037 (published January 25, 2021, signed January 20, 2021). After completing a review of and reconsidering the record for the 2020 NWPR, on June 9, 2021, the agencies announced their intention to revise or replace the rule. The 2020 NWPR was subsequently vacated by two district courts, as discussed further below.

In this rule, consistent with the general framework of the 1986 regulations, the agencies interpret the term ''waters of the United States'' to include:

- traditional navigable waters, the territorial seas, and interstate waters (''paragraph (a)(1) waters'');
- impoundments of ''waters of the United States'' (''paragraph (a)(2) impoundments'');
- tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2)

[2] As explained in section IV.A.3.a.ii of this preamble, the agencies find it appropriate to assert Federal jurisdiction over waters meeting the relatively permanent standard in addition to waters meeting the significant nexus standard because—though the relatively permanent standard identifies only a subset of the ''waters of the United States''—it provides important efficiencies and additional clarity for regulators and the public by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters; *i.e.,* those waters for which the Federal interest is indisputable. 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.

[3] The Corps' 1977 regulations (42 FR 37122, 37144 (July 19, 1977)), though organized differently than their 1986 regulations, contained many of the same categories as those later regulations, and its definition of ''adjacent'' was identical to the definition promulgated in 1986. EPA's 1979 regulations (44 FR 32854, 32901 (June 7, 1979)) were substantially similar to the Corps' 1977 regulations and added for the first time an exclusion for waste treatment systems. In 1986 and 1988, the Corps and EPA, respectively, promulgated nearly identical definitions of ''waters of the United States.'' 51 FR 41206, 41217 (November 13, 1986); 53 FR 20764, 20765 (June 6, 1988). Besides the addition of an exclusion for prior converted cropland in 1993 (58 FR 45008, 45031 (August 25, 1993)), the agencies' regulations defining ''waters of the United States'' remained unchanged until the agencies finalized the 2015 Clean Water Rule (80 FR 37054, 37104 (June 29, 2015)). In 2019, the agencies repromulgated their pre-2015 regulations (84 FR 56626, 56667 (October 22, 2019)).

[4] For convenience, in this preamble the agencies will generally cite the Corps' longstanding regulations and will refer to them as ''the 1986 regulations,'' ''the pre-2015 regulations,'' or ''the regulations in place until 2015.'' These references are inclusive of EPA's comparable regulations that were recodified in 1988 and of the exclusion for prior converted cropland, which both agencies added in 1993.

impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard (''jurisdictional tributaries'');

- wetlands adjacent to paragraph (a)(1) waters, wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments, wetlands adjacent to tributaries that meet the relatively permanent standard, and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (''jurisdictional adjacent wetlands''); and
- intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) that meet either the relatively permanent standard or the significant nexus standard (''paragraph (a)(5) waters'').

The ''relatively permanent standard'' refers to the test to identify 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 traditional navigable waters, the territorial seas, or interstate waters. The ''significant nexus standard'' refers to the test to identify waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters—*i.e.,* the paragraph (a)(1) waters. The regulatory text defines ''significantly affect'' in order to increase the clarity and consistency of implementation of the significant nexus standard.

With respect to ''adjacent wetlands,'' the concept of adjacency and the significant nexus standard create separate, additive limitations that work together to ensure that such wetlands are covered (*i.e.,* jurisdictional under the Act) when they have the necessary relationship to other covered waters. The adjacency limitation focuses on the relationship between the wetland and the covered water to which it is adjacent. Consistent with the plain meaning of the term and the agencies' 45-year-old definition of ''adjacent,'' the rule requires that an ''adjacent wetland'' be ''bordering, contiguous, or neighboring'' to another covered water.[5] Where a wetland is adjacent to a traditional navigable water, the territorial seas, or an interstate water, consistent with longstanding regulations and practice, no further inquiry is required, and the wetland is jurisdictional. But where a wetland is adjacent to a covered water that is *not* a traditional navigable water, the territorial seas, or an interstate water, such as a tributary, this rule requires an additional showing for that adjacent wetland to be covered: the wetland must satisfy either the relatively permanent standard or the significant nexus standard. And that inquiry, under either standard, fundamentally concerns the adjacent wetland's relationship to the relevant paragraph (a)(1) water rather than the relationship between the adjacent wetland and the covered water to which it is adjacent. In other words, the adjacent wetland must have a continuous surface connection to a relatively permanent, standing or continuously flowing water connected to a paragraph (a)(1) water *or* must either alone or in combination with similarly situated waters significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water.

In addition, this rule codifies several exclusions from the definition of ''waters of the United States,'' including longstanding exclusions for prior converted cropland and waste treatment systems, and for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime.[6]

This rule advances the Clean Water Act's statutory objective as it is informed by the best available science concerning the functions provided by upstream tributaries, adjacent wetlands, as well as intrastate lakes and ponds, streams, and wetlands that do not fall within the other jurisdictional categories to restore and maintain the water quality of traditional navigable waters, the territorial seas, and interstate waters (*i.e.,* the paragraph (a)(1) waters). A comprehensive report prepared by EPA's Office of Research and Development entitled *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*[7] (hereinafter, ''Science Report'') in 2015 synthesized the peer-reviewed science. Since the release of the Science Report, additional published peer-reviewed scientific literature has strengthened and supplemented the report's conclusions. The *Technical Support Document for the Final Rule: Revised Definition of ''Waters of the United States''* (hereinafter, ''Technical Support Document'') provides additional scientific and technical information about issues raised in this rule.[8] [9]

The agencies' interpretation also reflects consideration of the statute as a whole, including both its objective in section 101(a) and its policies, such as that of section 101(b), which states in part that ''it is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, [and] to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.'' 33 U.S.C. 1251(b). The agencies find that the scope of Clean Water Act jurisdiction established in this final rule enhances States' ability to protect waters within their borders, such as by participating in the section 401 certification process and by providing input during the permitting process for out-of-state section 402 and 404 permits that may affect their waters. *See* 33 U.S.C. 1341, 1342(b), 1344(h)(1)(E). Indeed, in implementing and participating in the Clean Water Act's regulatory requirements and framework, States can have more powerful and holistic tools for addressing water quality than they would have in implementing state-only laws and regulations.

Further, this rule is 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 is appropriate to include in this rule because, while it

[5] The agencies have a longstanding, specific definition of ''adjacent,'' and section IV.C.6 of this preamble provides additional clarity by articulating the criteria the agencies have long used to interpret and implement that definition.

[6] The ''pre-2015 regulatory regime'' refers to the agencies' pre-2015 definition of ''waters of the United States,'' implemented consistent with relevant case law and longstanding practice, as informed by applicable guidance, training, and experience.

[7] U.S. Environmental Protection Agency, *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* (Final Report), EPA/600/R–14/475F (2015), *available at https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414.*

[8] Appendix A of the Technical Support Document contains a glossary of terms used in the document. Appendix B of the Technical Support Document contains the references cited in the document. Appendix C of the Technical Support Document is a list of citations that have been published since the Science Report and that contain findings relevant to the report's conclusions.

[9] Throughout this preamble, when the agencies refer to ''science,'' that means foundational principles related to chemical, physical, and biological integrity, including biology, hydrology, geology, chemistry, and soil science; the Science Report; and the Technical Support Document for this rule.

identifies only a subset of the ''waters of the United States,'' it also provides important efficiencies and additional clarity for regulators and the public by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. In addition, because this rule is founded upon a longstanding regulatory framework and reflects the agencies' experience and expertise, as well as updates in implementation tools and resources, it is generally familiar to the public and implementable. The clarifications in this rule, including the addition of exclusions that codify longstanding practice, and review of the advancements in implementation resources, tools, and scientific support (*see* section IV.G of this preamble) address many of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under the Clean Water Act.

By contrast, the agencies conclude that the 2020 NWPR, which substantially departed from prior rules defining ''waters of the United States,'' is incompatible with the objective of the Clean Water Act and inconsistent with the text of relevant provisions of the statute, the statute as a whole, relevant case law, and the best available science. The 2020 NWPR found jurisdiction primarily under the relatively permanent standard. The agencies have concluded that while the relatively permanent standard is administratively useful by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters, it is insufficient as the sole test for Clean Water Act jurisdiction. Sole reliance on the relatively permanent standard's extremely limited approach has no grounding in the Clean Water Act's text, structure, or history. Limiting determinations to that standard alone upends an understanding of the Clean Water Act's coverage that has prevailed for nearly half a century. The relatively permanent standard as the exclusive jurisdictional test would seriously compromise the Clean Water Act's comprehensive scheme by denying any protection to tributaries that are not relatively permanent and adjacent wetlands that do not have a continuous surface connection to other jurisdictional waters. The exclusion of these waters runs counter to the science demonstrating how such waters can affect the integrity of larger downstream waters, including traditional navigable waters, the territorial seas, and interstate waters. The agencies have concluded that the relatively permanent standard should still be included in the rule in conjunction with the significant nexus standard because the subset of waters that meet the relatively permanent standard will virtually always have the requisite connection [10] to traditional navigable waters, the territorial seas, or interstate waters to properly fall within the Clean Water Act's scope. The relatively permanent standard is also administratively useful as it more readily identifies a subset of waters that will virtually always significantly affect paragraph (a)(1) waters.

Following a Federal district court decision vacating the 2020 NWPR on August 30, 2021, the agencies halted implementation of the 2020 NWPR and began interpreting ''waters of the United States'' consistent with the pre-2015 regulatory regime.[11] For the reasons discussed more fully below, the agencies have decided that replacement of the 2020 NWPR is vital.

Through the rulemaking process, the agencies have considered all timely public comments on the proposed rule, including changes that improve the clarity, implementability, and durability of the definition. The regulations established in this rule are founded on the familiar framework of the 1986 regulations and are generally consistent with the pre-2015 regulatory regime. They are fully consistent with the statute, informed by relevant Supreme Court decisions, and reflect the record before the agencies, including consideration of the best available science, as well as the agencies' expertise and experience implementing the pre-2015 regulatory regime. In addition, this final rule increases clarity and implementability by streamlining and restructuring the 1986 regulations and providing implementation guidance informed by sound science, implementation tools including modern assessment tools, and other resources.

[10] Throughout this preamble, the agencies' reference to a ''connection'' to traditional navigable waters, the territorial seas, or interstate waters (when used without qualification such as ''continuous surface connection'' or an ''unbroken surface or shallow subsurface connection'') includes all the types of connections relevant to either the relatively permanent standard or the significant nexus standard: physical (including hydrological), chemical, biological, or functional relationships (including where the water retains floodwaters or pollutants that would otherwise flow to the traditional navigable water, the territorial seas, or an interstate water). *See* Technical Support Document section III. A ''requisite'' connection is one that satisfies either the relatively permanent or significant nexus standard.

[11] *See Pascua Yaqui Tribe* v. *EPA,* 557 F. Supp. 3d 949 (D. Ariz. 2021); U.S. EPA, *Current Implementation of Waters of the United States, https://www.epa.gov/wotus/current-implementation-waters-united-states;* U.S. Army Corps of Engineers, *Navigable Waters Protection Rule Vacatur* (published January 5, 2022), *https://www.usace.army.mil/Media/Announcements/Article/2888988/5-january-2022-navigable-waters-protection-rule-vacatur/.*

II. General Information

A. What action are the agencies taking?

In this action, the agencies are publishing a final rule defining ''waters of the United States'' in 33 CFR 328.3 and 40 CFR 120.2.

B. What is the agencies' authority for taking this action?

The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251 *et seq.,* including sections 301, 304, 311, 401, 402, 404, and 501.

C. What are the incremental costs and benefits of this action?

The agencies prepared the Economic Analysis for the Final ''Revised Definition of 'Waters of the United States' '' Rule (hereinafter, ''Economic Analysis for the Final Rule''), available in the rulemaking docket, for informational purposes to analyze the potential costs and benefits associated with this final action. This rule establishing the definition of ''waters of the United States'' does not by itself impose costs or benefits. Potential costs and benefits would only be incurred as a result of actions taken under existing Clean Water Act programs relying on the definition of ''waters of the United States'' (*i.e.,* sections 303, 311, 401, 402, and 404). The agencies analyze the potential costs and benefits against two baselines: the current status quo and the vacated 2020 NWPR. The findings of this analysis for the primary baseline of the current status quo conclude that there are *de minimis* costs and benefits associated with this rulemaking. The findings of this analysis for the secondary baseline of the 2020 NWPR conclude that within the ranges of indirect costs and benefits considered, benefits consistently outweigh the costs. The analysis is summarized in section V.A of this preamble.

III. Background

A. Legal Background

1. The Clean Water Act

Before passage of the Clean Water Act, the nation's waters were in ''serious trouble, thanks to years of neglect, ignorance, and public indifference.'' H.R. Rep. No. 911, 92d Cong., 2d Sess. at 66 (1972). Congress enacted the Federal Water Pollution Control Act Amendments of 1972, Public Law 92–500, 86 Stat. 816, as amended, 33 U.S.C. 1251 *et seq.,* with the objective ''to restore and maintain the chemical, physical and biological integrity of the

Nation's waters.'' 33 U.S.C. 1251(a). The Clean Water Act was intended to address longstanding concerns regarding the quality of the nation's waters and the Federal Government's ability to respond to those concerns under existing law. A centerpiece of that comprehensive framework is the term ''navigable waters,'' which the Clean Water Act broadly defines as ''the waters of the United States, including the territorial seas.'' 33 U.S.C. 1362(7). Waters satisfying that definition are often called ''covered'' or ''jurisdictional'' waters because the term ''navigable waters'' appears in most of the Clean Water Act's key programs, including those for water quality standards, oil-spill prevention, and permits regulating the discharge of pollutants.

a. History of the Clean Water Act

Prior to 1972, the Federal Government's authority to control and redress pollution in the nation's waters largely fell to the U.S. Army Corps of Engineers (Corps) under the Rivers and Harbors Act of 1899. While much of that statute focused on restricting obstructions to navigation on the nation's major waterways, section 13 of the statute made it unlawful to discharge refuse ''into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water.'' 33 U.S.C. 407. In 1948, Congress enacted the Federal Water Pollution Control Act of 1948, Public Law 80–845, 62 Stat. 1155 (June 30, 1948), to address interstate water pollution, and subsequently amended that statute in 1956, 1961, and 1965.[12] These early versions of the statute that eventually became known as the Clean Water Act encouraged the development of pollution abatement programs, required States to develop water quality standards, and authorized the Federal Government to bring enforcement actions to abate water pollution. However, Congress subsequently concluded these authorities proved inadequate to address the decline in the quality of the nation's waters. *See City of Milwaukee* v. *Illinois,* 451 U.S. 304, 310 (1981) (citing S. Rep. No. 92–414, p. 7 (1971)).

As a result, in 1972, Congress performed ''a 'total restructuring' and 'complete rewriting' of the existing'' statutory framework. *Id.* at 317 (quoting legislative history of 1972 amendments). The Clean Water Act, which was passed as an amendment to the Federal Water Pollution Control Act, was described by its supporters as the first truly comprehensive Federal water pollution legislation. The ''major purpose'' of the Clean Water Act was ''to establish a *comprehensive* long-range policy for the elimination of water pollution.'' S. Rep. No. 92–414, at 95 (1971), 2 Legislative History of the Water Pollution Control Act Amendments of 1972 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), Ser. No. 93–1, p. 1511 (1971) (emphasis added). ''No Congressman's remarks on the legislation were complete without reference to [its] 'comprehensive' nature.'' *City of Milwaukee,* 451 U.S. at 318. In passing the 1972 Act, 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; *see also Int'l Paper Co.* v. *Ouellette,* 479 U.S. 481, 486 n.6 (1987).

One of the Clean Water Act's principal tools to protect the integrity of the nation's waters is section 301(a), which generally prohibits ''the discharge of any pollutant by any person'' without a permit or other authorization under the Act. The terms ''discharge of a pollutant'' and ''discharge of pollutants'' are defined broadly to include ''any addition of any pollutant to navigable waters from any point source.'' 33 U.S.C. 1362(12). And ''navigable waters'' has a broad, specialized definition: ''the waters of the United States, including the territorial seas.'' *Id.* at 1362(7). Although Congress opted to carry over the term ''navigable waters'' from prior versions of the Federal Water Pollution Control Act, Congress broadened the definition of ''navigable waters'' to encompass all the ''waters of the United States.'' *Id.* The relevant House bill would have defined ''navigable waters'' as the ''navigable waters of the United States, including the territorial seas.'' H.R. Rep. No. 911, 92d Cong., 2d Sess. 356 (1972) (emphasis omitted). 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. 1236, 92d Cong., 2d Sess. 144 (1972). Further, the Senate Report stated that ''navigable waters'' means ''the navigable waters of the United States, portions thereof, *tributaries thereof,* and includes the Territorial Seas and the Great Lakes.'' S. Rep. No. 92–414, at 77 (1971), *as reprinted in* 1972 U.S.C.C.A.N. 3668, 3742–43 (emphasis added). The Senate Report accompanying the 1972 Act also explained that ''[w]ater moves in hydrologic cycles and it is essential that the discharge of pollutants be controlled at the source.'' *Id.*

In 1977, Congress substantially amended the Clean Water Act while leaving unchanged the 1972 definition of ''navigable waters.'' *See* Clean Water Act of 1977 (1977 Act), Public Law 95–217, 91 Stat. 1566. In the run-up to those amendments, Congress considered proposals to amend section 404, which requires a permit for discharges of dredged or fill material into ''waters of the United States,'' and debate on those proposals ''centered largely on the issue of wetlands preservation.'' *SWANCC,* 531 U.S. at 170 (citation omitted). The legislative proposal followed the Corps' 1975 rulemaking, which defined the scope of ''waters of the United States'' to cover all of the following waters, but phased Corps' regulation of discharges of dredged or fill material into these waters in three phases: first, into ''coastal waters and coastal wetlands contiguous or adjacent thereto or into inland navigable waters of the United States and freshwater wetlands contiguous or adjacent thereto;'' second, into ''primary tributaries, freshwater wetlands contiguous or adjacent to primary tributaries, and lakes;'' and third, ''into intrastate lakes, rivers and streams landward to their ordinary high water mark''. 40 FR 31320, 31324, 31326 (July 25, 1975); *see* section III.A.2 of this preamble *infra* for further discussion of the phased rulemaking through which the Corps established a definition of ''waters of the United States'' and the dates when the Corps began regulating activities under that definition. The House passed a bill that would have limited the waters and adjacent wetlands to which section 404 applies. H.R. 3199, 95th Cong., section 16 (1977). Many legislators objected, with one characterizing the proposed limitation as an ''open invitation'' to pollute other

[12] The 1948 Act was enacted ''in connection with the exercise of jurisdiction over the waterways of the Nation'' and focused specifically on the protection of water quality in interstate waters and tributaries of interstate waters. *See* Public Law 80–845, 62 Stat. 1155 (1948). Congress's 1956 amendments to the Act strengthened measures for controlling pollution of interstate waters and their tributaries. Public Law 84–660, 70 Stat. 498 (1956). In 1961, Congress amended the Act to substitute the term ''interstate or navigable waters'' for ''interstate waters.'' *See* Public Law 87–88, 75 Stat. 208 (1961). Accordingly, beginning in 1961, the Act's provisions applied to all interstate waters and navigable waters and to the tributaries of each. *See* 33 U.S.C. 466a, 466g(a) (1964). The 1965 amendments established the requirement that states develop water quality standards for interstate waters. Public Law 89–234, 79 Stat. 903, 908, 909 (1965).

wetlands. 123 Cong. Rec. 26,725 (1977) (statement of Sen. Hart); *see id.* at 26,714–26,716. The Senate ultimately rejected the proposal. *Id.* at 26,728; *cf.* S. Rep. No. 370, 95th Cong., 1st Sess. 10 (1977).

Congress instead modified the Clean Water Act in other respects. Rather than alter the geographic reach of section 404 in 1977, Congress amended the statute by exempting certain activities—for example, certain agricultural and silvicultural activities—from the permit requirements of section 404. *See* 33 U.S.C. 1344(f). The amendments also authorized the use of ''general permits'' to streamline the permitting process.[13] *See id.* at 1344(e). Finally, the 1977 Act established for the first time a mechanism by which a State, rather than the Corps, could assume responsibility to administer the section 404 permitting program. *Id.* at 1344(g)(1). In so doing, however, Congress limited States' potential jurisdiction to 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 shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, or mean higher high water mark on the west coast, including wetlands adjacent thereto.'' *Id.* The Corps retains jurisdiction to issue permits in those waters. *See* section IV.A.2.b for additional analysis of the Corps' regulations, the text of the 1977 amendments, and their legislative history for purposes of construing the scope of ''waters of the United States.''

b. Clean Water Act Programs

The term ''navigable waters'' is used in most of the key programs established by the Clean Water Act, including the section 402 National Pollutant Discharge Elimination System (NPDES) permit program; the section 404 permit program for dredged or fill material; the section 311 oil spill prevention, preparedness, and response program; [14] the water quality standards, impaired waters, and total maximum daily load programs under section 303; and the section 401 Tribal and State water quality certification process. While there is only one definition of ''waters of the United States'' for purposes of the Clean Water Act, there may be other statutory factors that define the reach of a particular Clean Water Act program or provision.[15]

EPA administers the Clean Water Act except as otherwise explicitly provided. 33 U.S.C. 1251(d). The United States Attorney General long ago determined that the ''ultimate administrative authority to determine the reach of the term 'navigable waters' for purposes of § 404'' resides with EPA. 43 Op. Att'y Gen. 197 (1979). The Act provides for the Federal Government to implement some Clean Water Act programs, and it gives direct grants of authority to authorized Tribes as well as States for implementation and enforcement of others. In some cases, the Act provides authorized Tribes and States the option to take on certain Clean Water Act programs.[16] Eligible Tribes or States implement the section 401 program and may request approval by EPA to administer a Clean Water Act section 402 or 404 program.[17] [18] Moreover, consistent with the Clean Water Act, Tribes and States retain authority to implement their own programs to protect the waters in their jurisdiction more broadly and more stringently than the Federal Government. Section 510 of the Clean Water Act provides that, unless expressly stated, nothing in the Clean Water Act precludes or denies the right of any Tribe or State to establish more protective standards or limits than the Clean Water Act.[19] For example, many Tribes and States regulate groundwater, and some others protect vital wetlands that may be outside the scope of the Clean Water Act.

In addition to section 301(a) which regulates discharges of pollutants to jurisdictional waters, many other provisions of the Clean Water Act operate based on the definition of ''waters of the United States.'' For example, under section 303, water quality standards and total maximum daily loads are not required under the Clean Water Act for waters that are not ''waters of the United States,'' and Tribes and States have no authority to provide certifications under section 401

[13] Whereas individual permits are issued directly to an individual discharger, a ''general permit'' may provide coverage for multiple dischargers. *See also* preamble section III.A.1.b for additional discussion of general permits.

[14] While Clean Water Act section 311 uses the phrase ''navigable waters of the United States,'' EPA has interpreted it to have the same breadth as the phrase ''navigable waters'' used elsewhere in section 311, and in other sections of the Clean Water Act. *See United States* v. *Texas Pipe Line Co.,* 611 F.2d 345, 347 (10th Cir. 1979); *United States* v. *Ashland Oil & Transp. Co.,* 504 F.2d 1317, 1324–25 (6th Cir. 1974). In 2002, EPA revised its regulations defining ''waters of the United States'' in 40 CFR part 112 to ensure that the rule's language was consistent with the regulatory language used in other Clean Water Act programs. Oil Pollution Prevention & Response; Non-Transportation-Related Onshore & Offshore Facilities, 67 FR 47042 (July 17, 2002). A district court vacated the rule for failure to comply with the Administrative Procedure Act and reinstated the prior regulatory language. *American Petroleum Ins.* v. *Johnson,* 541 F. Supp. 2d 165 (D.D.C. 2008). However, EPA interprets ''navigable waters of the United States'' in Clean Water Act section 311(b), in both the pre-2002 regulations and the 2002 rule, to have the same meaning as ''navigable waters'' in Clean Water Act section 502(7).

[15] For example, the Clean Water Act section 402 permit program regulates discharges of pollutants from ''point sources'' to ''navigable waters'' whether the pollutants reach jurisdictional waters directly or indirectly. *See Rapanos,* 547 U.S. at 743 (plurality); *see also County of Maui, Hawaii* v. *Hawaii Wildlife Fund,* 140 S. Ct. 1462, 1476 (2020) (holding that the statute also requires a permit ''when there is the functional equivalent of a direct discharge''). Section 402 also regulates ''any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.'' *See* 33 U.S.C. 1362(12). As another example, section 311 applies to ''discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act [43 U.S.C. 1331 *et seq.*] or the Deepwater Port Act of 1974 [33 U.S.C. 1501 *et seq.*], or which may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson-Stevens Fishery Conservation and Management Act [16 U.S.C. 1801 *et seq.*]).'' 33 U.S.C. 1321(b)(1).

[16] The Clean Water Act defines ''state'' as ''a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands.'' 33 U.S.C. 1362(3). Clean Water Act section 518(e), which is part of the 1987 amendments to the Act, authorizes EPA to treat eligible federally recognized Tribes in a similar manner as a State for implementing and managing certain environmental programs. 33 U.S.C. 1377(e).

[17] All States and 79 Tribes have authority to implement section 401 water quality certification programs. Currently 47 States and one territory have authority to administer all or portions of the section 402 NPDES program for ''waters of the United States.'' All States and 47 Tribes have established water quality standards pursuant to section 303 of the Clean Water Act, which form a legal basis for limitations on discharges of pollutants to ''waters of the United States.'' Three States are authorized to administer a section 404 program for certain waters in their boundaries.

[18] As noted in section III.A.1.a of this preamble, when a Tribe or State assumes a section 404 program, the Corps retains permitting authority over certain waters. The scope of Clean Water Act jurisdiction as defined by ''waters of the United States'' is distinct from the scope of waters over which the Corps retains authority following Tribal or State assumption of the section 404 program. Corps-retained waters are identified during approval of a Tribal or State section 404 program, and any modifications are approved through a formal EPA process. 40 CFR 233.36. This rule does not address the scope of Corps-retained waters, and nothing in this rule should affect the process for determining the scope of Corps-retained waters.

[19] Congress has provided for eligible Tribes to administer Clean Water Act programs over their reservations and expressed a preference for Tribal regulation of surface water quality on reservations to ensure compliance with the goals of the statute. *See* 33 U.S.C. 1377; 56 FR 64876, 64878–79 (December 12, 1991). In addition, Tribes may establish more protective standards or limits under Tribal law that may be more stringent than the Federal Clean Water Act. Where appropriate, references to States in this preamble may also include eligible Tribes.

with water quality conditions for a permit or license issued by a Federal agency for an activity that does not result in a discharge to ''waters of the United States.''

Under section 402 of the Clean Water Act, an NPDES permit is required where a point source discharges a pollutant to ''waters of the United States.'' [20] Clean Water Act section 404 requires a permit before dredged or fill material may be discharged to ''waters of the United States,'' with regulatory exemptions for certain farming, ranching, and forestry activities. No section 404 permits are required for discharging dredged or fill material into waters or features that are not ''waters of the United States.''

Section 303(c) of the Clean Water Act requires States to establish water quality standards for ''waters of the United States.'' States must periodically review their water quality standards and modify or adopt standards as required by the Clean Water Act or as otherwise appropriate. States must submit new or revised standards for EPA review. Water quality standards are the foundation for a wide range of programs under the Clean Water Act. They serve multiple purposes including establishing the water quality goals for a specific waterbody, or portion thereof, and providing the regulatory basis for establishing water quality-based effluent limits beyond the technology-based levels of treatment required by the Clean Water Act. Water quality standards also serve as a target for Clean Water Act restoration goals such as total maximum daily loads.

Under Clean Water Act section 303(d) and EPA's implementing regulations, States are required to assemble and evaluate all existing and readily available water quality-related data and information and to submit to EPA every two years a list of impaired waters that require total maximum daily loads. For waters identified on a 303(d) list, States establish total maximum daily loads for all pollutants preventing or expected to prevent attainment of water quality standards. Section 303(d) applies to ''waters of the United States.'' Non-jurisdictional waterbodies are not required to be assessed or otherwise identified as impaired. Total maximum daily load restoration plans likewise apply only to ''waters of the United States.''

Clean Water Act section 311 and the Oil Pollution Act (OPA) of 1990 authorize the Oil Spill Liability Trust Fund (OSLTF) to pay for or reimburse costs of assessing and responding to oil spills to ''waters of the United States'' or adjoining shorelines or the Exclusive Economic Zone.[21] The OSLTF allows an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities. The OSLTF can only reimburse Tribes or States for cleanup costs and damages to businesses and citizens (*e.g.,* lost wages and damages) for spills affecting waters subject to Clean Water Act jurisdiction. EPA also lacks authority under the Clean Water Act to take enforcement actions based on spills solely affecting waters not subject to Clean Water Act jurisdiction under section 311(b). Moreover, section 311's requirements for oil spill and prevention plans only apply to those facilities where there is a reasonable expectation that an oil discharge could reach a jurisdictional water or adjoining shoreline or the Exclusive Economic Zone.

The scope of facilities required to prepare oil spill prevention and response plans is also affected by the definition of ''waters of the United States.'' EPA-regulated oil storage facilities with storage capacities greater than 1,320 gallons (except farms) that have a reasonable expectation of an oil discharge to ''waters of the United States'' or adjoining shorelines [22] are required to prepare and implement spill prevention plans. High-risk oil storage facilities that meet certain higher storage thresholds and related harm factors are required to prepare and submit oil spill preparedness plans to EPA for review. The U.S. Coast Guard and Department of Transportation also require oil spill response plans under their respective authorities. However, section 311 spill prevention and preparedness plan requirements do not apply to a facility if there is no reasonable expectation that an oil discharge from that facility could reach a jurisdictional water or adjoining shoreline or the Exclusive Economic Zone.

Clean Water Act section 401 provides authorized Tribes and States an opportunity to address the proposed aquatic resource impacts of federally issued permits and licenses. The definition of ''waters of the United States'' affects where Federal permits and licenses are required and thus where section 401 certification applies. Section 401 prohibits Federal agencies from issuing permits or licenses for activities that may result in a discharge to ''waters of the United States'' until after the State or authorized Tribe where the discharge would originate has granted or waived water quality certification.

The fact that a resource meets the definition of ''waters of the United States'' does not mean that activities such as farming, construction, infrastructure development, or resource extraction cannot occur in or near the resource at hand. For example, the Clean Water Act exempts a number of activities from permitting or from the definition of ''point source,'' including agricultural storm water and irrigation return flows. *See* 33 U.S.C. 1342(*l*)(2), 1362(14). As discussed above, since 1977 the Clean Water Act in section 404(f) has exempted activities such as many ''normal farming, silviculture, and ranching activities'' from the section 404 permitting requirement, including seeding, harvesting, cultivating, planting, and soil and water conservation practices. *Id.* at 1344(f)(1). This rule does not affect these statutory exemptions.

In addition, permits are routinely issued under Clean Water Act sections 402 and 404 to authorize certain discharges to ''waters of the United States.'' Further, under both permitting programs, the agencies have established general permits for a wide variety of activities that have minimal impacts to waters. General permits provide dischargers with knowledge about applicable requirements before dischargers may obtain coverage under them. Furthermore, obtaining coverage under a general permit is typically quicker than obtaining coverage under an individual permit, with coverage under a general permit often occurring immediately (depending on how the permit is written) or after a short waiting period. The permitting authority [23] generally works with permit applicants to ensure that activities can occur without harming the integrity of the nation's waters. Thus, the permitting programs allow for discharges to ''waters of the United States'' to occur while also ensuring that those discharges meet statutory and regulatory requirements designed to protect water quality.

[20] The term ''point source'' is defined in Clean Water Act section 502(14) and 40 CFR 122.2 to include ''any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged.'' This definition specifically excludes return flows from irrigated agriculture and agricultural stormwater runoff. *See also supra* note 15 (discussing discharges of pollutants subject to the section 402 program).

[21] *See* 33 U.S.C. 1321(b) for the full jurisdictional scope of Clean Water Act section 311.

[22] *See supra* note 14.

[23] Generally, the permitting authority is either EPA or an authorized State for the NPDES program and either the Corps or an authorized State for the section 404 program. No eligible Tribes have authority to administer a Clean Water Act section 402 or section 404 program at this time.

In issuing section 404 permits, the Corps or authorized State works with the applicant to avoid, minimize, and compensate for any unavoidable impacts to ''waters of the United States.'' For most discharges that ''will cause only minimal adverse environmental effects,'' a general permit (*e.g.,* a ''nationwide'' permit) may be suitable. 33 U.S.C. 1344(e)(1). General permits are issued on a nationwide, regional, or State basis for particular categories of activities. While some general permits require the applicant to submit a pre-construction notification to the Corps or the State, others allow the applicant to proceed with no formal notification. The general permit process allows certain activities to proceed with little or no delay, provided the general or specific conditions for the general permit are met. For example, minor road construction activities, utility line backfill, and minor discharges for maintenance can be considered for a general permit, where the activity meets the threshold limits and only results in minimal impacts, individually and cumulatively. Tribes and States can also have a role in Corps section 404 permit decisions, through State Programmatic General Permits (SPGPs), Regional General Permits (RGPs), and water quality certification.

Property owners may obtain a jurisdictional determination from the Corps.[24] A jurisdictional determination is a written Corps document indicating whether a water is subject to regulatory jurisdiction under section 404 of the Clean Water Act (33 U.S.C. 1344) or under section 9 or 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 *et seq.*). Jurisdictional determinations are identified as either preliminary or approved. An approved jurisdictional determination (AJD) is ''a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel.'' 33 CFR 331.2. An approved jurisdictional determination is administratively appealable and is a final agency action subject to judicial review. *U.S. Army Corps of Engineers* v. *Hawkes Co., Inc.,* 578 U.S. 590 (2016). A preliminary jurisdictional determination (PJD) is a non-binding ''written indication that there may be waters of the United States on a parcel or indications of the approximate location(s) of waters of the United States on a parcel.'' 3 CFR 331.2. An applicant can elect to use a PJD to voluntarily waive or set aside questions regarding Clean Water Act jurisdiction over a particular site and thus move forward assuming all waters will be treated as jurisdictional without making a formal determination. The Corps does not charge a fee for these jurisdictional determinations. *See* 33 CFR 325.1 (omitting mention of fees for jurisdictional determinations); Regulatory Guidance Letter 16–01 (2016) (stating that such determinations are issued as a ''public service'').

2. The 1986 Regulations Defining ''Waters of the United States''

In 1973, EPA published regulations defining ''navigable waters'' to include traditional navigable waters; tributaries of traditional navigable waters; interstate waters; and intrastate lakes, rivers, and streams used in interstate commerce. 38 FR 13528, 13528–29 (May 22, 1973). The Corps published regulations in 1974 defining the term ''navigable waters'' for purposes of section 404 to mean ''those waters of the United States which are subject to the ebb and flow of the tide, and/or are presently, or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce.'' 39 FR 12115, 12119 (April 3, 1974); 33 CFR 209.120(d)(1) (1974); *see also* 33 CFR 209.260(e)(1) (1974) (explaining that ''[i]t is the water body's capability of use by the public for purposes of transportation or commerce which is the determinative factor'').[25]

Around the same time, several Federal courts found that limiting ''waters of the United States'' to those that are navigable-in-fact is an unduly restrictive reading of the Act. *See, e.g., United States* v. *Holland,* 373 F. Supp. 665, 670–676 (M.D. Fla. 1974) (''*Holland*''); *Natural Resources Defense Council, Inc.* v. *Callaway,* 392 F. Supp. 685, 686 (D.D.C. 1975) (''*Callaway*''). EPA and the House Committee on Government Operations agreed with the decision in *Holland*.[26] In *Callaway,* the court held that in the Clean Water Act, Congress had ''asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution. Accordingly, as used in the [Federal] Water [Pollution Control] Act, the term ['navigable waters'] is not limited to the traditional tests of navigability.'' The court ordered the Corps to publish new regulations ''clearly recognizing the full regulatory mandate of the [Federal] Water [Pollution Control] Act.'' *Callaway,* 392 F. Supp. at 686.

In response to the district court's order in *Callaway,* the Corps promulgated interim final regulations providing for a phased-in expansion of its section 404 jurisdiction. 40 FR 31320 (July 25, 1975); *see* 33 CFR 209.120(d)(2), (e)(2) (1976). The court required that the Corps put forth a new definition within a short timeframe. The regulatory phased-in approach was to ensure enough time for the Corps to build up their resources to implement the expanded jurisdiction and workload. Thus, the phases did not mean all of the waters in the final regulation were not ''waters of the United States,'' but rather established when the Corps would begin regulating activities within each type of jurisdictional water.[27] The interim regulations revised the definition of ''waters of the United States'' to include waters not covered by the other regulatory provisions. 33 CFR 209.120(d)(2)(i) (1976).[28] On July 19, 1977, the Corps published its final regulations, in which it revised the 1975 interim regulations to clarify many of

[24] When a Tribe, State, or territory is approved to administer the Clean Water Act section 404 program for certain waters, it is responsible for decisions on whether or not a section 404 permit is required.

[25] *See* Lance Wood, Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands, 34 Envtl. L. Rptr. (Envtl. L. Inst.) 10,187 (2004) (explaining history and limitations of the 1974 Corps regulation as an interpretation of the scope of the Clean Water Act).

[26] EPA expressed the view that ''the *Holland* decision provides a necessary step for the preservation of our limited wetland resources,'' and that ''the [*Holland*] court properly interpreted the jurisdiction granted under the [Clean Water Act] and Congressional power to make such a grant.'' *See* section 404 of the Federal Water Pollution Control Act Amendments of 1972: Hearings Before the Senate Comm. on Pub. Works, 94th Cong., 2d Sess. 349 (1976) (letter dated June 19, 1974, from Russell E. Train, Administrator of EPA, to Lt. Gen. W.C. Gribble, Jr., Chief of Corps of Engineers). Shortly thereafter, the House Committee on Government Operations discussed the disagreement between the two agencies (as reflected in EPA's June 19 letter) and concluded that the Corps should adopt the broader view of the term ''waters of the United States'' taken by EPA and by the court in *Holland. See* H.R. Rep. No. 1396, 93d Cong., 2d Sess. 23–27 (1974). The Committee urged the Corps to adopt a new definition that ''complies with the congressional mandate that this term be given the broadest possible constitutional interpretation.'' *Id.* at 27 (internal quotation marks omitted).

[27] *See* Wood, *supra* note 25.

[28] Phase I, which was immediately effective, included coastal waters and traditional inland navigable waters and their adjacent wetlands. 40 FR 31321, 31324, 31326 (July 25, 1975). Phase II, which took effect after July 1, 1976, extended the Corps' jurisdiction to lakes and certain tributaries of Phase I waters, as well as wetlands adjacent to the lakes and certain tributaries. *Id.* Phase III, which took effect after July 1, 1977, extended the Corps' jurisdiction to all remaining areas encompassed by the regulations, including ''intermittent rivers, streams, tributaries, and perched wetlands that are not contiguous or adjacent to navigable waters.'' *Id.* at 31325; *see also* 42 FR 37124 (July 19, 1977) (describing the three phases).

the definitional terms for purposes of section 404. 42 FR 37122 (July 19, 1977). The 1977 final regulations defined the term ''waters of the United States'' to include, *inter alia,* ''isolated wetlands and lakes, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of which could affect interstate commerce.'' 33 CFR 323.2(a)(5) (1978); *see also* 40 CFR 122.3 (1979).[29]

In 1986, the Corps consolidated and recodified its regulatory provisions defining ''waters of the United States'' for purposes of implementing the section 404 program. *See* 51 FR 41206, 41216–17 (November 13, 1986). These regulations reflected the interpretation of both agencies. While EPA and the Corps also have separate regulations defining the statutory term ''waters of the United States,'' their interpretations, reflected in the 1986 regulations, were identical and remained largely unchanged from 1977 to 2015. *See* 42 FR 37122, 37124, 37127 (July 19, 1977).[30] EPA's comparable regulations were recodified in 1988 (53 FR 20764 (June 6, 1988)), and both agencies added an exclusion for prior converted cropland in 1993 (58 FR 45008, 45031 (August 25, 1993)). For convenience, the agencies in this preamble will generally cite the Corps' longstanding regulations and will refer to ''the 1986 regulations'' as including EPA's comparable regulations and the 1993 addition of the exclusion for prior converted cropland.

The 1986 regulations define ''waters of the United States'' as follows (33 CFR 328.3 (2014)): [31]

(a) The term ''waters of the United States'' means:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. All interstate waters including interstate wetlands;

3. All 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 would or could affect interstate or foreign commerce including any such waters:

i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

iii. Which are used or could be used for industrial purposes by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States under this definition;

5. Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;

6. The territorial seas; and

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of Clean Water Act (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

See section I.B of the Economic Analysis for the Final Rule for a comparison of regulatory categories between the pre-2015 regulatory regime, the 2020 NWPR, and this rule.

3. U.S. Supreme Court Decisions

The U.S. Supreme Court first addressed the scope of ''waters of the United States'' protected by the Clean Water Act in *United States* v. *Riverside Bayview Homes,* 474 U.S. 121 (1985) (''*Riverside Bayview*''), which involved wetlands adjacent to a traditional navigable water in Michigan. In a unanimous opinion, the Court reversed the Sixth Circuit Court of Appeals and held that court had erred when it imposed a limitation requiring inundation or ''frequent flooding'' of wetlands by the adjacent body of water for the wetlands to be jurisdictional when such a limitation was required by neither the regulation nor the Clean Water Act. *Id.* at 129, 134. The Supreme Court then deferred to the Corps' judgment that adjacent wetlands ''that form the border of or are in reasonable proximity to'' other ''waters of the United States'' are ''inseparably bound up with the 'waters' of the United States,'' thus concluding that ''adjacent wetlands may be defined as waters under the Act.'' *Riverside Bayview,* 474 U.S. at 134. The Court observed that the objective of the Clean Water Act to restore the integrity of the nation's waters ''incorporated a broad, systemic view of the goal of maintaining and improving water quality . . . . Protection of aquatic ecosystems, Congress recognized, demanded broad federal authority to control pollution, for '[water] moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.' '' *Id.* at 132–33 (citing S. Rep. 92–414 (1972)). The Court then stated: ''In keeping with these views, Congress chose to define the waters covered by the Act broadly. Although the Act prohibits discharges into 'navigable waters,' see CWA [sections] 301(a), 404(a), 502(12), 33 U.S.C. [sections] 1311(a), 1344(a), 1362(12), the Act's definition of 'navigable waters' as 'the waters of the United States' makes it clear that the term 'navigable' as used in the Act is of limited import.'' *Id.* at 133.

The Court also recognized that ''[i]n determining the limits of its power to regulate discharges under the Act, the Corps must necessarily choose some point at which water ends and land begins. Our common experience tells us that this is often no easy task: the transition from water to solid ground is not necessarily or even typically an abrupt one. Rather, 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. Where on this continuum to find the limit of 'waters' is far from obvious.'' *Id.* at 132. The Court then 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

[29] An explanatory footnote published in the Code of Federal Regulations stated that this paragraph ''incorporates all other waters of the United States that could be regulated under the Federal government's Constitutional powers to regulate and protect interstate commerce.'' 33 CFR 323.2(a)(5), at 616 n.2 (1978).

[30] Multiple provisions in the Code of Federal Regulations contained the definition of the phrases ''waters of the United States'' and ''navigable waters'' for purposes of implementing the Clean Water Act, 33 U.S.C. 1362(7), and other water pollution protection statutes such as the Oil Pollution Act, 33 U.S.C. 2701(21). Some EPA definitions were added after 1986, but each conformed to the 1986 regulations except for variations in the waste treatment system exclusion. *See, e.g.,* 55 FR 8666 (March 8, 1990); 73 FR 71941 (November 26, 2008).

[31] There are some variations in the waste treatment system exclusion across EPA's regulations defining ''waters of the United States.'' The placement of the waste treatment system and prior converted cropland exclusions also varies in EPA's regulations.

wetlands may be defined as waters under the Act.'' *Id.* at 134. The Court further stated, ''[i]f 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. The Court expressly reserved the question of whether the Clean Water Act applies to ''wetlands that are not adjacent to open waters.'' *Id.* at 131 n.8.

The Supreme Court again addressed the issue of Clean Water Act jurisdiction over ''waters of the United States'' in *Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers,* 531 U.S. 159 (2001) (''*SWANCC*''). A 5–4 Court in *SWANCC* held that the use of ''nonnavigable, isolated, intrastate waters'' by migratory birds was not by itself a sufficient basis for the exercise of Federal authority under the Clean Water Act. *SWANCC,* 531 U.S. at 172. The Court noted that in *Riverside Bayview,* it had ''found that Congress' concern for the protection of water quality and aquatic ecosystems indicated its intent to regulate wetlands 'inseparably bound up with the ''waters'' of the United States''' and that ''[i]t was the significant nexus between the wetlands and 'navigable waters' that informed [the Court's] reading of the Clean Water Act'' in that case. *Id.* at 167.

While recognizing that *Riverside Bayview* had found the term ''navigable'' to be of limited import, the Court in *SWANCC* noted that the term ''navigable'' could not be read entirely out of the Act. *Id.* at 172 (''We said in *Riverside Bayview Homes* that the word 'navigable' in the statute was of 'limited import' and went on to hold that [section] 404(a) extended to non-navigable wetlands adjacent to open waters. But it is one thing to give a word limited effect and quite another to give it no effect whatever. The term 'navigable' has at least the import of showing us 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.'' (citations omitted)).

The Corps asserted authority in this instance based on an interpretation of the regulations (known as the ''Migratory Bird Rule'') that waters used as habitat for migratory birds were jurisdictional. The Court found that the exercise of Clean Water Act regulatory authority over discharges into the ponds based on their use by migratory birds raised ''significant constitutional questions.'' *Id.* at 173. The Court explained that ''[w]here an administrative interpretation of a statute invokes the outer limits of Congress' power, we expect a clear indication that Congress intended that result.'' *Id.* at 172. This is particularly true ''where the administrative interpretation alters the federal-state framework by permitting federal encroachment upon a traditional state power.'' *Id.* at 173 (citing *United States* v. *Bass,* 404 U.S. 336, 349 (1971)). The Court concluded that ''the 'Migratory Bird Rule' is not fairly supported by the CWA.'' *Id.* at 167.

Five years after *SWANCC,* the Court again addressed the Clean Water Act term ''waters of the United States'' in *Rapanos* v. *United States,* 547 U.S. 715 (2006) (''*Rapanos*''). *Rapanos* involved two consolidated cases in which the Clean Water Act had been applied to wetlands adjacent to tributaries, that are not themselves navigable-in-fact, of traditional navigable waters. Although the Court remanded the Court of Appeals' finding of Clean Water Act jurisdiction, the plurality opinion and Justice Kennedy's concurrence disagreed on the proper test to apply. Despite this disagreement, all nine members of the Court agreed that the term ''waters of the United States'' encompasses some waters that are not navigable in the traditional sense. *Id.* at 731 (Scalia, J., plurality opinion) (''We have twice stated that the meaning of 'navigable waters' in the Act is broader than the traditional understanding of that term, *SWANCC,* 531 U.S. at 167, 121 S. Ct. 675, 148 L. Ed. 2d 576; *Riverside Bayview,* 474 U.S. at 133, 106 S. Ct. 455, 88 L. Ed. 2d 419.'').

A four-Justice plurality in *Rapanos* interpreted the term ''waters of the United States'' as covering ''relatively permanent, standing or continuously flowing bodies of water,'' *id.* at 739, that are connected to traditional navigable waters, *id.* at 742, as well as wetlands with a ''continuous surface connection'' to such waterbodies, *id.* (Scalia, J., plurality opinion). The *Rapanos* plurality noted that its reference to ''relatively permanent'' waters did ''not necessarily exclude streams, rivers, or lakes 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.'' *Id.* at 732 n.5 (emphasis in original).

Justice Kennedy's concurring opinion took a different approach, concluding that ''to constitute '' 'navigable waters' '' under the Act, a water or wetland must possess a 'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made.'' *Id.* at 759 (citing *SWANCC,* 531 U.S. at 167, 172); *see also id.* at 774 (''As *Riverside Bayview* recognizes, the Corps' adjacency standard is reasonable in some of its applications. Indeed, the Corps' view draws support from the structure of the Act.''). He concluded that wetlands possess the requisite significant nexus if the wetlands ''either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' '' *Id.* at 780. Justice Kennedy's opinion noted that to be jurisdictional, such a relationship with traditional navigable waters must be more than ''speculative or insubstantial.'' *Id.*

The four dissenting Justices in *Rapanos,* who would have affirmed the Court of Appeals' application of the agencies' regulation to find jurisdiction over the waters at issue, also concluded that the term ''waters of the United States'' encompasses, *inter alia,* all tributaries and wetlands that satisfy ''either the plurality's or Justice Kennedy's test'' and that in ''future cases the United States may elect to prove jurisdiction under either test.'' *Id.* at 810 & n.14 (Stevens, J., dissenting). The four dissenting Justices stated: ''The Army Corps has determined that wetlands adjacent to tributaries of traditionally navigable waters preserve the quality of our Nation's waters by, among other things, providing habitat for aquatic animals, keeping excessive sediment and toxic pollutants out of adjacent waters, and reducing downstream flooding by absorbing water at times of high flow. The Corps' resulting decision to treat these wetlands as encompassed within the term 'waters of the United States' is a quintessential example of the Executive's reasonable interpretation of a statutory provision.'' *Id.* at 788 (citation omitted).

In addition to joining the plurality opinion, Chief Justice Roberts issued his own concurring opinion noting that the agencies ''are afforded generous leeway by the courts in interpreting the statute they are entrusted to administer,'' and the agencies thus have ''plenty of room to operate in developing *some* notion of an outer bound to the reach of their authority'' under the Clean Water Act. *Id.* at 758 (emphasis in original). The Chief Justice observed that the Court's division over the proper standard ''could have been avoided'' had the agencies conducted rulemaking more clearly defining ''its authority to regulate wetlands.'' *Id.*

4. Post-*Rapanos* Appellate Court Decisions

The earliest post-*Rapanos* decisions by the United States Courts of Appeals focused on which standard to apply in interpreting the scope of ''waters of the United States''—the plurality's or Justice Kennedy's. Chief Justice Roberts anticipated this question and cited *Marks* v. *United States,* 430 U.S. 188 (1977) in his concurring opinion to *Rapanos* as applicable precedent. *Marks* v. *United States* provides that ''[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, 'the holding of the Court may be viewed as the position taken by those Members who concurred in the judgments on the narrowest grounds.' '' *Marks,* 430 U.S. at 193 (quoting *Gregg* v. *Georgia,* 428 U.S. 153, 169 n.15 (1976)). The dissenting Justices in *Rapanos* also spoke to future application of the divided decision. While Justice Stevens stated that he assumed Justice Kennedy's significant nexus standard would apply in most instances, the dissenting Justices noted that they would find the Clean Water Act extended to waters meeting either the relatively permanent standard articulated by Justice Scalia or the significant nexus standard described by Justice Kennedy. *Rapanos,* 547 U.S. at 810 & n.14 (Stevens, J., dissenting).

Since *Rapanos,* every Court of Appeals to have considered the question has determined that the government may exercise Clean Water Act jurisdiction over at least those waters that satisfy the significant nexus standard set forth in Justice Kennedy's concurrence. None has held that the plurality's relatively permanent standard is the sole basis that may be used to establish jurisdiction. *Precon Dev. Corp.* v. *U.S. Army Corps of Eng'rs,* 633 F.3d 278 (4th Cir. 2011); *see also United States* v. *Donovan,* 661 F.3d 174 (3d Cir. 2011); *United States* v. *Bailey,* 571 F.3d 791 (8th Cir. 2009); *United States* v. *Cundiff,* 555 F.3d 200 (6th Cir. 2009); *United States* v. *Lucas,* 516 F.3d 316 (5th Cir. 2008); *N. Cal. River Watch* v. *City of Healdsburg,* 496 F.3d 993 (9th Cir. 2007) (superseding the original opinion published at 457 F.3d 1023 (9th Cir. 2006)); *United States* v. *Johnson,* 467 F.3d 56 (1st Cir. 2006); *United States* v. *Gerke Excavating, Inc.,* 464 F.3d 723 (7th Cir. 2006). Some Courts of Appeals have held that the government may establish jurisdiction under either standard. *See, e.g., United States* v. *Johnson,* 467 F.3d 56, 62–64 (1st Cir. 2006); *United States* v. *Bailey,* 571 F.3d 791, 799 (8th Cir. 2009). The Eleventh Circuit has held that only Justice Kennedy's significant nexus standard applies. *United States* v. *Robison,* 505 F.3d 1208 (11th Cir. 2007).

5. Post-*Rapanos* Implementation of the 1986 Regulations

For nearly a decade after *Rapanos,* the agencies did not revise their regulations but instead determined jurisdiction under the 1986 regulations consistent with the two standards established in *Rapanos*—the plurality's relatively permanent standard and Justice Kennedy's significant nexus standard—informed by guidance issued jointly by the agencies. *See* U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos* v. *United States & Carabell v. United States* (June 5, 2007), superseded December 2, 2008 (the ''*Rapanos* Guidance'').

In the *Rapanos* Guidance,[32] the agencies concluded that Clean Water Act jurisdiction exists if a water meets either the relatively permanent standard or the significant nexus standard. The agencies' assertion of jurisdiction over traditional navigable waters and their adjacent wetlands remained unchanged by *Rapanos.* Under the relatively permanent standard, the guidance stated that the agencies would assert jurisdiction over: non-navigable tributaries of traditional navigable waters that typically flow year-round or have continuous flow at least seasonally; and wetlands that directly abut such tributaries. *Rapanos* Guidance at 4–7. The guidance stated that the agencies would determine jurisdiction under the significant nexus standard for the following waters: non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary. *Id.* at 8–12. Under the guidance, the agencies generally did not assert jurisdiction over swales or erosional features (*e.g.,* gullies and small washes characterized by low volume or infrequent or short duration flow) or ditches (including roadside ditches) excavated wholly in and draining only uplands and that did not carry a relatively permanent flow of water. *Id.* at 11–12.

B. The Agencies' Post-Rapanos Rules

Since 2015, EPA and the Army have finalized three rules revising the definition of ''waters of the United States.''

1. The 2015 Clean Water Rule

On June 29, 2015, EPA and the Army published the ''Clean Water Rule: Definition of 'Waters of the United States,''' 80 FR 37054 (June 29, 2015) (the ''2015 Clean Water Rule''). The 2015 Clean Water Rule's definition of ''waters of the United States'' established three categories: (A) waters that are categorically ''jurisdictional by rule'' (without the need for additional analysis); (B) waters that are subject to case-specific analysis to determine whether they are jurisdictional; and (C) waters that are categorically excluded from jurisdiction. *Id.* at 37054. Waters considered ''jurisdictional by rule'' included: (1) traditional navigable waters; (2) interstate waters, including interstate wetlands; (3) the territorial seas; (4) impoundments of waters otherwise identified as jurisdictional; (5) tributaries of the first three categories of ''jurisdictional by rule'' waters; and (6) waters adjacent to a water identified in the first five categories of ''jurisdictional by rule'' waters, including ''wetlands, ponds, lakes, oxbows, impoundments, and similar waters.'' Finally, all exclusions from the definition of ''waters of the United States'' in the pre-2015 regulations were retained, and several exclusions reflecting agency practice or based on public comment were added to the regulation for the first time. The rule excluded the following (unless they were traditional navigable waters, the territorial seas, or interstate waters): certain ditches; artificially irrigated areas that would revert to dry land should application of water to that area cease; artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds; artificial reflecting pools or swimming pools created in dry land; small ornamental waters created in dry land; water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water; erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; puddles; groundwater, including groundwater drained through subsurface drainage systems; stormwater control features constructed to convey, treat, or store stormwater that are created in dry land; and wastewater

[32] The agencies note that the guidance ''does not impose legally binding requirements on EPA, the Corps, or the regulated community, and may not apply to a particular situation depending on the circumstances.'' *Rapanos* Guidance at 4 n.17.

recycling structures constructed in dry land.

2. The 2019 Repeal Rule

On February 28, 2017, Executive Order 13778 ''Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule,'' directed EPA and the Army to review the 2015 Clean Water Rule for consistency with the policy outlined in section 1 of the order and to issue a proposed rule rescinding or revising the 2015 Clean Water Rule as appropriate and consistent with law. 82 FR 12497 (March 3, 2017). The Executive Order also directed the agencies to ''consider interpreting the term 'navigable waters' . . . in a manner consistent with'' Justice Scalia's opinion in *Rapanos. Id.*

Consistent with this directive, after notice and comment rulemaking, on October 22, 2019, the agencies published a final rule repealing the 2015 Clean Water Rule and recodifying the 1986 regulations without any changes to the regulatory text. 84 FR 56626 (October 22, 2019). The final rule provided that the agencies would implement the definition ''consistent with Supreme Court decisions and longstanding practice, as informed by applicable agency guidance documents, training, and experience''; *i.e.,* consistent with the pre-2015 regulatory regime. *Id.* at 56626.

3. The 2020 Navigable Waters Protection Rule

Three months later, on January 23, 2020, the agencies signed another final rule—the ''Navigable Waters Protection Rule: Definition of 'Waters of the United States''' (''2020 NWPR'')—that for the first time defined ''waters of the United States'' based primarily on Justice Scalia's plurality test from *Rapanos.* The 2020 NWPR was published on April 21, 2020, and went into effect on June 22, 2020.[33] 85 FR 22250 (April 21, 2020). The 2020 NWPR interpreted the term ''the waters'' within ''the waters of the United States'' to ''encompass relatively permanent flowing and standing waterbodies that are traditional navigable waters in their own right or that have a specific surface water connection to traditional navigable waters, as well as wetlands that abut or are otherwise inseparably bound up with such relatively permanent waters.'' *Id.* at 22273. Specifically, the rule established four categories of jurisdictional waters: (1) the territorial seas and traditional navigable waters; (2) tributaries of such waters; (3) certain lakes, ponds, and impoundments of jurisdictional waters; and (4) wetlands adjacent to other jurisdictional waters (other than jurisdictional wetlands). *Id.*

The 2020 NWPR further defined the scope of each of these four categories. The territorial seas and traditional navigable waters were defined consistent with the agencies' longstanding interpretations of those terms. A ''tributary'' was defined as a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable water in a typical year either directly or indirectly through other tributaries, jurisdictional lakes, ponds, or impoundments, or adjacent wetlands. A tributary was required to be perennial or intermittent in a typical year. The term ''tributary'' included a ditch that either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch is perennial or intermittent and contributes surface water flow to a traditional navigable water or the territorial seas in a typical year. *Id.* at 22251. The definition did not include ephemeral features, which were defined as surface waters that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools. *Id.*

The 2020 NWPR defined ''lakes and ponds, and impoundments of jurisdictional waters'' as ''standing bodies of open water that contribute surface water flow in a typical year to a territorial sea or traditional navigable water either directly or through a tributary, another jurisdictional lake, pond, or impoundment, or an adjacent wetland.'' *Id.* A lake, pond, or impoundment of a jurisdictional water was jurisdictional under the 2020 NWPR if it contributed surface water flow to a downstream jurisdictional water in a typical year through certain artificial or natural features. A lake, pond, or impoundment of a jurisdictional water inundated by flooding from a jurisdictional water in a typical year was also jurisdictional. *Id.*

As for wetlands, the 2020 NWPR interpreted ''adjacent wetlands'' to be those wetlands that abut jurisdictional waters and those non-abutting wetlands that are (1) ''inundated by flooding'' from a jurisdictional water in a typical year, (2) physically separated from a jurisdictional water only by certain natural features (*e.g.,* a berm, bank, or dune), or (3) physically separated from a jurisdictional water by an artificial structure that ''allows for a direct hydrologic surface connection'' between the wetland and the jurisdictional water in a typical year. *Id.* at 22251. Wetlands that do not have these types of connections to other waters were not jurisdictional.

The 2020 NWPR expressly provided that waters that do not fall into one of these jurisdictional categories were not considered ''waters of the United States.'' *Id.* For the first time, interstate waters were not included in the definition of ''waters of the United States.'' The rule also excluded groundwater, including groundwater drained through subsurface drainage systems; ephemeral features, including ephemeral streams, swales, gullies, rills, and pools; diffuse stormwater run-off and directional sheet flow over upland; ditches that are not traditional navigable waters, the territorial seas, or tributaries as defined in the rule; and those portions of ditches constructed in adjacent wetlands as defined in the rule that do not satisfy the conditions of an adjacent wetland under the rule; prior converted cropland; artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease; artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the rule's definition of lakes and ponds, and impoundments of jurisdictional waters; water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity; pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel; stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff; groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and waste treatment systems. While many of these exclusions were based on the exclusions

[33] The 2020 NWPR went into effect on June 22, 2020, in all jurisdictions except Colorado, where the rule was subject to a preliminary injunction issued by the U.S. District Court for the District of Colorado. *Colorado* v. *EPA,* 445 F. Supp. 3d 1295 (D. Colo. 2020). After the Tenth Circuit reversed the Colorado district court's order on appeal, the 2020 NWPR went into effect in Colorado on April 26, 2021. *Colorado* v. *EPA,* 989 F.3d 874 (6th Cir. 2021); *Colorado* v. *EPA,* No. 20–1238, ECF No. 010110512604 (Doc. 10825032) (10th Cir. Apr. 26, 2021).

in the 2015 Clean Water Rule, new exclusions were added and some were substantially broadened in a number of ways. For example, for the first time, all ephemeral streams were excluded. Moreover, waters within the 2020 NWPR's jurisdictional categories, including traditional navigable waters and the territorial seas, were not ''waters of the United States'' if they also fit within the 2020 NWPR's exclusions. *See id.* at 22325 (''If the water meets any of the[ ] exclusions, the water is excluded even if the water satisfies one or more conditions to be a [jurisdictional] water.'').[34] In addition, the rule expanded the longstanding exclusion for prior converted cropland. Generally speaking, the 2020 NWPR's approach to prior converted cropland substantially reduced the likelihood that prior converted cropland would ever lose its excluded status. The 2020 NWPR definition extended prior converted cropland status beyond those areas the U.S. Department of Agriculture (USDA) defines as prior converted cropland for purposes of the Food Security Act.

4. Legal Challenges to the Rules

The agencies' rulemakings to revise the definition of ''waters of the United States'' have been subject to a series of legal challenges.[35]

Multiple parties sought judicial review of the 2015 Clean Water Rule in various district and circuit courts. On January 22, 2018, the Supreme Court, in a unanimous opinion, held that rules defining the scope of ''waters of the United States'' are subject to direct review in the district courts. *Nat'l Ass'n of Mfrs.* v. *Dep't of Def.,* 138 S. Ct. 617 (2018). Several of those district court cases remain pending in district court or on appeal.[36] While the 2015 Clean Water Rule went into effect in some parts of the country in August 2015, it was never implemented nationwide due to multiple injunctions and later rulemakings. The day before the 2015 Clean Water Rule's August 28, 2015 effective date, the U.S. District Court for the District of North Dakota preliminarily enjoined the rule in the 13 States challenging the rule in that court at the time. *North Dakota* v. *EPA,* 127 F. Supp. 3d 1047 (D.N.D. 2015); Order, *North Dakota* v. *EPA,* No. 3:15–cv–59, Dkt. No. 79 (D.N.D. Sept. 4, 2015) (limiting scope of preliminary injunction to the parties before the court). Shortly thereafter, on October 9, 2015, the Sixth Circuit issued an order staying the 2015 Clean Water Rule nationwide and directing the agencies to resume implementing the ''familiar, if imperfect'' pre-2015 regulatory regime. *In re EPA & Dep't of Def. Final Rule,* 803 F.3d 804, 806, 808 (6th Cir. 2015). In 2018, two other district courts issued geographically limited preliminary injunctions against the 2015 Clean Water Rule. *Georgia* v. *Pruitt,* 326 F. Supp. 3d 1356 (S.D. Ga. June 6, 2018) (barring implementation of the 2015 Clean Water Rule in 11 States); *Texas* v. *EPA,* No. 3:15–cv–162, 2018 WL 4518230 (S.D. Tex. Sept. 12, 2018) (same as to three States). In 2019, prior to issuance of the 2019 Repeal Rule, two courts remanded the 2015 Clean Water Rule to the agencies, but neither court vacated the rule. *See Texas* v. *EPA,* 389 F. Supp. 3d 497 (S.D. Tex. 2019); *Georgia* v. *Wheeler,* 418 F. Supp. 3d 1336 (S.D. Ga. 2019). As such, the 2015 Clean Water Rule remained in effect in some parts of the country until the effective date of the 2019 Repeal Rule.[37]

The 2019 Repeal Rule went into effect on December 23, 2019, and though it has been the subject of legal challenges, no court has issued an adverse ruling with respect to it. The 2019 Repeal Rule was thus in effect until the effective date of the 2020 NWPR.

Multiple parties subsequently sought judicial review of the 2020 NWPR, which went into effect on June 22, 2020, in all jurisdictions except Colorado, where the rule was subject to a preliminary injunction issued by the U.S. District Court for the District of Colorado. *Colorado* v. *EPA,* 445 F. Supp. 3d 1295 (D. Colo. 2020). The Tenth Circuit later reversed the Colorado district court's order on appeal; as a result, the 2020 NWPR went into effect in Colorado on April 26, 2021. *Colorado* v. *EPA,* 989 F.3d 874 (6th Cir. 2021); *Colorado* v. *EPA,* No. 20–1238, ECF No. 010110512604 (Doc. 10825032) (10th Cir. Apr. 26, 2021).

On August 30, 2021, the U.S. District Court for the District of Arizona remanded the 2020 NWPR and vacated the rule. *Pascua Yaqui Tribe* v. *EPA,* 557 F. Supp. 3d 949 (D. Ariz. 2021). The court found that ''[t]he seriousness of the Agencies' errors in enacting the NWPR, the likelihood that the Agencies will alter the NWPR's definition of 'waters of the United States,' and the possibility of serious environmental harm if the NWPR remains in place upon remand, all weigh in favor of remand with vacatur.'' *Id.* at 956. On September 27, 2021, the U.S. District Court for the District of New Mexico also issued an order vacating and remanding the 2020 NWPR. *Navajo Nation* v. *Regan,* 563 F. Supp. 3d 1164 (D.N.M. 2021). In vacating the rule, the court agreed with the reasoning of the *Pascua Yaqui* court that the 2020 NWPR suffers from ''fundamental, substantive flaws that cannot be cured without revising or replacing the NWPR's definition of ''waters of the United States.''' *Id.* at 1168. In six additional cases, courts remanded the 2020 NWPR without vacatur or without addressing vacatur.[38]

At this time, 14 cases challenging the 2015 Clean Water Rule, 2019 Repeal Rule, and/or the 2020 NWPR remain.[39]

[34] The 2020 NWPR's exclusion for ditches, however, explicitly did not encompass ditches that are traditional navigable waters or jurisdictional tributaries. 33 CFR 328.3(b)(5) (2022).

[35] The agencies note that a Clean Water Act case currently pending before the Supreme Court is not a direct challenge to any of the rules defining ''waters of the United States,'' but instead presents the question of the Act's jurisdictional standard for adjacent wetlands in the context of a challenge to an EPA administrative compliance order for the unauthorized discharge of a pollutant into ''waters of the United States.'' *Sackett* v. *EPA,* No. 21–454. Petitioners—who operated a commercial construction and excavation business—dumped approximately 1,700 cubic yards of gravel and sand to fill wetlands adjacent to ''waters of the United States,'' and EPA issued an administrative order in light of the unauthorized discharge. The district court and the Court of Appeals determined that, under Ninth Circuit precedent, the Clean Water Act covers at least those adjacent wetlands that satisfy the significant nexus standard. The lower courts held that the administrative record supports EPA's conclusion that the wetlands on petitioners' property are adjacent to a jurisdictional tributary and that, together with other similarly situated adjacent wetlands, the adjacent wetlands have a significant nexus to Priest Lake, a traditional navigable water.

[36] *See, e.g., North Dakota* v. *EPA,* No. 15–00059 (D.N.D.); *Ohio* v. *EPA,* No. 15–02467 (S.D. Ohio) (dismissed as moot), No. 22–3292 (6th Cir.) (appeal stayed); *Southeastern Legal Found.* v. *EPA,* No. 15–02488 (N.D. Ga.).

[37] In February 2018, the agencies issued a rule that added an applicability date of February 6, 2020, to the 2015 Clean Water Rule. 83 FR 5200 (February 6, 2018) (''Applicability Date Rule''). The Applicability Date Rule was challenged in several district court actions, and on August 16, 2018, the rule was vacated and enjoined nationwide. *See South Carolina Coastal Conservation League* v. *Pruitt,* 318 F. Supp. 3d 959 (D.S.C. 2018); *see also* Order, *Puget Soundkeeper All.* v. *Wheeler,* No. 15–01342 (W.D. Wash. Nov. 26, 2018) (vacating the Applicability Date Rule nationwide).

[38] Order, *Pueblo of Laguna* v. *Regan,* No. 1:21–cv–277, Dkt. 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–3005, Dkt. No. 271 (N.D. Cal. Sept. 16, 2021) (same); Order, *Waterkeeper All.* v. *Regan,* No. 3:18–cv–3521, Dkt. No. 125 (N.D. Cal. Sept. 16, 2021) (same); Order, *Conservation Law Found.* v. *EPA,* No. 1:20–cv–10820, Dkt. No. 122 (D. Mass. Sept. 1, 2021) (same); Order, *S.C. Coastal Conservation League* v. *Regan,* No. 2:20–cv–1687, Dkt. No. 147 (D.S.C. July 15, 2021) (remanding without vacating); Order, *Murray* v. *Wheeler,* No. 1:19–cv–1498, Dkt. No. 46 (N.D.N.Y. Sept. 7, 2021) (same).

[39] *Pascua Yaqui Tribe* v. *EPA,* No. 4:20–cv–266 (D. Ariz.); *Colorado* v. *EPA,* No. 1:20–cv–1461 (D. Colo.); *Am. Exploration & Mining Ass'n* v. *EPA,* No. 1:16–cv–1279 (D.D.C.); *Envtl. Integrity Project* v. *Regan,* No. 1:20–cv–1734 (D.D.C.); *Se. Stormwater Ass'n* v. *EPA,* No. 4:15–cv–579 (N.D. Fla.); *Se. Legal Found.* v. *EPA,* No. 1:15–cv–2488 (N.D. Ga.); *Chesapeake Bay Found.* v. *Regan,* Nos. 1:20–cv–

All of these cases are administratively closed, inactive, or being held in abeyance as of the date this final rule was signed. *See* ''History of the Effects of Litigation over Recent Definitions of 'Waters of the United States''' in the docket for this rule for more information on how litigation has impacted the status of the definition of ''waters of the United States'' in effect at different times across the country.

5. 2021 Executive Order and Review of the Navigable Waters Protection Rule

On January 20, 2021, President Biden signed Executive Order 13990, entitled ''Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis.'' It provides that ''[i]t is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.'' 86 FR 7037, section 1 (published January 25, 2021, signed January 20, 2021). The order ''directs all executive departments and agencies (agencies) to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and to immediately commence work to confront the climate crisis.'' *Id.* The order specified that ''[f]or any such actions identified by the agencies, the heads of agencies shall, as appropriate and consistent with applicable law, consider suspending, revising, or rescinding the agency actions.'' *Id.* at section 2(a). The order also revoked Executive Order 13778 of February 28, 2017 (Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ''Waters of the United States'' Rule), which had initiated development of the 2020 NWPR. *Id.* at section 7(a).

In conformance with Executive Order 13990, the agencies reviewed the 2020 NWPR to determine its alignment with three principles laid out in the Executive Order: science, climate change, and environmental justice.

Science: Science plays a critical role in understanding how to protect the integrity of our nation's waters. As discussed in detail below, *see* section IV.B.3 of this preamble, the 2020 NWPR did not properly consider the extensive scientific evidence demonstrating the interconnectedness of waters and their downstream effects, thereby undermining Congress's objective to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The 2020 NWPR's definition of ''waters of the United States'' does not adequately consider the way pollution moves through waters or the way filling in a wetland affects downstream water resources.

Climate: Science has established that human and natural systems have been and continue to be extensively impacted by climate change. Climate change can have a variety of impacts on water resources in particular. *See* section II.C of the Technical Support Document. For instance, a warming climate is already increasing precipitation in many areas (*e.g.,* the Northeast and Midwest), while decreasing precipitation in other areas (*e.g.,* the Southwest). Other areas are experiencing more extreme cycles of flood and drought (*e.g.,* the Northern Great Plains). Climate change can increase the intensity of precipitation events. Runoff from more intense storms can impair water quality as pollutants deposited on land wash into waterbodies. Changes in streamflow, snowmelt timing, snowpack accumulation, and the size and frequency of heavy precipitation events can also cause river floods to become larger or more frequent than they used to be in some places. In addition, climate change affects streamflow characteristics, such as the magnitude and timing of flows, in part due to changes in snowpack magnitude and seasonality. Many historically dry areas are experiencing less precipitation and an increased risk of drought associated with more frequent and intense heatwaves, which cause streams and wetlands to become drier, negatively affecting water supplies and water quality. Heatwaves, associated drought, and the loss of surface and soil moisture associated with longer dry seasons, lower streamflow, and lower groundwater levels also affect the frequency, size, and duration of wildfires, which alter water quality and impact wetlands and their functions. A changing climate can also result in higher and more variable temperatures in streams, killing fish and harming other aquatic species that can live only in colder water. Finally, rising sea levels associated with climate change are inundating low-lying streams and wetlands and further contributing to coastal flooding and erosion.

Although water resources are vulnerable to climate change, when their interconnectedness and extent are maintained, streams and wetlands perform a variety of functions that contribute to climate resiliency by mitigating negative effects on traditional navigable waters, the territorial seas, and interstate waters. For instance, wetlands inside and outside of floodplains store large volumes of floodwaters, thereby reducing flood peaks and protecting downstream watersheds. As natural filters, wetlands help purify and protect the quality of other waterbodies, including drinking water supplies—a function which is more important than ever as intense precipitation events spurred on by a changing climate mobilize sediment, nutrients, and other pollutants. Coastal wetlands help buffer storm surges, which may increase in frequency or severity with sea-level rise and the increasing size and intensity of coastal storms. Additionally, small streams are particularly effective at retaining and attenuating floodwaters. Biological communities and geomorphic processes in small streams and wetlands break down leaves and other organic matter, sequestering a portion of that carbon that could otherwise be released into the atmosphere and continue to negatively affect water resources.

The 2020 NWPR did not appropriately acknowledge or take account of the effects of a changing climate on the chemical, physical, and biological integrity of the nation's waters. For example, its rolling thirty-year approach to determining a ''typical year'' did not allow the agencies flexibility to account for the effects of a rapidly changing climate, including upward trending temperatures, increasing storm events, and extended droughts (*see* section IV.B.3.c of this preamble). The 2020 NWPR also categorically excluded ephemeral streams and their adjacent wetlands from the definition of ''waters of the United States.'' These exclusions, if in effect, would disproportionately impact the arid West. Aquatic systems comprised largely of ephemeral streams are increasingly critical to protecting

1063 & 1:20–cv–1064 (D. Md.); *Navajo Nation* v. *Regan,* No. 2:20–cv–602 (D.N.M.); *N.M. Cattle Growers' Ass'n* v. *EPA,* No. 1:19–cv–988 (D.N.M.); *North Dakota* v. *EPA,* No. 3:15–cv–59 (D.N.D.); *Ohio* v. *EPA,* No. 2:15–cv–2467 (S.D. Ohio) (dismissed as moot), No. 22–3292 (6th Cir.) (appeal stayed); *Or. Cattlemen's Ass'n* v. *EPA,* No. 3:19–cv–564 (D. Or.); *Puget Soundkeeper All.* v. *EPA,* No. 2:20–cv–950 (W.D. Wash.); *Wash. Cattlemen's Ass'n* v. *EPA,* No. 2:19–cv–569 (W.D. Wash.).

and maintaining the integrity of paragraph (a)(1) waters, for example by contributing streamflow and organic matter to those larger waters. This is especially true in the Southwestern United States, where climate change is expanding the spatial extent of arid conditions and increasing the risks of more extreme drought. Some portions of the arid West are experiencing altered monsoon seasons that have fewer but more intense storms that contribute to so-called ''flashy'' stream hydrology (*i.e.,* higher runoff volume, leading to more rapidly rising and falling streamflow over shorter periods of time).

Environmental Justice: While impacts on communities with environmental justice concerns are not a basis for determining the scope of the definition of ''waters of the United States,'' the agencies recognize that the burdens of environmental pollution and climate change often fall disproportionately on communities with environmental justice concerns (*e.g.,* minority (Indigenous peoples and/or people of color) and low-income populations, as specified in Executive Order 12898). Numerous groups have raised concerns that the 2020 NWPR had disproportionate impacts on Tribes and Indigenous communities.[40] The 2020 NWPR decreased the scope of Clean Water Act jurisdiction across the country, including in geographic regions where regulation of waters beyond those covered by the Act is not authorized under current Tribal or State law (*see* section IV.B.3.d of this preamble). If the 2020 NWPR were in effect, without regulations governing discharges of pollutants into previously jurisdictional waters, communities with environmental justice concerns where these waters are located could experience increased water pollution and impacts from associated increases in health risk.

Further, the 2020 NWPR's categorical exclusion of ephemeral streams from jurisdiction (and any wetlands adjacent to those streams) disproportionately impacted Tribes and communities with environmental justice concerns in the arid West. Many Tribes lack the authority and resources to regulate waters within their boundaries, and they may also be affected by pollution from adjacent jurisdictions.[41] In addition, under the 2020 NWPR, increased water pollution due to the elimination of Federal protection over ephemeral streams and their adjacent wetlands could lead to health impacts and the reduction of clean water needed for traditional agricultural, cultural, and subsistence uses for communities with environmental justice concerns.[42] Therefore, if in effect, the 2020 NWPR could disproportionately expose Tribes to increased pollution and health risks.

After completing the review and reconsidering the record for the 2020 NWPR, on June 9, 2021, the agencies announced their intention to revise or replace the rule. The factors the agencies found most relevant in making this decision were the text, structure, and history of the Clean Water Act; relevant Supreme Court case law; the current and future harms to the chemical, physical, and biological integrity of the nation's waters due to implementation of the 2020 NWPR; concerns raised by co-regulators and stakeholders about the 2020 NWPR, including implementation-related issues; the principles outlined in the Executive Order; and issues raised in ongoing litigation challenging the 2020 NWPR. EPA and the Army concluded that the 2020 NWPR did not appropriately consider the effect of the revised definition of ''waters of the United States'' on the integrity of the nation's waters, and that it threatened the loss or degradation of waters critical to the protection of traditional navigable waters, the territorial seas, and interstate waters, among other concerns.

C. Summary of Co-Regulator Engagement and Stakeholder Outreach

EPA and the Army held a series of stakeholder meetings during the agencies' review of the 2020 NWPR, including specific meetings in May 2021 with industry, environmental organizations, agricultural organizations, and State associations. On July 30, 2021, the agencies signed a **Federal Register** document that announced a schedule for initial public meetings to hear from interested stakeholders on their perspectives on defining ''waters of the United States'' and implementing the definition. 86 FR 41911 (August 4, 2021). The agencies also announced their intent to accept written pre-proposal recommendations from members of the public for a 30-day period from August 4, 2021, to September 3, 2021. The agencies received over 32,000 recommendation letters from the public, which can be found in the pre-proposal docket (Docket ID No. EPA–HQ–OW–2021–0328). Consistent with the August 4, 2021, **Federal Register** publication, the agencies held six public meeting webinars on August 18, August 23, August 25 (specifically for small entities), August 26, August 31, and September 2, 2021.

The agencies also engaged State and local governments over a 60-day federalism consultation period during development of the proposed rule, beginning with an initial federalism consultation meeting on August 5, 2021, and concluding on October 4, 2021. A total of thirty-eight letters were submitted to the agencies as part of the federalism consultation process from State and local government agencies, intergovernmental associations, and State-level associations. On September 29, October 6, and October 20, 2021, the agencies hosted virtual meetings with States focused on implementation of prior ''waters of the United States'' regulatory regimes. Additional information about the federalism consultation can be found in section V.E of this preamble and the Summary

[40] *See, e.g.,* Tribal Consultation Comment Letter from President Jonathan Nez and Vice President Myron Lizer, Navajo Nation, October 4, 2021 (''The Navajo Nation relies greatly on all its surface waters, including ephemeral, intermittent, and perennial surface waters. The Navajo Nation currently lacks the resources to implement CWA permitting and other programs necessary to maintain and protect water quality and relies on the Agencies to fill that need. Therefore, any new [''waters of the United States''] rule must not reduce the scope of the waters that the Agencies can protect, or it will have 'disproportionately high and adverse human health or environmental effects' on the Navajo Nation.''), and Tribal Consultation Comment Letter from Clarice Madalena, Interim Director, Natural Resources Department, Pueblo of Jemez, October 4, 2021 (stating that desert ''hydrology and the geographic location of Native communities—means that the Navigable Waters Rule had the effect of disparately stripping Clean Water Act protections from areas with higher Native populations. This means that the Rule disproportionately harmed Native American communities. This discriminatory impact violates the principles of environmental justice'') (citations omitted). *See also* section IV.B.3.d of this preamble and Technical Support Document section II.B.D.

[41] *See supra* note 40.

[42] *See, e.g.,* comments submitted by Navajo Nation at 3 (February 7, 2022) (Docket ID No. EPA–HQ–OW–2021–0602–0581), *https://www.regulations.gov/comment/EPA-HQ-OW-2021-0602-0581* (''Nor did the NWPR consider environmental justice concerns, including that tribes, among other environmental justice communities, 'may experience increased water pollution and impacts from associated increases in health risk.' '' (citation omitted)); comments submitted by Amigos Bravos et al. at 2 (February 7, 2022) (Docket ID No. EPA–HQ–OW–2021–0602–0600), *https://www.regulations.gov/comment/EPA-HQ-OW-2021-0602-0600* (''Many New Mexican farmers of color depend upon clean water flowing from the ephemeral drainages in headwater systems to water their crops and livestock. New Mexico acequias (community irrigation ditches) help to convey and distribute surface water to tens of thousands of New Mexican acequia families and over 100,000 acres of irrigable lands, primarily for traditional agricultural and cultural uses. New Mexico's surface waters are the lifeblood of numerous acequias, sustaining and enriching centuries-old acequias and farming and ranching traditions which depend upon clean water. Protecting clean water in New Mexico is intricately tied to environmental justice.'').

Report of Federalism Consultation, available in the docket for this rule.

The agencies initiated a Tribal consultation and coordination process during development of the proposed rule which was conducted over a 66-day period from July 30, 2021, until October 4, 2021, including two consultation kick-off webinars. The agencies received consultation comment letters from 27 Tribes and three Tribal organizations and held three leader-to-leader consultation meetings and four staff-level meetings with Tribes at their request. On October 7, 13, 27, and 28, 2021, the agencies hosted virtual dialogues with Tribes focused on implementation of prior ''waters of the United States'' regulatory regimes. Additional information about Tribal consultation and engagement can be found in section V.F of this preamble and the Summary of Tribal Consultation and Coordination, which is available in the docket for this rule.

The agencies signed a proposed rule defining ''waters of the United States'' on November 18, 2021. On December 7, 2021, the agencies published the proposed rulemaking in the **Federal Register**, 86 FR 69372, which initiated a 60-day public comment period that lasted through February 7, 2022. EPA and Army held three virtual public hearings on January 11, 13, and 18, 2022. The Office of Advocacy of the U.S. Small Business Administration hosted EPA and Army staff in January 2022 to discuss the proposed rule with small entities at its Small Business Environmental Roundtables. The agencies met with small agricultural interests and their representatives for a roundtable on January 7, 2022, and met with other small entities on January 10, 2022. The agencies also engaged with State and local governments during the public comment period, including through two virtual roundtables on January 24 and 27, 2022. The agencies continued to engage with Tribes during the public comment period. On January 20, 2022, the agencies hosted a Tribal virtual roundtable.

In developing this rule, the agencies reviewed and considered approximately 114,000 comments received on the proposed rulemaking from a broad spectrum of interested parties. Commenters provided a wide range of feedback on the proposal, including: the legal basis for the proposed rule; the agencies' proposed treatment of categories of jurisdictional waters and those features that would not be jurisdictional; the Economic Analysis and Technical Support Document for the proposed rule; and the need for a clear and implementable rule that is easy for the public to understand. The agencies discuss comments received and their responses in the applicable sections of the preamble to this rule. A complete response to comments document is available in the docket for this rule (Docket ID No. EPA–HQ–OW–2021–0602).

The agencies also engaged with EPA's Science Advisory Board (SAB) on several occasions during the development of this rule. The SAB was established in 1978 by the Environmental Research, Development, and Demonstration Authorization Act (ERDDAA), to provide independent scientific and technical advice to the EPA Administrator on the technical basis for agency positions and regulations.

On January 28, 2022, during the public comment period, the agencies met with the SAB Work Group for Review of Science Supporting EPA Decisions to explain the proposed rule, including its basis, and to address the SAB Work Group's initial questions. On February 7, 2022, the SAB Work Group signed a memorandum recommending that the Chartered SAB should review the adequacy of the science supporting the proposed rule. SAB Memorandum: Recommendations of the SAB Work Group for Review of Science Supporting EPA Decisions Regarding Two Planned EPA Regulatory Actions (February 7, 2022). On March 7, 2022, during the public meeting of the Chartered SAB, the Chartered SAB unanimously voted to review the scientific and technical basis of the proposed rule. The SAB formed a Work Group of its chartered members which issued a draft review on May 9, 2022, and the Chartered SAB held public meetings on the matter on May 31 and June 2, 2022. The SAB issued their final review on July 5, 2022 (EPA–SAB–22–005, hereinafter, ''2022 SAB Review''). All materials related to the SAB's review are available in the docket for this rule and on the SAB's website.

The SAB's review of the proposed rule was overall supportive of the science underpinning the proposed rule, including the Technical Support Document, and the discussion of shallow subsurface flow. The SAB made some recommendations on the discussion of climate change. The SAB's review was also generally favorable towards the approaches taken in the Economic Analysis supporting the proposed rule. The SAB made recommendations for improvement of the Economic Analysis, particularly regarding the environmental federalism approach and the continued non-monetization of certain benefits. The SAB indicated that the agencies' plans for expanding the environmental justice analysis for this rule were appropriate and provided recommendations for improving and clarifying the analysis. A memorandum summarizing the agencies' interactions with the SAB and the SAB's review of the proposed rule is available in the docket for this rule.

IV. Revised Definition of ''Waters of the United States''

A. Basis for This Rule

In this rule, the agencies are exercising their authority to interpret ''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 the ''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.'' [43] The agencies construe the term ''waters of the United States'' to mean: (1) traditional navigable waters, the territorial seas, and interstate waters (''paragraph (a)(1) waters''); (2) impoundments of ''waters of the United States'' (''paragraph (a)(2) impoundments''); (3) tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard (''jurisdictional tributaries''); (4) wetlands adjacent to paragraph (a)(1) waters; wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (''jurisdictional adjacent wetlands'');

[43] For brevity, the agencies may refer to the considerations that formed the basis of the agencies' interpretation of ''waters of the United States'' in the final rule as ''the law, the science, and agency expertise.'' References to the agencies' consideration of ''the law, the science, and agency expertise'' throughout this preamble are intended to encompass 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 decisions, and the agencies' experience and technical expertise implementing the pre-2015 regulatory regime.

and (5) intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) that meet either the relatively permanent standard or the significant nexus standard (''paragraph (a)(5) waters''). This rule also contains, at paragraph (b), the longstanding exclusions in the 1986 regulations, as well as additional exclusions based on well-established practice, from the definition of ''waters of the United States'' and, at paragraph (c), definitions for terms used in this rule.

This rule advances the Clean Water Act's statutory objective to ''restore and maintain the chemical, physical, and biological integrity of the Nation's waters,'' section 101(a), as it is informed by the best available science concerning the functions provided by upstream tributaries, adjacent wetlands, and paragraph (a)(5) waters to restore and maintain the water quality of paragraph (a)(1) waters. In developing the rule, the agencies also considered the text of the relevant statutory provisions of the Clean Water Act and the statute as a whole, relevant Supreme Court case law, and the agencies' experience and technical expertise after more than 45 years of implementing the 1986 regulations defining ''waters of the United States,'' including more than a decade of experience implementing those regulations consistent with the decisions in *Riverside Bayview, SWANCC,* and *Rapanos* collectively.

This construction also reflects consideration of provisions of the Clean Water Act referencing the role of the States. Section 101(b) provides that ''[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.'' The provisions in this rule reflect consideration of the comprehensive nature and objective of the Clean Water Act and also avoid assertions of jurisdiction that raise federalism concerns. 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 assigned by Congress to the agencies. This rule's relatively permanent and significant nexus limitations appropriately draw this boundary by ensuring that where upstream waters significantly affect the integrity of the traditional navigable waters, the territorial seas, and interstate waters, Clean Water Act programs will apply to ensure that those downstream waters have a baseline of protection established by Federal law. Where they do not, Tribes and States have authority. These 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, and that, while the relatively permanent standard, standing alone, identifies only a subset of the ''waters of the United States,'' including this standard in the final rule facilitates ease of implementation. In addition, this rule reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, and its terms are generally familiar and implementable.

For all these reasons, this rule will achieve the agencies' goals of effectively and durably protecting the quality of the nation's waters. The effectiveness of this rule is based, in part, on the familiarity of the regulatory framework to the agencies and stakeholders, with an array of readily available tools and resources. This rule also is durable because it is founded on the familiar framework of the longstanding 1986 regulations, amended to reflect the agencies' interpretation of appropriate limitations on the geographic scope of the Clean Water Act in light of the law, the science, and agency expertise. This rule also reflects the agencies' consideration of the extensive public comments. This rule protects the quality of the nation's waters by restoring the important protections for jurisdictional waters provided by the Clean Water Act, including not only protections provided by the Act's permitting programs, but also protections provided by programs ranging from water quality standards and total maximum daily loads to oil spill prevention, preparedness, and response programs, to the Tribal and State water quality certification programs.

1. The Agencies Are Exercising the Authority Granted by Congress To Define ''Waters of the United States'' Under the Clean Water Act

The agencies are exercising the authority granted to them by Congress in the Clean Water Act to construe the key term ''navigable waters,'' which Congress broadly defined to mean ''the waters of the United States, including the territorial seas.'' 33 U.S.C. 1362(7) (Clean Water Act section 502(7)). As explained herein, the text of the statute, including in particular sections 501 and 502(7), and congressional intent provide that delegation of authority. And the Supreme Court has affirmed the conclusion that the agencies have the authority to define the bounds of ''waters of the United States.'' In this rule, the agencies are using the traditional tools of statutory construction to exercise their delegated authority. Further, the rule is founded upon the longstanding 1986 regulations, familiar to Congress and the Court, while incorporating important limitations based on the text of the statute. Finally, it is well established that agencies have inherent authority to reconsider past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation.

Congress's intent to delegate authority to the agencies to construe the term ''navigable waters'' and its definition in section 502(7), ''the waters of the United States, including the territorial seas,'' is clear from this text in the Clean Water Act. First, Congress established a broad definition of a term foundational to advancing the Act's clear objective that requires additional interpretation to implement that term by the expert agencies charged with administering the statute. Second, Congress explicitly delegated such authority to EPA: ''The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this Act.'' 33 U.S.C. 1361 (Clean Water Act section 501). Clearly, interpreting this key term through regulation is necessary to carry out the functions of the Act.

Congressional intent affirms this delegation. The breadth of the definition of ''navigable waters'' reflects a deliberate choice by Congress to both enact a statute with a broad scope of waters protected by Federal law and to delegate the authority to interpret the specialized term and its definition to the expert agencies. The relevant House bill would have defined ''navigable waters'' as the ''navigable waters of the United States, including the territorial seas.'' H.R. Rep. No. 911, 92d Cong., 2d Sess. 356 (1972) (emphasis omitted). But the House was concerned that the definition might be given an unduly narrow interpretation. 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 also expressed disapproval of the narrow construction by the Corps of the scope of waters protected under prior water protection statutes, stating ''[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). Thus, in conference the word ''navigable'' was deleted from that definition, and the conference report again urged that the term ''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. 1236, 92d Cong., 2d Sess. 144 (1972). Congress thus intended the agencies to which it granted authority to implement the Clean Water Act to interpret the scope of the definition of ''navigable waters'' consistent with Congress's intent and objective in enacting the Act.

The Supreme Court has also affirmed the conclusion that it is the agencies' role to interpret the term ''waters of the United States.'' As the Court explained in *Riverside Bayview,* Congress delegated a ''breadth of federal regulatory authority'' and expected the agencies to tackle the ''inherent difficulties of defining precise bounds to regulable waters.'' 474 U.S. at 134.

In addition, any ambiguity in Congress's terms in Clean Water Act section 502(7) further underscores the role of the agencies in interpreting the statutory language. The *Riverside Bayview* Court deferred to and upheld the agencies' interpretation of the Clean Water Act to protect wetlands adjacent to navigable-in-fact bodies of water, stating ''[a]n agency's construction of a statute it is charged with enforcing is entitled to deference if it is reasonable and not in conflict with the expressed intent of Congress.'' 474 U.S. at 131 (citations omitted). All nine Justices in *Rapanos* again recognized that there was ambiguity in the terms of the Clean Water Act. 547 U.S. at 752, 758, 780, 796, 811–12. In concurring with the *Rapanos* plurality opinion, the Chief Justice explained that, given the ''broad, somewhat ambiguous, but nonetheless clearly limiting terms Congress employed in the Clean Water Act, the Corps and the EPA would have enjoyed plenty of room to operate'' if they had addressed the relevant interpretive questions through rulemaking. 547 U.S. at 758 (Roberts, C.J., concurring). The Chief Justice emphasized the breadth of the agencies' discretion in defining ''waters of the United States'' through rulemaking; indeed, the agencies' interpretations under the Clean Water Act, Chief Justice Roberts emphasized, are ''afforded generous leeway by the courts.'' *Id.* at 758.

In exercising their authority to interpret the statute in this rule, the agencies are ''employing the traditional tools of statutory interpretation,'' *American Hospital Association* v. *Becerra,* 142 S. Ct. 1896, 1906 (2022) (*per curiam*), beginning with ''the text and structure of the statute,'' *id.* at 1904, as well as ''with reference to the statutory context, 'structure, history, and purpose,' '' *Abramski* v. *United States,* 573 U.S. 169, 179 (2014) (citation omitted). As discussed further in this section IV.A of the preamble, the agencies have used additional tools of statutory construction, including the statutory history, the statute as a whole, the objective of the Clean Water Act, and the legislative history, which clears up ambiguity, in construing the Act. *See Bostock* v. *Clayton County, Georgia,* 140 S. Ct. 1731, 1749 (2020) (discussing use of legislative history by the Supreme Court ''when interpreting *ambiguous* statutory language'' (emphasis in original) and noting that ''[l]egislative history, for those who take it into account, is meant to clear up ambiguity, not create it'' (citing *Milner* v. *Department of Navy,* 562 U.S. 562, 574 (2011))).

The agencies have also properly brought to bear their expertise and experience in construing the Clean Water Act. As the Supreme Court concluded in *Riverside Bayview,* ''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. In addition, the agencies have more than 45 years of experience implementing the longstanding pre-2015 regulations defining ''waters of the United States,'' including more than a decade of implementing those regulations consistent with the Supreme Court's decisions in *Riverside Bayview, SWANCC,* and *Rapanos,* and have concluded this rule is also consistent with the ''longstanding practice of [the agencies] in implementing the relevant statutory authorities.'' *Biden* v. *Missouri,* 142 S. Ct. 647, 652 (2022). Finally, Congress is aware of the agencies' longstanding interpretation of ''waters of the United States'' and has not acted to limit the agencies' interpretation, but rather has incorporated aspects of the agencies' regulatory definition into the statute. *See* section IV.A.2.b of this preamble.

Further, agencies have inherent authority to reconsider past decisions and to revise, replace, or repeal a decision to the extent permitted by law and supported by a reasoned explanation. *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 515 (2009) (''*Fox*''); *Motor Vehicle Manufacturers Ass'n of the United States, Inc.* v. *State Farm Mutual Automobile Insurance Co.,* 463 U.S. 29, 42 (1983) (''*State Farm*''); *see also Encino Motorcars, LLC* v. *Navarro,* 136 S. Ct. 2117, 2125 (2016) (''Agencies are free to change their existing policies as long as they provide a reasoned explanation for the change.''). Such a decision need not be based upon a change of facts or circumstances. A revised rulemaking based ''on a reevaluation of which policy would be better in light of the facts'' is ''well within an agency's discretion.'' *Nat'l Ass'n of Home Builders* v. *EPA,* 682 F.3d 1032, 1038 & 1043 (D.C. Cir. 2012) (citing *Fox,* 556 U.S. at 514–15). As discussed further in section IV.B.3 of this preamble, the agencies have reviewed the 2020 NWPR and determined that the rule should be replaced. This rule properly considers the objective of the Clean Water Act, is consistent with the text and structure of the Act, informed by relevant Supreme Court precedent, and reflects the record before the agencies, including consideration of the best available science, as well as the agencies' expertise and experience implementing the pre-2015 regulatory regime.

To be clear, in this rule the agencies are exercising the authority granted to them by Congress to construe and implement the Clean Water Act and to interpret an ambiguous term and its statutory definition. Therefore, while the agencies' interpretation of the statute is informed by Supreme Court decisions, including *Rapanos,* it is not an interpretation of the multiple opinions in *Rapanos,* nor is it based on an application of the Supreme Court's principles to derive a governing rule of law from a decision of the Court in a case such as *Rapanos* where ''no opinion commands a majority.'' *Rapanos,* 547 U.S. at 758 (Roberts, C.J., concurring) (citing *Marks* v. *United States,* 430 U.S. 188, 193 (1977) (''*Marks*'')). Rather, this rule codifies the agencies' interpretation of ''navigable waters'' informed by the text of the relevant provisions of the Clean Water

Act and the statute as a whole, as well as the scientific record, relevant Supreme Court case law, input from public comment, 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,'' including more than a decade of implementing the regulations after *Rapanos.* 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 Clean Water Act.

2. This Rule Advances the Objective of the Clean Water Act

This rule is grounded in the Clean Water Act's objective ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,'' 33 U.S.C. 1251(a). This rule advances the Clean Water Act's objective by defining ''waters of the United States'' to include waters that significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, and interstate waters; and waters that meet the relatively permanent standard. The limitations in the definition ensure that the agencies will not assert jurisdiction where the effect on traditional navigable waters, the territorial seas, and interstate waters—*i.e.,* the paragraph (a)(1) waters—is not significant. This rule is informed by the best available science on the functions provided by upstream waters, including wetlands, to restore and maintain the integrity of paragraph (a)(1) waters because the rule recognizes that upstream waters can have significant effects on such waters and enables the agencies to make science-informed decisions about such effects. This rule thus defines ''waters of the United States'' to include the familiar types of waters in the 1986 regulations—traditional navigable waters, interstate waters, impoundments, tributaries, the territorial seas, adjacent wetlands, and waters that do not fall within the other categories—while adding, where appropriate, a requirement that waters also meet either the significant nexus standard or the relatively permanent standard.

a. The Objective of the Clean Water Act To Protect Water Quality Must Be Considered When Defining ''Waters of the United States''

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). When considering the scope of the Clean Water Act, the Supreme Court often begins with the objective of the Act and examines the relevant question through that lens. Thus, the agencies must consider the objective of the Clean Water Act in interpreting the scope of the statutory term ''waters of the United States.'' Here, Congress made its purpose crystal clear by stating its objective in the first section of the statute. The objective of the Clean Water Act is ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'' 33 U.S.C. 1251(a). To adequately consider the Clean Water Act's statutory objective, a rule defining ''waters of the United States'' must consider its effects on the chemical, physical, and biological integrity of the nation's waters. And—as the text and structure of the Clean Water Act, supported by legislative history and Supreme Court decisions, make clear—protecting the chemical, physical, and biological integrity of the nation's waters means protecting their water quality.

The Clean Water Act begins with the objective in section 101(a) and establishes numerous programs all designed to protect the integrity of the nation's waters, ranging from permitting programs and enforcement authorities, to water quality standards and effluent limitations guidelines, to research and grant provisions. Section 102 of the Clean Water Act requires the Administrator to, after consultation, develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters.

One of the Clean Water Act's principal tools in protecting the integrity of the nation's waters is section 301(a), which generally 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 401Tribal 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 question of Federal jurisdiction is foundational to most programs administered under the Clean Water Act. *See* section III.A.1 of this preamble.[44]

Two recent Supreme Court Clean Water Act decisions, *County of Maui, Hawaii* v. *Hawaii Wildlife Fund,* 140 S. Ct. 1462, 1476 (2020) (''*Maui*'') and *Nat'l Ass'n of Mfrs.* v. *Dep't of Defense,* 138 S. Ct. 617, 624 (2018) (''*National Association of Manufacturers*''), affirm that Congress used specific language in the definitions of the Clean Water Act in order to meet the objective of the Act, that the definition of ''waters of the United States'' is fundamental to meeting the objective of the Act, and, therefore, that the objective of the Act must be considered in interpreting the term ''waters of the United States.''

In *Maui,* the Supreme Court instructed that ''[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.'' 140 S. Ct. at 1476. The Court, in recognizing that Congress's purpose to '' 'restore and maintain the . . . integrity of the Nation's waters' '' is ''reflected in the language of the Clean Water Act,'' also found that ''[t]he Act's provisions use specific definitional language to achieve this result,'' noting that among that definitional language is the phrase ''navigable waters.'' *Id.* at 1468–69 (quoting 33 U.S.C. 1251(a)).[45] Thus, in accordance with *Maui,* in interpreting the ''specific definitional language'' of the Clean Water Act, the agencies must ensure that they are advancing the statutory purposes Congress sought to achieve.

In *National Association of Manufacturers,* the Court confirmed the importance of considering the plain language of the objective of the Clean Water Act when interpreting the

[44] Additional provisions are also designed to achieve the Clean Water Act's statutory objective and use its specific language, including the definition of ''pollution,'' which the Act defines as ''the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.'' 33 U.S.C. 1362(19).

[45] The Court explained:

The Act's provisions use specific definitional language to achieve this result. First, the Act defines ''pollutant'' broadly, including in its definition, for example, any solid waste, incinerator residue, '' 'heat,' '' '' 'discarded equipment,' '' or sand (among many other things). § 502(6), 86 Stat. 886. Second, the Act defines a ''point source'' as '' 'any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged,' '' including, for example, any '' 'container,' '' '' 'pipe, ditch, channel, tunnel, conduit,' '' or '' 'well.' '' § 502(14), *id.,* at 887. Third, it defines the term '' 'discharge of a pollutant' '' as '' 'any addition of any pollutant to navigable waters [including navigable streams, rivers, the ocean, or coastal waters] from any point source.' '' § 502(12), *id.,* at 886.

Maui, 140 S. Ct. at 1469.

specific definitional language of the Act, and in particular when interpreting the definitional language ''waters of the United States.'' The Court identified section 301's prohibition on unauthorized discharges as one of the Clean Water Act's principal tools for achieving the objective and then identified the definition of ''waters of the United States'' as key to the scope of the Act: ''Congress enacted the Clean Water Act in 1972 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.' [33 U.S.C.] 1251(a). One of the Act's principal tools in achieving that objective is [section] 1311(a), which prohibits 'the discharge of any pollutant by any person,' except in express circumstances. . . . Because many of the Clean Water Act's substantive provisions apply to 'navigable waters,' the statutory phrase 'waters of the United States' circumscribes the geographic scope of the Act in certain respects.'' 138 S. Ct. 617, 624. Thus, consideration of the objective of the Clean Water Act is of particular importance when defining the foundational phrase ''waters of the United States.''

Many other Supreme Court decisions confirm the importance of considering the Clean Water Act's objective. When faced with questions of statutory interpretation on the scope of the Clean Water Act, many Supreme Court decisions begin with the objective of the Act and examine the relevant question through that lens. *See, e.g., PUD No. 1 of Jefferson Cty* v. *Washington Dep't of Ecology,* 511 U.S. 700, 704 (1994) (interpreting the scope of Clean Water Act section 401 and finding that the Act ''is a comprehensive water quality statute designed to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' '' that ''[t]he Act also seeks to attain 'water quality which provides for the protection and propagation of fish, shellfish, and wildlife,' '' and that ''[t]o achieve these ambitious goals, the Clean Water Act establishes distinct roles for the Federal and State Governments''); *EPA* v. *California ex rel. State Water Resources Control Bd.,* 426 U.S. 200, 203, 205 n.12 (1976) (''In 1972, prompted by the conclusion of the Senate Committee on Public Works that 'the Federal water pollution control program . . . has been inadequate in every vital aspect,' Congress enacted the [Clean Water Act], declaring 'the national goal that the discharge of pollutants into the navigable waters be Eliminated by 1985.'''); *Arkansas* v. *Oklahoma,* 503 U.S. 91, 101 (1992) (reviewing the scope of EPA's authority to issue a permit affecting a downstream State and finding that the Clean Water Act ''anticipates a partnership between the States and the Federal Government, animated by a shared objective: 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters' ''); *S.D. Warren Co.* v. *Maine Bd. of Envtl. Protection,* 126 S. Ct. 1843, 1852–53 (2006) (interpreting the scope of ''discharge'') (''Congress passed the Clean Water Act to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' 33 U.S.C. [section] 1251(a) . . . .''); *Int'l Paper Co.* v. *Ouellette,* 479 U.S. 481, 492–93 (1987) (''Congress intended the 1972 Act amendments to 'establish an all-encompassing program of water pollution regulation.' . . . The Act applies to all point sources and virtually all bodies of water, and it sets forth the procedures for obtaining a permit in great detail. . . . Given that the Act itself does not speak directly to the issue, the Court must be guided by the goals and policies of the Act in determining whether it in fact pre-empts an action based on the law of an affected State.'').

Along with *Maui* and *National Association of Manufacturers,* these cases confirm that, for purposes of a rulemaking revising the definition of ''waters of the United States,'' the agencies must consider the rule's effect on the chemical, physical, and biological integrity of the nation's waters—*i.e.,* on the quality of those waters. The Supreme Court in *Riverside Bayview* explained the inherent link between the Clean Water Act's objective and water quality: ''This objective incorporated a broad, systemic view of the goal of maintaining and improving water quality: as the House Report on the legislation put it, 'the word ''integrity'' . . . refers to a condition in which the natural structure and function of ecosystems [are] maintained.' '' 474 U.S. at 132 (citations omitted).

The statutory structure further confirms that ''waters of the United States'' must be interpreted to account for the Clean Water Act's broader objective of promoting water quality. The Act is replete with 90 references to water quality—from the goals set forth to meet the statutory objective to the provisions surrounding research, effluent limitations, and water quality standards. *See, e.g.,* 33 U.S.C. 1251(a)(2) (''[I]t is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved. . . .''), 1254(b)(6) (providing that the Administrator shall collect ''basic data on chemical, physical, and biological effects of varying water quality''), 1311(b)(1)(C) (requiring permits to have limits as stringent as necessary to meet water quality standards), 1313(c) (providing that water quality standards ''shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this [Act]''). And Congress was clear that ''[t]he development of information which describes the relationship of pollutants to water quality is essential for carrying out the objective of the Act.'' S. Rep. No. 92–414 at 47 (1972), *as reprinted in* 1972 U.S.C.C.A.N. 3668, 3716; *see also id.* at 3717 (''Water quality is intended to refer to the biological, chemical and physical parameters of aquatic ecosystems, and is intended to include reference to key species, natural temperature and current flow patterns, and other characteristics which help describe ecosystem integrity. . . . The criteria will allow the translation of the narrative of the general objective of the Act to specific and precise parameters.''); *id.* at 3742 (''The Committee has added a definition of pollution to further refine the concept of water quality measured by the natural chemical, physical and biological integrity.''). As the Sixth Circuit explained shortly 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).

To be clear, the objective of the Clean Water Act is not the only factor relevant to determining the scope of the Act. Rather, in light of the precise language of the definitions in the Act, the importance of water quality to the statute as a whole, and Supreme Court decisions affirming that consideration of the objective of the Act is of primary importance in defining its scope, the agencies conclude that a rule defining ''waters of the United States'' must substantively consider the effects of a revised definition on the integrity of the nation's waters and advance the protection of the quality of those waters. As discussed further below, this rule

properly considers and advances the objective of the Clean Water Act because the science conclusively demonstrates that upstream waters, including wetlands, can affect the quality of downstream waters and ensures application of Clean Water Act water quality programs to upstream waters when their effect on downstream traditional navigable waters, territorial seas, and interstate waters is significant.

b. This Rule Is Founded on the 1986 Regulations, Which Advance the Objective of the Clean Water Act

The 1986 regulations—which are substantially the same as the 1977 regulations—represented the agencies' interpretation of the Clean Water Act in light of its objective and their scientific knowledge about aquatic ecosystems. 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' construction of limitations on the scope of ''waters of the United States,'' based on the law, the science, and agency expertise. Of particular import, the agencies are limiting the scope of the longstanding regulatory categories by adding a requirement that tributaries, adjacent wetlands (that are adjacent to waters other than paragraph (a)(1) waters), and lakes and ponds, streams, and wetlands that are not identified in paragraphs (a)(1) through (4) meet either the relatively permanent standard or the significant nexus standard as established in this rule. The agencies also considered the extensive public comment on the proposed rule in developing this final rule.

The best available science confirms that the 1986 regulations remain a reasonable foundation for a definition of ''waters of the United States'' that furthers the water quality objective of the Clean Water Act. *See* Technical Support Document. This section of the preamble describes the agencies' historic rationale for the 1986 regulation and its regulatory categories and describes the latest science that supports the conclusion that the categories of waters identified in the 1986 regulations provide functions that restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters.

The agencies' historic regulations, eventually promulgated and referred to as the 1986 regulations, were based on the agencies' construction of the scope of the Clean Water Act and their scientific and technical judgment about which waters needed to be protected to restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters (*i.e.,* the paragraph (a)(1) waters). For more than 45 years, the agencies recognized the need to protect ''the many tributary streams that feed into the tidal and commercially navigable waters . . . since the destruction and/or degradation of the physical, chemical, and biological integrity of each of these waters is threatened by the unregulated discharge of dredged or fill material.'' *See, e.g.,* 42 FR 37122, 37123 (July 19, 1977). The agencies have also long recognized that the nation's wetlands are ''a unique, valuable, irreplaceable water resource. . . . Such areas moderate extremes in waterflow, aid in the natural purification of water, and maintain and recharge the ground water resource.'' EPA, Protection of Nation's Wetlands: Policy Statement, 38 FR 10834 (May 2, 1973). In *Riverside Bayview,* the Supreme Court acknowledged that the agencies were interpreting the Clean Water Act consistent with its objective and based on their scientific expertise:

> 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.

And, as the Corps stated in promulgating the 1977 definition, ''[t]he regulation of activities that cause water pollution cannot rely on . . . artificial lines, however, but must focus on all waters that together form the entire aquatic system. Water moves in hydrologic cycles, and the pollution of . . . part of the aquatic system . . . will affect the water quality of the other waters within that aquatic system.'' 42 FR 37128 (July 19, 1977).

Thus, this rule includes the categories long identified by the agencies as affecting the water quality of paragraph (a)(1) waters, including tributaries, adjacent wetlands, impoundments, and waters that do not fall within any of the more specific categories of the definition (a category that has been modified and codified in this rule as paragraph (a)(5) waters).

As discussed below, however, while these longstanding categories continue to provide a reasonable foundation for this rule, this rule codifies limitations on these categories based on the agencies' interpretation of the Clean Water Act. To be clear, this rule does not automatically include all tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) as jurisdictional waters. Rather, the agencies conclude that utilizing these longstanding, familiar categories of waters, subject to the relatively permanent or significant nexus jurisdictional standards, is consistent with the best available science because the significant nexus standard established in this rule is based on an assessment of the effects of waters in these categories on the water quality of paragraph (a)(1) waters. In addition, the agencies believe that waters that meet the relatively permanent standard individually and cumulatively provide many functions that benefit the integrity of paragraph (a)(1) waters. *See* section IV.A.3.a.ii of this preamble. This rule does categorically include wetlands adjacent to paragraph (a)(1) waters. *Riverside Bayview,* 474 U.S. at 135; *see also Rapanos,* 547 U.S. at 780 (Kennedy, J., concurring in the judgment) (''As applied to wetlands adjacent to navigable-in-fact waters, the Corps' conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone. That is the holding of *Riverside Bayview.*''). This rule enables the agencies to make science-informed determinations of whether or not a water that falls within these categories meets either jurisdictional standard and therefore satisfies the definition of ''waters of the United States'' on a case-specific basis. For a detailed discussion of implementation of adjacent wetlands under this rule, *see* section IV.A.4 of this preamble; for additional guidance to landowners on jurisdictional determinations, *see* section IV.C.10 of this preamble.

i. The Agencies' Longstanding Interpretation That Tributaries Can Be ''Waters of the United States'' Is a Reasonable Foundation for This Rule

The agencies have long construed the Clean Water Act to include tributaries as ''waters of the United States.'' In 1973, EPA's General Counsel issued an opinion upon which the agency's subsequent rulemaking was based that tributaries were included within the term ''navigable waters,'' finding that ''this broad interpretation is well grounded in the language of the statute and in the legislative history, and comports with the expressed intent of Congress to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters.' '' Envtl.

Prot. Agency, Off. Gen. Counsel, Meaning of the Term ''Navigable Waters'' (February 13, 1973), 1973 WL 21937. The Corps explained in 1977 that its regulations necessarily encompassed ''the many tributary streams that feed into the tidal and commercially navigable waters'' because ''the destruction and/or degradation of the physical, chemical, and biological integrity of each of these waters is threatened by the unregulated discharge of dredged or fill material.'' 42 FR 37123 (July 19, 1977).

The conclusion that the Clean Water Act includes tributaries is consistent with the structure and history of the statute. The Clean Water Act was not ''merely another law 'touching interstate waters,' '' but rather ''a 'total restructuring' and 'complete rewriting' of [then] existing water pollution legislation.'' *City of Milwaukee* v. *Illinois,* 451 U.S. 304, 317 (1981) (citations omitted). Congress concluded that prior measures had been ''inadequate in every vital aspect,'' and it enacted a wholly new scheme of point-source-based pollution controls. *EPA* v. *California ex rel. State Water Res. Control Bd.,* 426 U.S. 200, 203 (1976) (citation omitted). The Clean Water Act thus reflected Congress's fundamental dissatisfaction with prior law.

Even before it enacted the 1972 Clean Water Act amendments, Congress had recognized, and had acted to address, the danger that pollution of tributaries may impair the quality of traditional navigable waters downstream. Prior to those amendments, the Federal Water Pollution Control Act established procedures for abatement of ''(t)he pollution of interstate or navigable waters in or adjacent to any State or States (whether the matter causing or contributing to such pollution is discharged directly into such waters or reaches such waters after discharge *into a tributary of such waters*).'' 33 U.S.C. 1160(a) (1970) (emphasis added). Under specified circumstances, the Attorney General was authorized to bring suit on behalf of the United States ''to secure abatement of the pollution.'' 33 U.S.C. 1160(g) (1970). Indeed, the regulation of tributaries as part and parcel of a Federal effort to protect traditional navigable waters has been a feature of Federal law for over 100 years. Since its enactment as section 13 of the Rivers and Harbors Appropriation Act of 1899 (RHA), Ch. 425, section 13, 30 stat. 1152, the Refuse Act of 1899 has prohibited the discharge of refuse material into any ''navigable water of the United States or into any tributary of any navigable water of the United States,'' as well as depositing refuse material ''on the bank of any navigable water, or on the bank of any tributary of any navigable water.'' 33 U.S.C. 407. That provision does not limit the covered ''tributar[ies]'' to those that are themselves used or susceptible to use for navigation.

Thus, well over a hundred years ago, Congress understood the necessity of protecting tributaries in order to protect traditional navigable waters and recognized its authority over those tributaries, and in the Clean Water Act Congress sought to *expand* protection of the nation's waters. It would therefore be unreasonable for the agencies to construe the Clean Water Act, with its comprehensive focus on limiting discharges of pollutants to ''waters of the United States'' and restoring and maintaining the chemical, physical, and biological integrity of the nation's waters, to exclude tributaries to traditional navigable waters, the territorial seas, and interstate waters.

Section 404(g) of the Clean Water Act further supports the agencies' interpretation that the Act covers such tributaries. Section 404(g) authorizes States to administer their own permit programs over certain waters. Section 404(g)(1) provides, in relevant part, that any State ''desiring to administer its own individual and general permit program for 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)'' may submit a description of this proposed program to EPA. 33 U.S.C. 1344(g)(1).[46] Section 404(g)(1)'s reference to navigable waters ''other than those waters used or susceptible to use'' for transporting commerce and their adjacent wetlands plainly indicates that the Clean Water Act covers more than the waters in this parenthetical.

The Supreme Court has also recognized the relevance of section 404(g) to interpreting the scope of Clean Water Act jurisdiction. In *Riverside Bayview,* while the Supreme Court stated that section 404(g) ''does not *conclusively* determine the construction to be placed on the use of the term 'waters' elsewhere in the Act,'' the Court went on to say with respect to the significance of section 404(g) that ''the various provisions of the Act should be read in *pari materia* [*i.e.,* construed together],'' ultimately concluding that section 404(g) ''suggest[s] strongly that the term 'waters' as used in the Act'' supports the Corps' interpretation of ''waters of the United States'' to include wetlands. 474 U.S. at 138 n.11 (emphasis added). While the Court in *SWANCC* did not read section 404(g) to definitively answer the question of the scope of ''waters of the United States,'' the Court offered a hypothesis that ''Congress simply wanted to include all waters adjacent to 'navigable waters,' such as non-navigable tributaries and streams.'' 531 U.S. at 171. And all members of the Supreme Court agreed with the observation of the *Rapanos* plurality 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,'' 547 U.S. 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.* In light of the history of the Act as well as Congress's clear understanding of the relationship between tributaries and traditional navigable waters, tributaries—whether or not they themselves are traditional navigable waters—are an obvious candidate for the Clean Water Act's broader coverage. As noted above, even long before 1972, Congress had addressed the danger that pollution of tributaries may impair the quality of traditional navigable waters downstream, and it is implausible to suppose that Congress's landmark 1972 legislation actually reduced the scope of the prior statutes.

Construing ''waters of the United States'' to include tributaries of traditional navigable waters, the territorial seas, interstate waters, or impoundments of ''waters of the United States'' is also consistent with the discussion of tributaries in the Clean Water Act's legislative history. The Senate Report accompanying the 1972 Act states that ''navigable waters'' means ''the navigable waters of the United States, portions thereof, *tributaries thereof,* and includes the territorial seas and the Great Lakes.'' S. Rep. No. 92–414, at 77 (1971), *as reprinted in* 1972 U.S.C.C.A.N. 3668, 3742 (emphasis added). Congress thus restated that ''reference to the control requirements must be made to the navigable waters, portions thereof, *and their tributaries.*'' *Id.* at 3743 (emphasis added).

In addition, this rule and the 1986 regulations construe the statute not to

[46] The Corps retains permitting authority over the ''waters of the United States'' that States cannot or do not assume.

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* water*s* 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,

Continued

''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

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.

758, 62 Stat. 1155 (June 30, 1948), which focused on State water quality standards rather than the conduct of individual polluters. *See EPA* v. *California ex rel. State Water Res. Control Bd.,* 426 U.S. 200, 202–03 (1976). In 1972, Congress enacted the Clean Water Act after concluding that these prior efforts had been ''inadequate in every vital aspect.'' S. Rep. No. 414, 92d Cong., 1st Sess. 7 (1971). The Clean Water Act was a '' 'complete rewriting' '' of existing law, designed to ''establish an all-encompassing program of water pollution regulation.'' *City of Milwaukee,* 451 U.S at 317–18 (1981) (citation omitted).

More recently, the Supreme Court in *Maui* identified a key dividing line between the areas where Congress intended to create a comprehensive floor of Federal water quality protections and those areas generally left to the States, observing that ''the structure of the [Clean Water Act] indicates that, as to groundwater pollution and nonpoint source pollution, Congress intended to leave substantial responsibility and autonomy to the States.'' 140 S. Ct. at 1471 (citing Clean Water Act section 101(b)). The Clean Water Act thus sets a baseline of Federal protection for waters that meet the definition of ''waters of the United States'' and authorizes States to be more protective than the Act while also leaving substantial responsibility and autonomy to the States over those waters that do not have a significant nexus to the core waters covered by the Act. The agencies also agree that partnerships with Tribes, States, and local governments are important and can help facilitate meeting the objective of the Act and have coordinated with these entities over the course of this rulemaking to ensure that they had opportunities to provide input on this rule and will continue to work with Tribes and States to implement this rule.

b. Comments Regarding Supreme Court Case Law and the Significant Nexus and Relatively Permanent Standards

Many commenters addressed the legal standard for determining the controlling opinion in *Rapanos.* In particular, many commenters cited *Marks* v. *United States,* 430 U.S. 188 (1977) to support assertions around what controlling legal principles may be derived from the opinion of five or more Supreme Court Justices when there is no majority. Relying on *Marks,* some of these commenters asserted that the *Rapanos* plurality opinion should control the definition of ''waters of the United States,'' while other commenters stated that *Marks* allows for use of either the plurality's relatively permanent standard or Justice Kennedy's significant nexus standard to assess Clean Water Act jurisdiction. As discussed above, the applicability of *Marks* is not the relevant inquiry for purposes of this rule. Rather, this rule reflects the agencies' interpretation of the statute, informed by Supreme Court precedent, not an interpretation of the *Rapanos* decision.

The agencies received many comments on the proposed rule's reliance on and approach to the significant nexus standard. As explained in section IV.A.3.a of this preamble, the agencies have concluded 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 the authority to define the scope of the term ''navigable waters,'' and they are exercising that authority in this rule. A principal advantage of the significant nexus standard is that it focuses directly and specifically on protecting the integrity of those waters in which the Federal interest is indisputable—traditional navigable waters, the territorial seas, and interstate waters. Further, while the agencies disagree that this rule's significant nexus standard is inconsistent with Justice Kennedy's concurring opinion in *Rapanos* (as some commenters had suggested), this rule represents the agencies' interpretation of the statute, not an interpretation of *Rapanos.* The agencies have concluded that the significant nexus standard as established in this rule is the best interpretation of the statute and that the relatively permanent standard in the rule provides important efficiencies and additional clarity for regulators and the public. Thus, the rule gives effect to the Clean Water Act's broad terms and environmentally protective aim as well as its limitations.

Some commenters suggested that the significant nexus standard is unclear or produces inconsistent results. In response to this concern, the agencies have established a definition of ''significantly affect'' in this rule, provided additional guidance on applying the significant nexus standard, and identified implementation tools and resources that will work together to provide clarity and further consistency in implementing the significant nexus standard (*see* section IV.C.9 and section IV.G of this preamble). The agencies have concluded that these actions, along with the agencies' extensive experience making determinations under the significant nexus standard, will increase the clarity and consistency of determinations of jurisdiction.

Several commenters discussed whether the proposed rule is consistent with Justice Scalia's plurality opinion in *Rapanos* and expressed various views about the proper interpretation of that opinion. As discussed in section IV.A.3.a of this preamble, the agencies have concluded that use of the plurality's approach alone has no grounding in the Clean Water Act's text, structure, or history and would upend an understanding of the Act's coverage that has prevailed for decades. Similarly, no Court of Appeals has held that the plurality's relatively permanent standard is the sole test that may be used to establish Clean Water Act jurisdiction. Additionally, requiring a continuous surface *water* connection, as suggested by some commenters, would add a requirement and language that do not exist in the text of the plurality opinion. The plurality opinion states that ''continuous surface connection'' is a ''physical-connection requirement.'' *Rapanos,* 547 U.S. at 742, 751 n.13 (referring to ''our [the plurality's] physical-connection requirement'' and asserting that *Riverside Bayview* does not reject ''the physical-connection requirement''). The plurality does not state that this standard is a continuous surface *water* requirement. Therefore, the agencies disagree that their longstanding implementation of the continuous surface connection requirement (*see Rapanos* Guidance at 7 n.28), which does not require a continuous flow of water between the wetland and the jurisdictional water, is inconsistent with the plurality opinion. In addition, a continuous surface water connection for wetlands is illogical when many wetlands have surface water only seasonally or intermittently or meet the wetland hydrology factor through saturated soils, a high water table, or other indicators of hydrology, and no scientific or regulatory definition of wetlands demands year-round surface water. *See, e.g.,* 33 CFR 328.3(b) (2008); NRC Report 3–5; *see also* 85 FR 22309 (explaining that ''not all abutting wetlands display surface water as the wetland hydrology factor but rather may have saturated soils, a high water table, or other indicators of hydrology''). *See* section IV.C.5.c.ii of this preamble for further discussion of the basis for the agencies' implementation of the continuous surface connection requirement in this rule.

Additionally, multiple commenters suggested that the relatively permanent

standard is easier to apply than the significant nexus standard. While the agencies recognize that the relatively permanent standard can be easier to apply in many instances, that is not always the case. For example, in the case of a tributary that flows directly into a traditional navigable water, it may be easier to demonstrate that the tributary significantly affects the chemical, physical, or biological integrity of that paragraph (a)(1) water due to its direct contribution of flow, woody debris, and other materials and its close distance to the traditional navigable water than it would be to demonstrate that the flow in that tributary meets the relatively permanent standard. More importantly, greater simplicity that comes at the expense of a profound mismatch with the Clean Water Act's design is not a valid basis for determining the jurisdictional scope of the Act. *Cf. Maui,* 140 S. Ct. at 1470, 1476 (rejecting similar arguments about a need for bright-line certainty in favor of a fact-specific test). Further, treating the relatively permanent standard as the exclusive criterion for Clean Water Act coverage would lead to arbitrary and illogical results. The 2020 NWPR did rely primarily on the relatively permanent standard and, in doing so, introduced new implementation uncertainties, including uncertainties related to the rule's case-specific typical year analysis, which the 2020 NWPR required for most categories of jurisdictional waters and that proved challenging to implement and yielded arbitrary results (*see* section III.B.3 and IV.B.3 of this preamble). In contrast, as discussed above, the agencies now have over a decade of nationwide experience with the significant nexus standard, and it has proven to be eminently administrable. Moreover, the agencies have made changes to this rule to increase the ease of implementation of the significant nexus standard.

Commenters also provided a variety of views on the consistency of the proposed rule with the *SWANCC* Supreme Court decision. Some commenters expressed concern that the proposed rule would expand Federal jurisdiction over potentially all State waters, contrary to the Supreme Court's holding in *SWANCC* that—absent a clear statement from Congress—the Clean Water Act must be construed in a manner that avoids federalism and constitutional questions. The agencies disagree that this rule is contrary to the Supreme Court's holding in *SWANCC* and note that a principal advantage of the significant nexus standard is that it focuses directly and specifically on protecting traditional navigable waters, the territorial seas, and interstate waters. By design, the significant nexus standard thereby permits jurisdiction over waters only if they significantly affect the waters over which Congress has unquestioned authority. *See, e.g., United States* v. *Lopez,* 514 U.S. 549, 558–59 (1995); *Hodel* v. *Va. Surface Mining & Reclamation Ass'n,* 452 U.S. 264, 282 (1981). Thus, an affirmative finding under the significant nexus standard is, by definition, a finding that Congress's core purpose is implicated. Commenters' constitutional concerns are therefore fully addressed by this rule.

In addition, a few commenters asserted that the Supreme Court in *SWANCC* rejected the notion that a biological or ecological connection alone is sufficient to support a finding of significant nexus. This reading of *SWANCC* is not correct. The Court in *SWANCC* did not hold that the particular ''ecological considerations upon which the Corps relied in *Riverside Bayview,*'' *Rapanos,* 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 SWANCC,* 531 U.S. at 164–65, 171–72. The Court found that this specific 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. In contrast, in this rule, the agencies, through application of the significant nexus standard, provide Federal protections for adjacent wetlands and other categories of waters based on their importance to the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, and interstate waters. In addition, the objective of the Clean Water Act is ''to restore and maintain the chemical, physical, and *biological integrity* of the Nation's waters.'' 33 U.S.C. 1251(a) (emphasis added). Among the means to achieve the Clean Water Act's objective, Congress established an interim national goal to achieve wherever possible ''water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.'' 33 U.S.C. 1251(a)(2). Therefore, the agencies disagree that consideration of biological effects on paragraph (a)(1) waters is inconsistent with the Clean Water Act.

Finally, several commenters asserted that the Clean Water Act requires broader protections than those afforded by the significant nexus standard and relatively permanent standard. The agencies agree that the Clean Water Act requires broader protection than the relatively permanent standard, but have concluded, as explained in section IV.A.3 of this preamble, that the significant nexus standard is the best construction of the scope of the Clean Water Act.

c. Comments Regarding Categories of Waters in This Rule

Multiple commenters expressed concern that the proposed rule would exceed the agencies' statutory authority by providing for jurisdiction over broad categories of waters (for example, tributaries) that the commenters asserted are not within the limits of the Clean Water Act pursuant to *Rapanos.* The agencies disagree. As explained above, this rule reflects the agencies' independent judgment on the scope of ''waters of the United States'' based on the text of the relevant provisions of the Clean Water Act and the statute as a whole, the objective and history of the Clean Water Act, the scientific record, the agencies' experience and technical expertise, and other relevant Supreme Court cases. This rule reflects carefully tailored modifications to the 1986 regulations to incorporate both the relatively permanent standard and the significant nexus standard such that the waters covered by the definition are within the limits of the Clean Water Act.

Many commenters discussed the agencies' legal authority to assert jurisdiction over tributaries, including specific types of tributaries (*e.g.,* ephemeral, intermittent, and perennial). Some commenters asserted that providing for jurisdiction over ephemeral and intermittent streams in the definition of ''waters of the United States'' is not supported by *Rapanos.* In this rule, the agencies are neither categorically including nor categorically excluding ephemeral and intermittent tributaries. Nor are the agencies codifying the opinions in *Rapanos.* Rather, the agencies are interpreting the phrase ''waters of the United States'' to include tributaries that meet either the significant nexus standard or the relatively permanent standard based on their conclusions in section IV.A of this preamble. Further, there is nothing in the text of the statute or its legislative history that excludes some categories of

tributaries based on their flow regime. Indeed, as discussed further below, the best available science demonstrates that ephemeral and intermittent streams can significantly affect the chemical, physical, and biological integrity of paragraph (a)(1) waters—*i.e.,* traditional navigable waters, the territorial seas, and interstate waters.

Multiple commenters suggested that, pursuant to Supreme Court precedent and the Clean Water Act, jurisdiction over non-navigable tributaries should be limited to tributaries (1) containing clearly discernible features and contributing consistent flow into traditional navigable waters; or (2) that carry a volume of water needed for navigable capacity of a traditional navigable water; or (3) of a quality needed for interstate commerce, where impairment of water quality would have a negative effect on interstate commerce. The agencies disagree that the case law, the statute, or the Constitution provide these precise limitations on the scope of tributaries covered by the Clean Water Act. The text of ''navigable waters,'' and of its specialized definition, does not include particular flow requirements. As discussed further below, the agencies have concluded that tributaries that meet either the relatively permanent standard or the significant nexus standard are ''waters of the United States,'' and flow is a consideration under both standards. These limitations are informed by Supreme Court case law and designed to be well within constitutional limits.

In contrast, other commenters asserted that tributaries should be categorically jurisdictional rather than subject to a case-specific analysis and that the *Rapanos* decision supports a categorical approach. The agencies agree that Justice Kennedy's concurring opinion in *Rapanos* did not reject the agencies' then-existing regulations governing tributaries, which were more categorical than this rule. 547 U.S. at 781; *see also id.* at 761. More broadly, it is a well-established principle of administrative law that agencies may choose to proceed via rulemaking or adjudication. *NLRB* v. *Bell Aerospace Co. Div. of Textron, Inc.,* 416 U.S. 267, 294 (1974) (''[T]he choice between rulemaking and adjudication lies in the first instance within the [agency's] discretion.''). With respect to the significant nexus standard in particular, Justice Kennedy stated that the agencies could proceed to determine tributaries and their adjacent wetlands jurisdictional through regulations or adjudication. *See Rapanos,* 547 U.S. at 780–81. As explained in section IV.A.3.a.iii of this preamble, the agencies have concluded that adjudication of which tributaries are within Clean Water Act protections, through case-specific application of the significant nexus standard or the relatively permanent standard under this rule, is appropriate. *See* section IV.C.10 of this preamble for additional guidance to landowners on determinations of jurisdiction and the appeals process for such determinations.

Many commenters also discussed the agencies' legal authority to assert jurisdiction over adjacent wetlands. Some commenters stated that the proposed rule's relatively permanent standard was inconsistent with the *Rapanos* plurality opinion, asserting that the plurality opinion requires a continuous surface connection for adjacent wetlands to be jurisdictional. As stated elsewhere, the agencies disagree that the relatively permanent standard as applied in this rule is inconsistent with the plurality opinion. Under this rule, an adjacent wetland is jurisdictional if there is a continuous surface connection between that adjacent wetland and a paragraph (a)(2) impoundment or jurisdictional tributary when the paragraph (a)(2) impoundment or jurisdictional tributary is relatively permanent.

In addition, some commenters expressed concern that the proposed rule's aggregation of wetlands and the relevant reach approach would be contrary to Justice Kennedy's significant nexus standard, which the commenters suggested requires that each wetland be judged in its own right. The agencies disagree that aggregation of wetlands and their tributaries is inconsistent with the significant nexus standard. First, Justice Kennedy explicitly stated that similarly situated waters should be assessed for a significant nexus ''alone or in combination.'' *Rapanos,* 547 U.S. at 780. Justice Kennedy understood that waters provide critical functions to downstream waters in combination, explaining: ''With respect to wetlands, the rationale for Clean Water Act regulation is, as the Corps has recognized, that wetlands can perform critical functions related to the integrity of other waters—functions such as pollutant trapping, flood control, and runoff storage. Accordingly, wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' '' *Id.* at 779–780 (citing 33 CFR 320.4(b)(2)). And Justice Kennedy's understanding is scientifically correct—though filling in a single wetland might not on its own materially influence a paragraph (a)(1) water, its impact is more likely to be significant when evaluated in combination with other similarly situated waters. Second, the agencies interpret ''waters of the United States'' to include waters that meet the significant nexus standard as codified in this rule because the agencies have determined, informed by the best available science and the text, structure, and legislative history of the Clean Water Act, that this standard, including the aggregation of waters authorized by it, advances the objective of the Act. The agencies have also established a definition of ''significantly affect'' in this rule that identifies the factors and the functions for determining whether the significant nexus standard is met, thus ensuring that the agencies' determinations of jurisdiction are based on consistent application of sound scientific principles.

Further, several commenters stated that the agencies should assert jurisdiction only over those wetlands that directly abut other ''waters of the United States.'' These commenters asserted that doing otherwise would exceed the constitutional limits of the agencies' Clean Water Act jurisdiction. For the reasons discussed above, the agencies disagree that only wetlands that directly abut other ''waters of the United States'' should be jurisdictional. Moreover, as discussed elsewhere in this preamble, the addition of the significant nexus standard in this rule ensures that the definition of ''waters of the United States'' does not exceed constitutional limits.

In contrast, several commenters asserted that all adjacent wetlands—not just those adjacent to the paragraph (a)(1) waters—should be categorically jurisdictional. Some of these commenters suggested that providing categorical protection for such wetlands is necessary to achieve the Clean Water Act's statutory objective. The agencies agree that providing categorical protection of adjacent wetlands can be a means of achieving the Act's objective but disagree that it is the only means. As noted by Justice Kennedy, the agencies can reasonably proceed to determine which tributaries and their adjacent wetlands are jurisdictional through regulations or adjudication, *see* 547 U.S. at 780–81; *see also NLRB* v. *Bell Aerospace Co. Div. of Textron, Inc.,* 416 U.S. at 294. With respect to wetlands adjacent to tributaries, the agencies are requiring case-specific determinations

of whether such wetlands meet the relatively permanent standard or the significant nexus standard to be jurisdictional under this rule.

Many commenters also addressed the agencies' legal authority to assert jurisdiction over paragraph (a)(5) waters (the category of waters described in paragraph (a)(3) of the proposed rule). Some commenters suggested that, per the Supreme Court's decision in *SWANCC,* the agencies lack authority to assert jurisdiction over paragraph (a)(5) waters or that, under *Rapanos,* the significant nexus standard should be applied only to tributaries or wetlands adjacent to tributaries, not to paragraph (a)(5) waters. First, as explained further in section IV.A.1 of this preamble, in this rule the agencies are exercising the authority granted to them by Congress to construe and implement the Clean Water Act and to interpret an ambiguous term and its statutory definition. Therefore, while the agencies' interpretation of the statute is informed by Supreme Court decisions, including *Rapanos,* it is not an interpretation of *SWANCC* or the multiple opinions in *Rapanos,* nor is it based on an application of the Supreme Court's principles as set forth in *Marks* to derive a governing rule of law from a decision of the Court in a case such as *Rapanos* where no opinion commands a majority. Furthermore, the agencies disagree that asserting jurisdiction over any waters that meet the significant nexus standard, including any paragraph (a)(5) waters, is inconsistent with *SWANCC* or *Rapanos.* Based on the law, the science, and agency expertise, the agencies conclude that the significant nexus standard applies to tributaries, adjacent wetlands, and intrastate lakes and ponds, streams, or wetlands not covered by other categories (*i.e.,* paragraphs (a)(3), (a)(4), and (a)(5) waters under this rule). Justice Kennedy's explication of the significant nexus standard applies to each of these types of waters. 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''—''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 further explained that ''[t]he required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the law to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' and it pursued that objective by restricting dumping and filling in 'navigable waters'.'' *Id.* at 779 (citing 33 U.S.C. 1251(a), 1311(a), 1362(12)). Justice Kennedy then concluded that the term ''waters of the United States'' encompasses wetlands and other waters that ''possess a 'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made.'' *Id.* at 759 (citation omitted). While Justice Kennedy's discussion of the application of the significant nexus standard focused on adjacent wetlands in light of the facts of the cases before him, his opinion is clear that he does not conclude that the significant nexus analysis applies only to adjacent wetlands. As he explicitly states, ''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.'' *Id.* at 767 (emphasis added). Fundamentally, Justice Kennedy's significant nexus analysis is about the fact, long acknowledged by Supreme Court case law, that protection of waters from pollution can be achieved only by controlling pollution of upstream waters. In addition, the Court in *SWANCC* did not hold that ''other waters'' (a category that has been modified and codified in this rule as paragraph (a)(5) waters) could never be jurisdictional; rather it held that the potential use of isolated ponds as habitat for migratory birds could not be used as the sole basis to justify treating those ponds as ''waters of the United States.'' *See* 531 U.S. at 164–65, 171–72. Indeed, the *SWANCC* Court in describing *Riverside Bayview* stated that ''it was the significant nexus between the wetlands and 'navigable waters' that informed our reading of the CWA'' in that case. *Id.* at 167. In this rule, the agencies are not protecting paragraph (a)(5) waters based on their potential use as habitat for migratory birds or based on their use broadly in interstate commerce as the 1986 regulations did. Instead, this rule includes paragraph (a)(5) waters on a case-specific basis based on their importance to the integrity of traditional navigable waters, the territorial seas, and interstate waters because they meet either the relatively permanent standard or the significant nexus standard.

Other commenters stated that the proposed rule does not go far enough in protecting paragraph (a)(5) waters. The agencies have concluded that this rule's reliance on the relatively permanent standard and significant nexus standard properly balances the Clean Water Act's broad statutory objective, while giving meaning to the word ''navigable.'' Accordingly, the agencies are not asserting jurisdiction over waters and wetlands simply where ''the use, degradation or destruction of [such waters] could affect interstate or foreign commerce.'' *Cf.* 33 CFR 328.3(a)(3) (1999).

B. Alternatives to This Rule

In promulgating a rule to repeal existing regulations, agencies must address and consider alternative ways of achieving the relevant statute's objectives and must provide adequate reasons to abandon those alternatives. *Motor Vehicle Mfrs. Ass'n* v. *State Farm Mut. Auto. Ins. Co.,* 463 U.S. 29, 48 (1983); *see also FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 515 (2009). As discussed below, the agencies have thoroughly considered alternatives to this rule and have concluded that this final rule best accomplishes the agencies' goals to promulgate a rule that advances the objective of the Clean Water Act, is consistent with Supreme Court decisions, is informed by the best available science, and promptly and durably restores vital protections to the nation's waters. The agencies have reconsidered the policies, interpretations, and conclusions of the 2020 NWPR. Although the 2020 NWPR has been vacated, it is the text currently in the Code of Federal Regulations. For the reasons articulated in this preamble, the agencies are changing their approach from that of the 2020 NWPR to interpreting the scope of ''waters of the United States.''

1. 2015 Clean Water Rule

The agencies are not repromulgating the 2015 Clean Water Rule. Unlike aspects of the 2015 Clean Water Rule, this rule is not based on categorical significant nexus determinations. Rather, this rule generally restores the longstanding and familiar categories of the 1986 regulations and establishes jurisdictional limitations based on case-specific application of the relatively permanent standard and the significant nexus standard to certain categories of waters in the rule.

Many commenters expressed support for the 2015 Clean Water Rule because they viewed it as informed by science, and because under that rule certain types of waters were categorically jurisdictional, which eliminated the need for extensive case-by-case

jurisdictional determinations. Many other commenters asserted that they did not support the 2015 Clean Water Rule because they viewed that rule as expanding Federal jurisdiction over waters that should not be jurisdictional. The agencies have concluded that the 2015 Clean Water Rule, while designed to advance the objective of the Clean Water Act, is not the best alternative to meet the policy goals of the agencies: to quickly promulgate a durable rule that retains the protections of the longstanding regulatory framework and avoids harms to important aquatic resources, informed by the best available science and consistent with the agencies' determination of the statutory limits on the scope of the ''waters of the United States,'' informed by relevant Supreme Court case law. Moreover, agencies may choose to proceed via rulemaking or adjudication. *NLRB* v. *Bell Aerospace Co.,* 416 U.S. 267, 294 (1974) (''[T]he choice between rulemaking and adjudication lies in the first instance within the [agency's] discretion.''). With respect to the significant nexus standard in particular, Justice Kennedy also stated that the agencies could proceed to determine tributaries and their adjacent wetlands jurisdictional through regulations or adjudication. *See* 547 U.S. at 780–81. As explained in section IV.A.3.a.iii of this preamble, the agencies have concluded that the approach in this rule—*i.e.,* providing categorical jurisdiction for paragraph (a)(1) waters and for wetlands adjacent to paragraph (a)(1) waters, and adjudicating which waters in paragraphs (a)(2) through (5) are ''waters of the United States'' through case-specific application of the significant nexus standard or the relatively permanent standard under this rule—is appropriate and fulfills the goals of the agencies and the objective of the Clean Water Act.

2. 2019 Repeal Rule

The agencies agree with the concept in the 2019 Repeal Rule of returning to the pre-2015 regulatory framework as a means of restoring a longstanding and familiar regulatory regime,[67] but find that this rule is preferable to the 2019 Repeal Rule for several reasons. As an initial matter, like the 2019 Repeal Rule, this rule seeks to return generally to the longstanding regulatory framework that existed prior to the 2015 Clean Water Rule, but this rule also restores those regulations with necessary limitations to ensure the definition of ''waters of the United States'' reflects consideration of the agencies' statutory authority under the Clean Water Act and relevant Supreme Court decisions. Additionally, compared to the 2019 Repeal Rule, this rule provides greater clarity by adding a new definition of ''significantly affect'' and by streamlining and restructuring the 1986 regulations, including by consolidating certain provisions. This rule also codifies a number of exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime and thus provides more clarity and certainty than the 2019 Repeal Rule.

Moreover, the agencies have substantial concerns regarding the legal rationale underpinning the 2019 Repeal Rule. In particular, the agencies are concerned that the interpretation of relevant Supreme Court case law in the 2019 Repeal Rule is flawed and thereby led to an erroneous assessment of the legality of the approach to the significant nexus standard in the 2015 Clean Water Rule. *See, e.g.,* 84 FR 56638–52 (October 22, 2019). The agencies' reading of the Clean Water Act in the 2019 Repeal Rule is also inconsistent with the agencies' considered interpretation, at this time, of the Act. For these reasons, the agencies find that the 2019 Repeal Rule is not an appropriate alternative to this rule.

3. 2020 NWPR

The agencies have also evaluated the 2020 NWPR as an alternative to this rule. After carefully considering the 2020 NWPR in light of the text, objective, and legislative history of the Clean Water Act, Supreme Court case law, the best available scientific information, and the agencies' experience in implementing it for over a year, the agencies do not find that the 2020 NWPR is a suitable alternative to this rule.

a. The 2020 NWPR Failed To Advance the Objective of the Clean Water Act

The agencies do not consider the 2020 NWPR to have advanced the statutory objective of the Clean Water Act, which the Supreme Court recently emphasized is an important aspect of defining the jurisdictional scope of the Act. *See, e.g., Maui,* 140 S. Ct. at 1468–69 (emphasizing the importance of considering the Clean Water Act's objective when determining the scope of the Act and finding that ''[t]he Act's provisions use specific definitional language to achieve this result,'' including the phrase ''navigable waters''). One critical example of the 2020 NWPR's failure to advance the Clean Water Act's objective is its removal of the significant nexus standard without considering an alternative approach to protecting waters that significantly affect paragraph (a)(1) waters. To be clear, while the agencies view the significant nexus standard as the best interpretation of section 502(7) of the Clean Water Act, the agencies do not view the Supreme Court's interpretations of the scope of ''waters of the United States'' as requiring adoption of that approach. *Rapanos,* 547 U.S. at 758 (Roberts, C.J., concurring). Yet the 2020 NWPR's rejection of the significant nexus standard while failing to adopt any alternative standard for jurisdiction that adequately addresses the effects of degradation of upstream waters on paragraph (a)(1) waters, fails to advance the Clean Water Act's objective.

The significant nexus inquiry reflects and furthers the objective of the Clean Water Act by allowing for a scientific evaluation of the effect of wetlands, tributaries, and other types of waters on paragraph (a)(1) waters. For that reason, evolving forms of this inquiry are present in *Riverside Bayview, SWANCC,* and Justice Kennedy's concurring opinion in *Rapanos.* The 2020 NWPR rejected this scientific approach and instead, for example, categorically excluded ephemeral features without appropriately considering scientific information about their important effects on the integrity of paragraph (a)(1) waters. In addition, in limiting the scope of protected wetlands to those that touch other jurisdictional waters or demonstrate evidence (which could include a natural berm, bank, dune, or similar natural feature) of a regular surface water connection to other jurisdictional waters, the 2020 NWPR failed to appropriately consider the many effects of other categories of wetlands on paragraph (a)(1) waters. For example, ephemeral streams that flow directly into the Rio Grande (a traditional navigable water) and wetlands separated from the Mississippi River (a traditional navigable water) by artificial levees and that lack a direct hydrologic surface connection to the river in a typical year, would be non-jurisdictional under the 2020 NWPR, yet both can have significant effects on these traditional navigable waters.

The 2020 NWPR contended that the drastic reduction in the scope of Clean Water Act jurisdiction ''pursues'' the objective of the Act because it would be

[67] 2019 Repeal Rule, Response to Comments at 9 (''The agencies find that reinstating the longstanding and familiar pre-2015 Rule regulatory regime will provide regulatory certainty in this interim period . . . .''), 15 (''[T]his final rule to recodify the 1986 regulations will provide greater regulatory certainty and nationwide consistency while the agencies consider public comments on the proposed revised definition of ''waters of the United States.'').

supplemented by the Act's non-regulatory programs as well as Tribal, State, and local efforts. The 2020 NWPR explained: ''The CWA's longstanding regulatory permitting programs, coupled with the controls that States, Tribes, and local entities choose to exercise over their land and water resources, will continue to address the discharge of pollutants into waters of the United States, and the CWA's non-regulatory measures will continue to address pollution of the nation's waters generally. These programs and measures collectively pursue the objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters.'' 85 FR 22269 (April 21, 2020). The agencies disagree with the 2020 NWPR's assertion that such ''collective pursuit'' of the objective of the Clean Water Act based on these programs and measures appropriately considers the objective of the Act and have concluded that the 2020 NWPR did not advance the objective of the Act, the proper measure under the statute and Supreme Court case law of a rule defining ''waters of the United States.''

The agencies agree with the 2020 NWPR's position that the Clean Water Act's non-regulatory measures, such as grantmaking and technical assistance authorities, advance the objective the Act. However, the agencies do not view these authorities as limiting the scope of ''waters of the United States,'' or as relevant to determining whether a definition of ''waters of the United States'' advances the objective of the Clean Water Act. The non-regulatory Clean Water Act programs cited by the 2020 NWPR complement and support the permitting programs at the core of the Act, rather than limiting their geographic scope. For example, the 2020 NWPR cited the Clean Water Act's provisions to address pollution into key waters in its discussion, including the Great Lakes, 33 U.S.C. 1258, the Chesapeake Bay, *see id.* at 1267(a)(3), Long Island Sound, *see id.* at 1269(c)(2)(D), and Lake Champlain, *see id.* at 1270(g)(2). These resources are ''waters of the United States'' to which regulatory programs apply, and the technical assistance and grants in the cited sections assist States and others in achieving the requirements of the Clean Water Act, but they do not limit the regulatory programs' scope. To the extent there is ambiguity as to the effects of these non-regulatory programs on the scope of the ''waters of the United States,'' the agencies have concluded based on the text and structure of the statute that they are complementary, rather than limiting.

As discussed in section III.A of this preamble, the Clean Water Act's fundamental innovation in 1972 was to ''establish an all-encompassing program of water pollution regulation,'' *Int'l Paper Co.* v. *Ouellette,* 479 U.S. 481, 492–93 (1987). The definition of ''waters of the United States'' establishes the scope of that program. The agencies therefore find that it is appropriate to consider whether the definition of the scope of waters to which the Clean Water Act's water pollution regulations apply helps to achieve that objective. Thus, the 2020 NWPR's statement that this rule ''pursues'' the objective of the Act if Clean Water Act and non-Clean Water Act programs are viewed in ''combination'' is not consistent with the better reading of the text and structure of the Act, its legislative history, or Supreme Court decisions concerning the effect of enactment of the Clean Water Act in 1972, nor does it fulfill the agencies' obligation to consider the objective of the Clean Water Act by assessing the water quality effects of revising the definition of ''waters of the United States.''

The preamble to the 2020 NWPR also cited the introductory policy provision of the Clean Water Act in section 101(b), to protect the ''primary responsibilities and rights of States to prevent, reduce, and eliminate pollution'' as a justification, in part, for its line-drawing. For example, one of the most environmentally significant decisions in the 2020 NWPR was its categorical exclusion of all ephemeral features from Clean Water Act jurisdiction. The agencies cited section 101(b) as a basis for this exclusion, because the exclusion would ''respect[] State and Tribal land use authority over features that are only episodically wet during and/or following precipitation events.'' 85 FR 22319. Nothing in the agencies' explanation, however, links the agencies' line-drawing to the text or purpose of section 101(b). Nor do the agencies, at this time, see any linkage between the flow regime of ephemeral features and the nature or extent of State authorities referenced in section 101(b). Indeed, as discussed in section IV.A.c.i of this preamble, available science unequivocally demonstrates that ephemeral features can implicate the important Federal interest in the protection of the integrity of traditional navigable waters, the territorial seas, and interstate waters. Likewise, the 2020 NWPR cited section 101(a) as support for categorically excluding ephemeral features, but again did not explain how this decision relates to or advances the Clean Water Act's objective. 85 FR 22277 (April 21, 2020).

The 2020 NWPR similarly relied upon the policy provision in section 101(b) as a basis for its definition of adjacent wetlands, in particular the decision to exclude from consideration subsurface hydrologic connections between a wetland and an adjacent water when determining jurisdiction. It stated, ''balancing the policy in CWA section 101(a) with the limitations on Federal authority embodied in CWA section 101(b), the agencies are finalizing the definition of 'adjacent wetlands' that does not include subsurface hydrologic connectivity as a basis for determining adjacency.'' *Id.* at 22313. Again, the 2020 NWPR did not explain how excluding consideration of subsurface hydrologic connections relates to or derives from the text of section 101(b), and the agencies do not now discern such a linkage. And as with the definition of ''tributaries,'' the 2020 NWPR did not explain how this choice relates to or advances the objective of the Clean Water Act.

In sum, based on the text and structure of the statute and Supreme Court case law, the agencies have determined that the 2020 NWPR is not a suitable alternative to this rule because it fails to advance the objective of the Clean Water Act. The 2020 NWPR does not establish either the significant nexus standard or an alternative standard that similarly advances the objective of the Clean Water Act by protecting waters, including ephemeral features, wetlands, and paragraph (a)(5) waters where they have a significant effect on the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, and interstate waters. Nor does the 2020 NWPR appropriately value the importance of Federal programs in achieving the objective of the Clean Water Act.

b. The 2020 NWPR Was Inconsistent With the Best Available Scientific Information

The 2020 NWPR's exclusion of major categories of waters from the protections of the Clean Water Act, specifically in the definitions of ''tributary'' and ''adjacent wetlands,'' runs counter to the scientific record demonstrating how such waters can affect the integrity of downstream waters. Specifically, as many commenters on the proposed rule noted, its categorical exclusion of ephemeral features and large categories of wetlands was inconsistent with the scientific record before the agencies. In addition, the 2020 NWPR's limits on the scope of protected wetlands to those

that touch or demonstrate evidence of a regular surface water connection to other jurisdictional waters run counter to the ample scientific information demonstrating the effects of wetlands on downstream waters, including paragraph (a)(1) waters, when they have other types of connections.

First, the definition of the term ''tributary'' in the 2020 NWPR categorically excluded ephemeral features from the regulatory protections of the Clean Water Act, contrary to scientific information conclusively demonstrating the vital role these streams can play in protecting the integrity of downstream waters, including paragraph (a)(1) waters. 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,'' as discussed above. Science Report at 6–10, 6–13. EPA's SAB Review of the draft Science Report explains that ephemeral streams ''are no less important to the integrity of the downgradient waters'' than perennial or intermittent streams. 2014 SAB Review at 22–23, 54 fig. 3. While in the arid Southwest, streams flow into downstream waters less frequently than they do in the wetter East, the Science Report emphasizes that short duration flows through ephemeral streams can transport large volumes of water to downstream rivers. Science Report at 6–9. For instance, the report notes that ephemeral streams supplied 76% of flow to the Rio Grande following a large rainstorm. *Id.* at 3–8. The 2014 SAB Review emphasizes that the ''cumulative effects'' of ephemeral flows in arid landscapes can be ''critical to the maintenance of the chemical, physical, and biological integrity'' of downstream waters. 2014 SAB Review at 22.

Similarly, the 2020 NWPR's definition of ''adjacent wetlands'' excluded many categories of wetlands that can play a vital role in protecting the integrity of waters to which they are connected, including paragraph (a)(1) waters. In defining ''adjacent wetlands,'' the 2020 NWPR limited the scope of wetlands protected by the Clean Water Act's regulatory programs to those that either abut or have evidence of certain surface water connections to other protected waters in a typical year. 85 FR 22340. Specifically, the rule encompassed wetlands that (i) abut, meaning to touch, another jurisdictional water; (ii) are flooded by a jurisdictional water in a typical year; (iii) are separated from a jurisdictional water only by a natural feature, such as a berm, which provides evidence of a direct hydrologic surface connection with that water; or (iv) are separated from a jurisdictional water only by an artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water in a typical year. *Id.* As with the tributary definition, the 2020 NWPR stated that the definition of ''adjacent wetlands'' is ''informed by science.'' *Id.* at 22314. Yet the 2020 NWPR's limits on the scope of protected wetlands to those that touch or demonstrate evidence of a regular surface water connection to other jurisdictional waters contradicted the ample scientific information before the agencies conclusively demonstrating the effects of wetlands on downstream waters when they have other types of surface connections, such as wetlands that overflow and flood jurisdictional waters or wetlands with less frequent surface water connections; wetlands with shallow subsurface connections to other protected waters; or other wetlands proximate to jurisdictional waters. *See Rapanos,* 547 U.S. at 786 (Kennedy, J., concurring in the judgment) (''Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of a hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system.''). As commenters noted, under the 2020 NWPR's approach, if a river were surrounded by hundreds of acres of wetland, building a road or levee between a river and a wetland complex could potentially sever Clean Water Act protections for the entire wetland complex.

The overwhelming scientific information before the agencies weighs decisively against the limited definition of ''adjacent wetlands'' in the 2020 NWPR. Available scientific information demonstrates the significant effects of categories of wetlands excluded by the 2020 NWPR on the chemical, physical, and biological integrity of paragraph (a)(1) waters. For example, whereas the 2020 NWPR provided that wetlands flooded by jurisdictional waters are only protected if the flooding occurs in a ''typical year,'' the Science Report states that wetlands that are ''rarely'' or ''infrequently'' flooded by streams and rivers can be ''highly connected'' to those waters and have ''long-lasting effects'' on them. Science Report at 4–39. The Science Report notes that effects ''critical to maintaining the health of the river'' result from large floods that provide ''infrequent connections'' with more distant wetlands. *Id.* Reflecting these concerns, the October 16, 2019 SAB Draft Commentary on the proposed 2020 NWPR states that the narrow definition of ''adjacent wetlands'' in the 2020 NWPR as it was proposed ''departs from established science.'' The agencies have weighed these statements and in light of the information about the importance of ''infrequently'' flooded wetlands to downstream waters, have concluded that excluding wetlands that lack the limited types of surface water connections to other jurisdictional waters required by the 2020 NWPR lacks scientific support.

The SAB's assessment of the 2020 NWPR proposal recognizes that the proposal was not consistent with the scientific information in the record, including the Draft Science Report that the SAB had previously reviewed. SAB Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act (February 27, 2020) (hereinafter, ''SAB Commentary''). The SAB Commentary emphasizes that the proposal does not ''fully incorporate the body of science on connectivity'' that the SAB had reviewed in the Draft Science Report and offers ''no scientific justification for disregarding the connectivity of waters accepted by current hydrological science.'' *Id.* at 2.

The 2020 NWPR stated that the ''agencies' decisions in support of this rule have been informed by science.'' 85 FR 22288 (April 21, 2020). For example, the 2020 NWPR cited the concept of a ''connectivity gradient'' as a basis for excluding ephemeral features. *Id.* (citing the SAB Commentary). The 2020 NWPR referred to the SAB Commentary's recommendation that the agencies recognize that connectivity occurs along a gradient allowing for variation in chemical, physical, and biological connections. *Id.* (citing the SAB Commentary at 3). The 2020 NWPR asserted that there is a ''decreased'' likelihood that waters with ''less than perennial or intermittent'' flow, *i.e.,* ephemeral streams, will affect the chemical, physical, and biological integrity of downstream waters. 85 FR 22288 (April 21, 2020).

Upon careful review, the agencies have concluded that the 2020 NWPR's reliance on the SAB's recommendation is out of context and is inconsistent with the information in the SAB Commentary as a whole. The connectivity gradient the 2020 NWPR cited was just a hypothetical example [68]

[68] The figure cited is captioned in part as ''*Hypothetical illustration* of connectivity gradient and potential consequences to downstream waters.'' 2014 SAB Review at 54 (emphasis added). Nowhere

Continued

meant to illustrate a single aspect of connectivity—hydrological, or physical connectivity—and sheds no light on the many other ways that features connect to and affect downstream waters. According to the SAB itself, the scientific information the agencies provided in support of categorically excluding ephemeral features does not fully represent the discussion in the cited SAB Commentary and runs counter to key elements of the scientific record before the agencies. SAB Commentary at 2.

The 2020 NWPR also stated that the line it drew between regulated and non-regulated wetlands, which excluded large categories of wetlands covered by previous regulatory regimes is ''informed by science.'' 85 FR 22314 (April 21, 2020). The 2020 NWPR cited statements from the 2014 SAB Review to the effect that wetlands situated alongside other waters are likely to be connected to those waters, whereas ''those connections become less obvious'' as the distance ''increases.'' *Id.* (citing the 2014 SAB Review at 55); *see also id.* at 22314 (citing the 2014 SAB Review at 60 (stating ''[s]patial proximity is one important determinant [influencing the connections] between wetlands and downstream waters'')). In addition, the 2020 NWPR cited a statement in the Science Report that explained, ''areas that are closer to rivers and streams have a higher probability of being connected than areas farther away.'' *Id.* at 22314 (citing the Science Report at ES–4).

Despite these citations, the 2020 NWPR's definition of ''adjacent wetlands'' was not based on proximity, but instead on a ''direct hydrologic surface connection,'' a factor that is distinct from proximity. *See id.* at 22340. The 2020 NWPR's definition of ''adjacent wetlands'' may exclude wetlands fifteen feet away from jurisdictional waters if they are separated by a levee that does not convey flow in a typical year, but include wetlands much further away so long as they are inundated by flooding from the jurisdictional water in a typical year. Therefore, neither of the two scientific rationales the 2020 NWPR cited for its conclusions actually support the lines drawn in that rule.

Many commenters agreed with the agencies that the 2020 NWPR was inconsistent with the best available science. Some commenters asserted, however, that the definition of ''waters of the United States'' is a policy interpretation that may be informed by science but cannot be based on science alone. As discussed in section IV.A.2 of this preamble, the agencies agree that science alone cannot dictate where to draw the line defining ''waters of the United States.'' But science is critical to determining how to attain Congress's plainly stated objective to restore and maintain the chemical, physical, and biological integrity of the nation's waters and properly evaluating which waters are the subject of Federal jurisdiction due to their effects on paragraph (a)(1) 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. The 2020 NWPR is not a suitable alternative to this rule because it cannot advance the objective of the Act given its lack of scientific support.

c. The 2020 NWPR Was Difficult To Implement and Yielded Inconsistent Results

In addition to the above concerns, the agencies' experience implementing the 2020 NWPR for over a year made clear that foundational concepts underlying much of the 2020 NWPR were confusing and difficult to implement. While any rule that draws lines between jurisdictional waters and non-jurisdictional waters will involve some implementation challenges, the agencies have found the challenges imposed by the 2020 NWPR to be impracticable in important respects.

Many commenters stated that the agencies should retain the 2020 NWPR because it was clear, pragmatic, and easy to implement. For example, commenters stated that the rule provided ''bright lines,'' was based on readily observable surface features, and categorically excluded certain categories of waters. The agencies recognize that the regulatory text of the 2020 NWPR contained categorical language and referred to observable surface features. However, the ''bright lines'' and surface feature tests relied upon the concept of ''typical year,'' which, as other commenters pointed out, and as discussed further below, was extremely challenging to implement and led to arbitrary results. As a commenter emphasized, contrary to statements often made about the 2020 NWPR, under that rule landowners could not determine whether a stream or wetland is jurisdictional by standing on their property. Rather, the commenter stated that property owners would need to determine the source and timing of flow, whether the stream flowed into a navigable water off-property, whether wetlands abutted a jurisdictional water, and whether a downstream segment lacked sufficient flow or otherwise broke jurisdiction. The commenter asserted that many of these inquiries would require the decision-maker to trespass onto properties of others, or guess. Furthermore, the commenter stated that in many cases, critical information that the rule required the property owner to know—such as whether a wetland is inundated by flooding from a jurisdictional water in a typical year—is not normally recorded. This comment is consistent with the agencies' experience that the 2020 NWPR did not ''provide[ ] clarity and predictability for Federal agencies, States, Tribes, the regulated community, and the public.'' *See* 85 FR 22252 (April 21, 2020). With respect to categorical exclusions, this rule retains and codifies a list of categorical exclusions, as did the 2020 NWPR and the 2015 Clean Water Rule. *See* further discussion in section IV.C.7 of this preamble. The challenges that the 2020 NWPR imposed to establish jurisdiction for features that it appears to define as jurisdictional, and that significantly affect the integrity of paragraph (a)(1) waters, further undermine the 2020 NWPR's viability as an alternative to this rule.

i. ''Typical Year'' Metric

The ''typical year'' is a concept fundamental to many of the 2020 NWPR's definitions. 85 FR 22273 (April 21, 2020). Under the rule, tributaries and lakes, ponds, and impoundments of jurisdictional waters were only jurisdictional if they had certain surface water connections with a traditional navigable water or the territorial seas at least once in a typical year. 33 CFR 328.3(c)(6), (12). Two categories of wetlands only met the adjacency test for jurisdiction if they had a surface water connection with other jurisdictional waters once in a typical year. 33 CFR 328.3(c)(1). As a scientific matter, the concept of ''typical year conditions,'' including precipitation normalcy, may be relevant to ensuring that certain surface water connections in natural streams are not being observed under conditions that are unusually wet or dry. In terms of implementation, the concept of precipitation normalcy is valid in certain contexts, such as to inform determinations as to the presence of a wetland. However, in many important contexts, available tools, including the tools the 2020 NWPR recommended, cannot reliably demonstrate the presence of surface water connections in a typical year, which are a necessary element of most categories of jurisdictional waters under the 2020 NWPR. For example, a recent

in its review does the 2014 SAB Review indicate that this is the actual or only connectivity gradient.

study by the Corps found that precipitation normalcy (as calculated based on the methodology described in the preamble to the 2020 NWPR) was neither a reliable predictor of streamflow normalcy, nor was it a precise predictor of streamflow percentiles, in an analysis of watersheds across the United States.[69] These challenges undermine the 2020 NWPR's claim that it enhanced the ''predictability and consistency of Clean Water Act programs.'' *See* 85 FR 22250 (April 21, 2020).

One of the significant implementation challenges of the typical year metric is that it can be difficult and sometimes impossible to identify the presence of a surface water connection in a typical year. Such connections are often not apparent from visual field observation alone. For example, on the day of a visit to an intermittent stream that flows only several months or several weeks a year, it is very unlikely that an observer would see surface water flows connecting to a downstream jurisdictional water. Similarly, though many ponds or wetlands may be frequently inundated by flooding from another water, in arid areas those features may be inundated only a few times every year, and sometimes the inundation occurs on a single day or within a matter of hours. While these waters satisfy the 2020 NWPR's jurisdictional test, agency staff would probably not be able to determine that they do, given how unlikely they would be to observe these infrequent connections. The difficulty of finding the direct hydrologic connections required by the typical year concept during a field visit is exacerbated by the fact that the 2020 NWPR discouraged reliance on field indicators. *See, e.g., id.* at 22292 (''The agencies . . . conclude that physical indicators of flow, absent verification of the actual occurrence of flow, may not accurately represent the flow classifications required for tributaries under this rule.'').

Given the insufficiency of visual field observations to assess the presence of a surface water connection as specified in the 2020 NWPR, under that rule agency staff often needed to expend substantial time and resources to try to obtain ancillary data to determine flow conditions at a particular site in a typical year. Hydrologic modeling tools and advanced statistical analyses could be employed where sufficient flow data are available, but often data needed to conduct such analyses is limited or lacking altogether, especially for smaller streams. Few streams across the country have hydrologic gages that continuously measure flow, as most such gages are located on larger rivers with perennial flow. Moreover, ''typical year conditions'' are often irrelevant to the extent of flow in human-altered streams, including effluent-dependent streams. The 2020 NWPR did not explain why human-altered hydrology should be subject to the same typical year requirement as natural streams.

For the same reasons that agency staff are unlikely to witness the specific surface water connections required under the 2020 NWPR during a site visit in dry regions or during the dry season, they are also unlikely to capture evidence of a surface water connection between a stream and a downstream traditional navigable water or the territorial seas using available aerial photographs taken during typical year conditions. Aerial photographs are often taken just once per year or once every other year and staff have no way of ensuring that they were taken during a typical year. High-resolution satellite imagery can serve as a reliable source to demonstrate specific surface water connections. But the availability and usability of such imagery varies across the country, depending on access, update intervals, cloud cover, and land cover (*i.e.,* vegetation or trees that obscure aerial views of stream channels, requiring the use of advanced tools to detect features of interest or the presence of water), so that such tools may be unlikely to demonstrate that specific surface water connections are occurring in a typical year. Moreover, as the 2020 NWPR acknowledged, ''characteristics of tributaries may not be visible in aerial photographs'' taken during periods of ''high shrub or tree cover,'' 85 FR 22299 (April 21, 2020). Commenters on the proposed rule stated that Tribes and States lacked sufficient data, aerial photography and access to other tools required to support the use of the typical year test in many locations. They expressed concern that under-resourced communities suffer a particular lack of data necessary to support this test. New satellites are expected to surmount some of these issues in the future, but as this information is not yet available, regulators could not use it to inform jurisdiction based on the requirements in the 2020 NWPR. Remote tools, such as aerial or satellite imagery, are often useful in implementing any definition of ''waters of the United States,'' but the 2020 NWPR's typical year criteria made use of these resources particularly challenging.

The same difficulties created challenges in detecting surface hydrologic connections that occurred in a typical year to meet the 2020 NWPR's definition of ''adjacent wetlands'' or ''lakes and ponds, and impoundments of jurisdictional waters.'' The 2020 NWPR's standard of inundation by flooding in a typical year was not tied to any commonly calculated flood interval, such as flood recurrence intervals, and the agencies are not aware of a tool capable of collecting the type of inundation data the 2020 NWPR required. Demonstrating that a wetland, lake, pond, or impoundment is inundated by flooding once in a typical year would require a field visit or a high-quality aerial photograph or satellite image coinciding with the exact time that the flooding occurs from a tributary to a wetland, lake, pond, or impoundment, as well as being able to demonstrate that this flooding occurred in a typical year. Determining that inundation by flooding occurs in a typical year was therefore extremely difficult, and sometimes impossible. Demonstrating that an artificial feature allows for a direct hydrologic surface connection between a wetland and a tributary in a typical year posed similar obstacles, requiring either auspiciously timed field visits, aerial photography, high-resolution satellite imagery, or data that the agencies may not be able to access, such as construction plans or operational records for an artificial levee.

The 2020 NWPR suggested the agencies ''will generally use'' precipitation data from the National Oceanic and Atmospheric Administration (NOAA) to help determine the presence of a surface water connection in a typical year, *see* 85 FR 22274 (April 21, 2020), but the methodology described in the 2020 NWPR preamble for determining precipitation in a typical year made it difficult to use these data to inform jurisdiction. NOAA precipitation totals over the three months prior to a site observation are compared to precipitation totals observed over the preceding 30 years to determine if conditions were wetter than normal, drier than normal, or normal (''typical''). Using the methodology in the preamble of the 2020 NWPR, only 40% of observations over a rolling 30-year period of record are considered ''normal,'' while 30% of observations are considered to be ''wetter than normal'' and 30% of observations are considered to be ''drier than normal.'' If

[69] Sparrow, K.H, Gutenson, J.L., Wahl, M.D. and Cotterman, K.A. 2022. *Evaluation of Climatic and Hydroclimatic Resources to Support the US Army Corps of Engineers Regulatory Program.* Engineer Research and Development Center (U.S.) Technical Report no. ERDC/CHL TR–22–19.

surface water flow was observed during normal or dry conditions, the agencies could have higher confidence that the surface water observations represented flow in a ''typical year.'' However, if flow was observed during the 30% of conditions that are ''wetter than normal,'' the surface water observations did not reveal whether flow would occur during a typical year. And if flow was *not* observed, precipitation data from the previous three months did not indicate whether flow might occur in that particular water feature under typical year conditions at a different point in the year. Therefore, if a site visit was conducted when surface water flow was not present, the agencies' suggested approach for evaluating whether a feature meets the typical year test often did not provide meaningful and relevant information for the agencies to make accurate determinations of jurisdiction. Indeed, a commenter on the proposed rule emphasized that Tribes and States have found the ''typical year'' requirement to require extensive hydrologic modeling and advanced statistical analyses in complex conditions. Under any regulatory regime, the agencies use a weight of evidence approach to determine jurisdiction, but the 2020 NWPR typical year requirement placed onerous and, in many instances, arbitrary constraints on the data that can be used as evidence.

Furthermore, the typical year concept as applied to the 2020 NWPR does not account for the increasing number of recurrent heat waves, droughts, storms, and other extreme weather events in many parts of the country. These events can have profound impacts on local and regional hydrology, including streamflow. Commenters noted that determining what is ''typical'' under the 2020 NWPR in light of increased drought and floods was not simple for Tribal or State agencies; such determinations required expert analysis and left much to interpretation, undermining the assertion by the agencies that the 2020 NWPR would establish a clear, predictable regulatory framework that can be implemented in the field.

The concept of ''typical year'' in the 2020 NWPR sought to factor in long-term climatic changes over time to some degree by considering a thirty-year rolling period of data, *see* 33 CFR 328.3(c)(13). However, the 2020 NWPR did not allow the agencies flexibility to consider other time intervals when appropriate to reflect effects of a rapidly changing climate, including positive trends in temperature, increasing storm events, and extended droughts. In response to more rapid recent changes in climate, NOAA has developed alternative approaches for estimating climate normals, including seasonal averages computed using shorter, annually updated averaging periods for temperature (10-year seasonal average) and total precipitation (15-year seasonal average). The rigid rolling thirty-year approach to determining typical year in the 2020 NWPR did not allow the agencies to use these updated methods.

The 2020 NWPR noted that the agencies can look to sources of information other than site visits, aerial photographs, and precipitation data to assess whether a feature has surface water flow in a typical year. It identified the Web-based Water-Budget Interactive Modeling Program, Climate Analysis for Wetlands Tables, and the Palmer Drought Severity Index, 85 FR 22275 (April 21, 2020). These methods, which provide information useful in many other contexts, often only look at climate-related conditions generally and often did not answer the jurisdictional questions posed by the 2020 NWPR. For example, they did not address whether surface water flow might connect a particular stream to a downstream traditional navigable water or the territorial seas, whether a particular wetland was inundated by or connected to a jurisdictional water as required under the 2020 NWPR, or how uncertainties at different locations and in different months affected the accuracy of condition estimates. While precipitation is an important factor, other information is also relevant to streamflow and surface water connections in a typical year, including the contributions of flow from wetlands, upgradient streams, and open waters in the watershed, evapotranspiration rates, water withdrawals including groundwater pumping, and other climatic conditions. Yet collecting this information from a variety of sources and interpreting it can be extremely time- and resource-intensive and may require special expertise. While the agencies have substantial experience using a weight of evidence approach to determine jurisdiction, for example as part of the significant nexus analysis, the typical year requirement makes it substantially more difficult to interpret available data and narrows the scope of data that can be used to determine jurisdiction.

Finally, the challenges presented by determining the presence of surface water flow in a typical year are even greater when evaluating a tributary at a distance from the downstream traditional navigable water or the territorial seas. Even streams that flow perennially or intermittently often travel many miles prior to reaching the closest traditional navigable water or the territorial seas, meaning many downstream reaches may need to be assessed. Under the 2020 NWPR, any ephemeral reaches along that pathway that did not carry surface water flow once in a typical year would render all upstream waters non-jurisdictional. 85 FR 22277 (April 21, 2020). The need to assess lengthy tributary systems imposed an extraordinarily high burden of proof on the agencies to evaluate surface water flow in a typical year along the flow path from a stream of interest to a downstream traditional navigable water or the territorial seas. The longer the pathway, the more challenging the analysis. As a commenter noted, in adopting the test, the 2020 NWPR inserted case-by-case analyses for every jurisdictional determination despite the rule's claim that it ''provide[s] a predictable framework in which to establish federal jurisdiction.'' *Id.* at 22273–22274. The uncertainty and implementation challenges generated by the 2020 NWPR's foundational typical year test are yet another basis to replace that rule.

ii. Determining Adjacency

The 2020 NWPR provided that wetlands are ''adjacent'' when they: (1) abut a traditional navigable water or the territorial seas; a tributary; or a lake, pond, or impoundment of a jurisdictional water; (2) are inundated by flooding from one of these waters in a typical year; (3) are physically separated from one of these waters only by a natural berm, bank, dune, or similar natural feature; or (4) are physically separated from one of these waters only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and the water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. 85 FR 22338; 33 CFR 328.3(c)(1). In practice, agency staff have found several of these criteria for adjacency extremely difficult to implement in certain circumstances.

The artificial barrier provision led to arbitrary results. For example, under the fourth way to meet the adjacency definition, a wetland may be jurisdictional if it is separated from a jurisdictional water by an artificial structure, such as a levee, that allows for a direct hydrologic surface connection in a typical year through a culvert. However, the same wetland would not be jurisdictional if there was no levee present, even if there was a direct

hydrological surface connection in a typical year through a culvert (assuming the wetland did not meet another criterion for adjacency). The 2020 NWPR therefore established that certain wetlands with a direct hydrologic surface connection to a jurisdictional water are *only* jurisdictional due to the presence of an artificial barrier. This discrepancy bears no relationship to the actual connections between the features at issue and is not supported by science or the agencies' experience.

Moreover, the provision establishing that a wetland is ''adjacent'' if a jurisdictional water inundates it by flooding in a typical year was extremely difficult to implement. *See* 33 CFR 328.3(c)(1)(ii). Inundation by flooding in a typical year is not a metric that is normally recorded either by implementing agencies or the regulated community. Available models generally focus on flood recurrence intervals, which do not necessarily correspond to the likelihood of inundation by flooding in a given or typical year, and the agencies would typically be unable to demonstrate that these indicators reflect typical year conditions. Indeed, the 2020 NWPR acknowledged that inundation by flooding in a typical year could correspond to a variety of flood recurrence intervals depending on location, climate, season, and other factors. 85 FR 22311. Given the absence of existing records of inundation by flooding, determining whether inundation by flooding has occurred in a typical year is challenging in many circumstances.

Compounding the challenge, the 2020 NWPR provided that wetlands can be jurisdictional if they are inundated by flooding from a jurisdictional water in a typical year—but inundation in the other direction, *from* the wetlands *to* the jurisdictional water, is not grounds for jurisdiction. Not only is there no scientific or legal basis for distinguishing between inundation *of* the wetland as opposed to inundation *from* the wetland, *see Riverside Bayview,* 474 U.S. at 134 (upholding the Corps' assertion of jurisdiction over ''wetlands that are not flooded by adjacent waters [but] may still tend to drain into those waters''), but determining whether the limited available photographs or other evidence of inundation reflects flooding in one direction as opposed to another adds to the difficulty in evaluating whether this standard is met. The same challenges apply to determining whether lakes, ponds, or impoundments of jurisdictional waters are inundated by flooding in a typical year, one basis for demonstrating Clean Water Act jurisdiction over these features. 85 FR 22338–39 (April 21, 2020); 33 CFR 328.3(c)(vi).

iii. Ditches

Among other requirements, the 2020 NWPR provided that a ditch [70] is jurisdictional as a tributary if it was originally built in a tributary or adjacent wetland, as those terms are defined in the 2020 NWPR, and emphasized that the agencies bear the burden of proof to determine that a ditch was originally constructed in a tributary or adjacent wetland. 33 CFR 328.3(a)(2), (c)(12); 85 FR 22299. In other words, in order to find a ditch jurisdictional, the agencies had to demonstrate that a ditch was (1) originally constructed in a stream (2) that, at the time of construction, had perennial or intermittent flow and (3) a surface water connection to a downstream traditional navigable water or the territorial seas (4) in a ''typical year.'' Alternatively, the agencies had to show that a ditch was (1) originally constructed in a wetland (2) that either abutted or had certain surface hydrologic connections to a jurisdictional water at the time the ditch was constructed (3) in a ''typical year,'' in order to demonstrate that the ditch is jurisdictional. Americans have been building ditches, straightening streams, and draining wetlands for hundreds of years. And while under earlier guidance and practice, the agencies generally assessed whether a ditch was excavated in dry land when making a jurisdictional determination, that involved an assessment simply of whether the ditch was excavated in a stream, a wetland, or other aquatic resource. By contrast, to determine whether a ditch was jurisdictional under the 2020 NWPR, the agencies had to determine if it was originally built in a tributary or adjacent wetland that would have been jurisdictional under the 2020 NWPR, and therefore had to address all of the implementation challenges discussed in the preceding sections involved in determining surface water connections and wetland adjacency in a typical year—but often for ditches built twenty, one hundred, or even several hundred years ago. To the extent that sparse evidence is available to demonstrate a surface water connection in a typical year for tributaries using tools available today, evidence is even more difficult to find when looking so far back in time. States approached the agencies seeking assistance in assessing the jurisdictional status of ditches, but the agencies were often unable to provide meaningful help given the burdens imposed by the 2020 NWPR's ditch definition.

The 2020 NWPR also provided that ditches are jurisdictional if they relocate a tributary, as that term was defined in the rule, 85 FR 22341 (April 21, 2020); 33 CFR 328.3(a)(2), (c)(12), but this standard as defined by the 2020 NWPR was also often extremely difficult to assess. The 2020 NWPR explained that a relocated tributary is ''one in which an *entire portion* of the tributary may be moved to a different location.'' 85 FR 22290 (April 21, 2020) (emphasis added). In other words, the 2020 NWPR appeared to require a ditch to divert 100% of the tributary's flow to meet the ''relocate a tributary'' test. While prior rules have defined relocated tributaries as jurisdictional, the requirement that the entire portion be relocated is new and has created substantial implementation challenges. As a practical matter, when a tributary is relocated it often reroutes just a portion of its flow to the ditch. Assessing whether a ditch relocated 100% of a tributary's flow, as opposed to 80% or 50% of its flow, is extremely difficult and may not be possible in some circumstances. The scientific literature indicates that features like ditches that convey water continue to connect to and affect downstream waters. *See* section III.A.iv of the Technical Support Document for additional information. By establishing a jurisdictional standard that is extremely difficult to meet, the 2020 NWPR effectively removed from the protections of the Clean Water Act large numbers of ditches that function as tributaries and that significantly affect the integrity of downstream traditional navigable waters, the territorial seas, and interstate waters. As is the case with tributaries, lakes and ponds, impoundments, and wetlands, the 2020 NWPR's impracticable approach to ditches made it extremely difficult to implement. In the agencies' judgment, any efficiencies the 2020 NWPR may have achieved through categorical exclusions are outweighed by the challenges the agencies encountered in implementing the rule, coupled with its failure to implement the objective of the Clean Water Act by removing protections for waters that are properly within the statute's scope.

[70] Ditches perform many of the same functions as natural tributaries. For example, like natural tributaries, ditches that are part of the stream network convey water that carries nutrients, pollutants, and other constituents, both good and bad, to downstream traditional navigable waters, the territorial seas, and interstate waters.

d. The 2020 NWPR Substantially Reduced Clean Water Act Protections Over Waters

The failure of the 2020 NWPR to advance the objective of the Clean Water Act, as well as its inconsistency with science and the challenges it presents in implementation, have had real-world consequences. The agencies have found that substantially fewer waters were protected by the Clean Water Act under the 2020 NWPR compared to under previous rules and practices. It is important to note that the definition of ''waters of the United States'' affects most Clean Water Act programs designed to restore and maintain water quality—including not only the section 402 NPDES and section 404 dredged and fill permitting programs, but also water quality standards under section 303, identification of impaired waters and total maximum daily loads under section 303, section 311 oil spill prevention, preparedness, and response programs, and the section 401 Tribal and State water quality certification programs—because the Clean Water Act provisions establishing such programs use the term ''navigable waters'' or ''waters of the United States.'' While the 2020 NWPR was promulgated with the expressed intent to decrease the scope of Federal jurisdiction, the agencies now are concerned that the actual decrease in water resource protections was more pronounced than the qualitative predictions in the 2020 NWPR preamble and supporting documents anticipated and acknowledged to the public. These data support the agencies' conclusion that the 2020 NWPR is not a suitable alternative to this rule.

i. Jurisdictional Determination and Permitting Data Show a Large Drop in the Scope of Waters Protected Under the Clean Water Act

Through an evaluation of jurisdictional determinations completed by the Corps between 2016 and 2021,[71] EPA and the Army have identified consistent indicators of a substantial reduction in waters protected under the Clean Water Act by the 2020 NWPR (*see* Technical Support Document section II.B.i for additional discussion on methods and results of the agencies' analyses). These indicators include an increase in the number and proportion of jurisdictional determinations completed where aquatic resources were found to be non-jurisdictional, an increase in determinations made by the Corps that no Clean Water Act section 404 permit is required for specific projects, and an increase in requests for the Corps to complete approved jurisdictional determinations (AJDs), rather than preliminary jurisdictional determinations (PJDs) which treat a feature as jurisdictional. These trends all reflect the narrow scope of jurisdiction in the 2020 NWPR's definitions. Additionally, the agencies find that these indicators likely account for only a fraction of the 2020 NWPR's impacts, because many project proponents did not seek any form of jurisdictional determination for waters that the 2020 NWPR categorically excluded, such as ephemeral features, and the Corps would not have knowledge of or ability to track such projects. A closer look at each of these indicators will help demonstrate some of the more pronounced impacts of the 2020 NWPR on paragraph (a)(1) waters than were identified for the public in the 2020 NWPR and its supporting documents. As explained in detail above, when a water falls outside the scope of the Clean Water Act, that means, among other things, that no Federal water quality standards will be established, and no Federal permit will be required to control the discharge of pollutants, including dredged or fill material, into such waters unless the pollutants reach jurisdictional waters. And since many entities did not believe that they would need to seek a jurisdictional determination under the 2020 NWPR, it is impossible to fully understand the scope of degradation the 2020 NWPR's definition caused to paragraph (a)(1) waters.

Consistent with Executive Order 13990, EPA and Army staff have reviewed jurisdictional determinations as recorded in the Corps' internal regulatory management database, referred to as the ORM2 database,[72] to identify any noticeable trends in jurisdictional determinations under the past recent rules defining ''waters of the United States.'' The agencies found within the AJDs completed under the 2020 NWPR, the probability of finding resources to be non-jurisdictional increased precipitously. Of the 9,399 AJDs completed by the Corps under the 2020 NWPR during the first 12 months in which that rule was in effect,[73] the agencies found approximately 75% of AJDs completed had identified non-jurisdictional water resources and approximately 25% of AJDs completed identified jurisdictional waters.[74] Conversely, when the 1986 regulations and applicable guidance were in effect (including following the 2019 recodification of those regulations), substantially more jurisdictional waters were identified in AJDs on average per year than compared to the first twelve months of the 2020 NWPR.[75] During similar one-year calendar intervals when the 1986 regulations and applicable guidance were in effect, approximately 28% to 45% of AJDs completed identified non-jurisdictional aquatic resources, and 56% to 72% of AJDs identified jurisdictional resources.

[71] A jurisdictional determination is a written Corps determination that a water is subject to regulatory jurisdiction under section 404 of the Clean Water Act (33 U.S.C. 1344) or a written determination that a water is subject to regulatory jurisdiction under section 9 or 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401 *et seq.*). Jurisdictional determinations are identified as either preliminary or approved, and both types are recorded in determinations through an internal regulatory management database, called Operation and Maintenance Business Information Link, Regulatory Module (ORM2). This database documents Department of the Army authorizations under Clean Water Act section 404 and Rivers and Harbors Act section 10, including permit application processing and jurisdictional determinations. This database does not include aquatic resources that are not associated with a jurisdictional determination or that are not associated with alternatives to jurisdictional determinations (such as delineation concurrences or ''No jurisdictional determination required'' findings, where the Corps finds that a jurisdictional determination is not needed for a project), or permit request or resource impacts that are not associated with a Corps permit or enforcement action. An approved jurisdictional determination (AJD) is an official Corps document stating the presence or absence of ''waters of the United States'' on a parcel or a written statement and map identifying the limits of ''waters of the United States'' on a parcel. A preliminary jurisdictional determination (PJD) is a non-binding written indication that there may be ''waters of the United States'' on a parcel; an applicant can elect to use a PJD to voluntarily waive or set aside questions regarding Clean Water Act jurisdiction over a particular site and thus move forward assuming all waters will be treated as jurisdictional without making a formal determination.

[72] *See supra* note 71.

[73] These AJDs were completed by the Corps between the 2020 NWPR's effective date of June 22, 2020, and June 21, 2021.

[74] This excludes dryland AJDs and waters identified as jurisdictional only under section 10 of the Rivers and Harbors Act. In addition, under the 2020 NWPR, a single AJD in the Corps' database can include both affirmative and negative jurisdictional determinations. Under prior regulatory regimes, the Corps' database was structured such that a single AJD could be either affirmative, or negative, but not both. To account for this change in the structure of the database, a 2020 NWPR jurisdictional determination that includes both affirmative and negative jurisdictional resources was normalized and counted as two separate AJDs, one affirmative and one negative. The total number of AJDs considered after this process was carried out was 9,399. Prior to this normalization, the total number of AJDs considered was 7,769. More details on the agencies' analysis can be found in the Technical Support Document section II.B.i.

[75] The time periods evaluated were June 22, 2016 to June 21, 2017; June 22, 2017 to June 21, 2018; and December 23, 2019 to June 21, 2020. The date ranges here constitute periods of time when the 1986 regulations (including the 2019 Repeal Rule's recodification of those regulations) and applicable guidance were in effect nationally. 2015 Clean Water Rule determinations were not part of this analysis.

The change from a range of 28% to 45% non-jurisdictional AJD findings prior to the 2020 NWPR to 75% non-jurisdictional findings after issuance of the 2020 NWPR indicates that substantially fewer waters were protected by the Clean Water Act under the 2020 NWPR (*see* Technical Support Document section II.B.i for additional discussion). Again, as commenters on the proposed rule noted, these numbers do not account for the many entities that did not seek AJDs because they believed their features were excluded under the 2020 NWPR.

When evaluating the effect of the 2020 NWPR on the number of individual aquatic resources (as opposed to the AJDs completed), the agencies found a similar substantial reduction in protections provided by the Clean Water Act. Within the first twelve months of implementation of the 2020 NWPR, between June 22, 2020, and June 21, 2021, the Corps documented the jurisdictional status of 48,313 individual aquatic resources or water features through AJDs completed; of these individual aquatic resources, approximately 75% were found to be non-jurisdictional by the Corps. More specifically, 70% of streams and wetlands evaluated were found to be non-jurisdictional, including 11,044 ephemeral features (mostly streams) and 15,675 wetlands. Ditches were also frequently found to be non-jurisdictional (4,706 individual exclusions), which is likely the result of the narrowed definition of tributary under the 2020 NPWR and the requirement that a ditch was only jurisdictional as a tributary if it was originally built in a tributary or adjacent wetland, as those terms are defined in the 2020 NWPR. By comparison, only 45% of aquatic resources were found to be non-jurisdictional during similar year-long calendar intervals between 2016 and 2020 under the pre-2015 regulatory regime.[76] This increase in non-jurisdictional determinations, so that approximately 75% of water bodies are non-jurisdictional under the 2020 NWPR as opposed to only 45% under the prior regulations, undermined the agencies' ability to provide a baseline of Federal protection for the integrity of the nation's waters.

Of particular concern to the agencies is the 2020 NWPR's disproportionate effect on arid regions of the country, as the aquatic resources in these regions predominantly consist of ephemeral features. Under the 2020 NWPR, more permittees across the country, including in the arid West, sought AJDs rather than PJDs, particularly for ephemeral features. Many more streams were evaluated and determined to be non-jurisdictional through AJDs in the arid West, while the number of individual stream reaches considered under PJDs declined precipitously. As mentioned previously, project proponents who request an AJD obtain an official Corps document that states either that there are no ''waters of the United States'' present on a parcel, or a statement that ''waters of the United States'' are present, accompanied by a map identifying their extent. In contrast, an applicant can elect to use a PJD to voluntarily waive or set aside questions regarding Clean Water Act jurisdiction over a particular site and thus move forward assuming all waters will be treated as jurisdictional without making a formal determination. There are time savings and sometimes cost savings associated with requesting a PJD in lieu of an AJD. A decline in the proportion of PJDs being requested under the 2020 NWPR indicates that fewer project proponents requested that aquatic resources on their project site be treated as if they were jurisdictional.

In Arizona, the annual average number of individual stream reaches considered under PJDs and similar alternatives to AJDs between 2016 to 2020 was 941, while under the 2020 NWPR in 2020–2021 it was only 45.[77] Compared to pre-2015 regulatory practice, under the 2020 NWPR, Arizona experienced an approximate 95% decrease in individual stream reaches being considered via PJDs and a 9-fold increase in individual stream reaches being considered via AJDs. Similar metrics for New Mexico show an 84% decrease in individual streams being considered via PJDs and a 28-fold increase in individual streams being considered via AJDs under the 2020 NWPR.

The number of stream reaches assessed in Arizona under AJDs compared to the number of evaluations completed nationwide was disproportionately high under the 2020 NWPR. The number of stream reaches assessed in Arizona constituted 9% of the total stream reaches assessed nationally and 13% of the ephemeral reaches assessed nationally over the first twelve months in which the 2020 NWPR was implemented.[78] This increase in the number of AJDs sought in Arizona under the 2020 NWPR compared to the number of AJDs sought in Arizona between 2016 and 2020 likely reflects the desire of landowners to confirm that features on their property were ephemeral or otherwise excluded under that rule, though it is possible the pace of landowners seeking AJDs would have slowed to some extent over time. The agencies understand the drastic decline in the number of PJDs requested compared to AJDs in the arid West, and the simultaneous increase in the number of AJD non-jurisdictional findings in the arid West, to have been driven largely by the categorical exclusion of ephemeral streams from jurisdiction. PJDs assume jurisdiction, and under the 2020 NWPR project proponents were less likely to assume that ephemeral streams were jurisdictional.

The Corps' data show that in New Mexico, of the 263 streams assessed via AJDs in the first twelve months of implementation of the 2020 NWPR (*i.e.,* between June 22, 2020, to June 21, 2021), 100% were found to be non-jurisdictional ephemeral features.[79] In Arizona, of the 1,525 streams assessed in AJDs in the first year of implementation of the 2020 NWPR, 1,518, or 99.5%, were found to be non-jurisdictional ephemeral resources. Eliminating these streams from jurisdiction under the 2020 NWPR also typically eliminated jurisdiction over wetlands which otherwise might meet adjacency criteria.

Some commenters asserted that the low percentage of jurisdictional AJD findings in Arizona under the 2020 NWPR does not have a statistically significant difference from the percentages of jurisdictional findings under the pre-2015 regulatory regime. The agencies agree that of Corps AJDs completed between 2016 and 2020, high percentages of streams in Arizona were found to be non-jurisdictional between 2016 and 2020. Proportionally, the non-jurisdictional findings via AJDs between 2016–2020 and the 2020 NWPR are similar. However, because the volume of streams assessed under AJDs in the arid West increased so substantially, there was a 10-fold increase in non-jurisdictional findings for streams in Arizona and a 36-fold increase in non-jurisdictional findings for streams in

[76] Based on the average annual percentage of non-jurisdictional findings.

[77] The AJD values associated with the 2020 NWPR fall outside of the 95% confidence interval calculated for annual data from 2016–2020. Note that in New Mexico and Arizona, the 2015 Clean Water Rule was never implemented due to litigation stays. The PJD values associated with the 2020 NWPR do not fall outside of the 95% confidence interval calculated for annual data from 2016–2020; this is likely a product of scale. See the Technical Support Document section II.B.i for more analysis.

[78] There were a total of 16,787 stream reaches assessed via AJDs nationwide between June 22, 2020 and June 21, 2021.

[79] These non-jurisdictional ephemeral resources are predominantly ephemeral streams, but a small portion may be swales, gullies, or pools.

New Mexico following implementation of the 2020 NWPR. The average annual number of individual stream resources considered in AJDs in Arizona between 2016–2020 was 147 (of which 138 were determined non-jurisdictional), compared to 1,525 stream reaches assessed under the 2020 NWPR (of which 1,521 were determined non-jurisdictional accounting for all exclusions). Assessed together, the statistically significant increase in overall resources assessed via AJD combined with the shift away from requests for PJDs, as well as the consistent proportion of AJDs with non-jurisdictional findings indicates that many more project proponents viewed resources on their land as no longer ''waters of the United States'' under the 2020 NWPR. The agencies' analysis also reflects the scope of the streams that the 2020 NWPR left unprotected, which in many cases are vitally important to desert aquatic ecosystems and to the hydrologic integrity of watersheds. *See* section IV.A.2.c.i of this preamble.

The Corps identified at least 368 projects from June 22, 2020, to June 21, 2021, through its ORM2 database that would have needed a Clean Water Act section 404 permit prior to the 2020 NWPR, but no longer did under the 2020 NWPR's definition of ''waters of the United States.'' [80] Moreover, in comparing 2020–2021 to similar annual data from 2016–2020 from implementation of the 1986 regulations consistent with Supreme Court case law, there was an average increase of over 100% in the number of projects determined to not require section 404 permits under the Clean Water Act due to activities not occurring in ''waters of the United States'' or activities occurring in waters that were deemed no longer ''waters of the United States'' due to the 2020 NWPR. The number of projects that did not require a section 404 permit under the 2020 NWPR was likely much greater than these numbers indicate because project proponents did not need to notify the Corps if they had already received an AJD that concluded waters in the review area were not ''waters of the United States,'' and because many project proponents would not have sought a jurisdictional determination or applied for a permit at all if they believed their aquatic resources were non-jurisdictional under the 2020 NWPR. Many projects could have occurred without consultation with the Corps due to the 2020 NWPR's narrow definition of ''waters of the United States'' and expansive non-jurisdictional categories. Therefore, while the Corps' ORM2 data shed light on the trend and magnitude of impacts to the scope of jurisdiction under the 2020 NWPR, it is fair to assume that these impacts are an underestimate.[81]

Many commenters cited the impacts referenced above as reasons to reject the 2020 NWPR's definition of ''waters of the United States.'' In addition, many commenters cited national-scale assessments of the number of waterbodies that lost protection under the 2020 NWPR as evidence of environmental harm. Some commenters noted that 51% of wetlands and 18% of streams lost protections.[82] Other commenters stated that 4.8 million miles of streams and 16.3 million acres of non-floodplain wetlands would be left without Federal level protections under the 2020 NWPR.[83]

Commenters provided many potential examples of the harms caused by the 2020 NWPR around the country. One commenter stated that in the Northwest, an estimated 9,165 miles of ephemeral streams in Oregon's Rogue River Basin that provide drinking water for the region, as well as habitat and spawning grounds for Federal threatened Southern Oregon/Northern California Coast coho salmon and steelhead, would have lost protection under the 2020 NWPR. Another commenter stated that in the Midwest, protection would have been lost for an estimated 500 to 1,000 miles of ephemeral and ditched streams that flow into the Niagara River, the channel that connects Lake Erie and Lake Ontario. The commenter also noted that following promulgation of the 2020 NWPR, two Great Lakes states finalized legislative action to further reduce protections under State law for waters excluded by the 2020 NWPR. One commenter asserted that up to 202,244 acres of wetlands located behind levees in Missouri would have been excluded from jurisdiction under the 2020 NWPR because they are separated from jurisdictional waters by ''upland or by dikes, barriers, or similar structures.'' The commenter stated that these wetlands provide flood control, habitats, and improve water quality. In the Mountain West, a commenter stated that over half of Colorado's streams and 22% of that State's remaining wetlands would have been excluded from jurisdiction under the 2020 NWPR. With respect to the Southeast, a commenter cited analyses demonstrating that 162,149 acres of wetlands in Georgia's Chattahoochee watershed were vulnerable to losing protection under the 2020 NWPR. The same commenter noted that, in the Mid-Atlantic, over 100,000 acres of wetlands would have lost protection under the 2020 NWPR in Virginia's James River and Rappahannock River watersheds, which are vital to water quality in the Chesapeake Bay. Finally, in the Southwest, comments from the State of New Mexico estimated that under the 2020 NWPR, 25–45% of its Clean Water Act stormwater general permits and 50% of its individual permits would no longer be required. In Arizona, a commenter stated that 94% of all wetlands and flowlines in Arizona's Upper San Pedro Watershed would have lost protection under the 2020 NWPR.

The agencies have not conducted an independent analysis to verify each of these comments but have carefully reviewed the concerns identified and the underlying analyses that commenters cited and found them generally consistent with the agencies' own findings about the impacts of the 2020 NWPR. These examples illustrate the quality and importance of the waters that lost protection under the 2020 NWPR. As commenters emphasized, waters that the 2020 NWPR categorically excluded, such as ephemeral streams and their associated wetlands and wetlands that did not

[80] This tracking method only applies when 100% of jurisdiction is lost under the 2020 NWPR (*i.e.,* if even 1 aquatic resource out of 100 that is proposed to be impacted remains jurisdictional, this method is not used). Additionally, this tracking method was a new database feature, which was not yet implemented uniformly across the United States, and is likely under-representative even for those cases in which 100% of jurisdiction was lost under the 2020 NWPR.

[81] Requests for AJDs and the jurisdictional dispositions of the aquatic resources evaluated as part of those AJDs are imperfect measures of activities that might affect those jurisdictional or non-jurisdictional aquatic resources. The AJD data in the Corps ORM2 database generally contain only records for situations in which landowners or project proponents have requested jurisdictional determinations from the Corps or that are associated with an enforcement action, and thus do not represent all aquatic resources that exist within the United States. The proportion and specific types of aquatic resources evaluated for jurisdiction via AJDs varies both geographically and from year to year. In addition, the ORM2 data collected from AJDs conducted under different regulatory regimes have some metrics that are not directly comparable. Notwithstanding these limitations, the volume of ORM2 data on AJDs and associated aquatic resources is large and is tracked in a reasonably accurate fashion, and thus provides a reasonable estimate of overall trends and conditions on the ground. It represents the best data available to the agencies at this time.

[82] Contained in the Resource and Programmatic Assessment for the Proposed Revised Definition of ''Waters of the United States'' (Docket ID No. EPA–HQ–OW–2021–0602–0039).

[83] Commenters cited to the following scientific paper as support: C.R. Lane and E. D'Amico. *Identification of putative geographically isolated wetlands of the conterminous United States,* 52 J Am Water Resource Association 705(2016); K. Fesenmyer et al., *Large portion of USA streams lose protection with new interpretation of Clean Water Act.* February 2021. Freshwater Science 40(1).

meet the 2020 NWPR's adjacency criteria, provide critical ecosystem services. The absence of Clean Water Act protections for such resources and any subsequent unregulated and unmitigated impacts to such resources would have caused cascading, cumulative, and substantial downstream harm. Commenters stated that, specifically, the 2020 NWPR would have reduced the extent to which waters filter out pollutants before they reach traditional navigable waters; reduced flood protections and water storage services, and increased flooding; harmed fisheries and hunting sites; destroyed bird and wildlife habitat, including habitats relied on by endangered species; and reduced the quality of drinking water. Commenters also stated that the reduction in federally protected waters under the 2020 NWPR could increase water pollution near low-income communities and communities of color in particular and that they could experience associated increases in health risk.

The 2020 NWPR's removal of Federal protections from the nation's waters, and the resulting detriment to the services they provide, undermines the objective of the Clean Water Act, as discussed in section IV.A.2 of this preamble.

ii. Tribes and States Did Not Fill the Regulatory Gap Left by the 2020 NWPR

Some commenters asserted that the diminished scope of ''waters of the United States'' would not necessarily reduce protections for waters because Tribes, States, and local entities may regulate discharges even in the absence of Clean Water Act regulation. *See* section IV.A.3.b of this preamble. This perspective is consistent with the 2020 NWPR's emphasis that, in the face of a narrower scope of ''waters of the United States,'' ''the controls that States, Tribes, and local entities choose to exercise over their land and water resources'' would help to achieve the objective of the Clean Water Act. 85 FR 22259 (April 21, 2020). Yet while some Tribes and States regulate ''waters of the Tribe'' or ''waters of the State'' more broadly than the Federal Government under their own laws, many newly non-jurisdictional waters under the 2020 NWPR were on Tribal lands or in States that do not regulate waters beyond those covered by the Clean Water Act. Under the 2020 NWPR, discharges into these waters could have occurred without any restriction.

As discussed in the Economic Analysis for the Final Rule, many Tribes and States do not regulate waters more broadly than the Clean Water Act. *See* Economic Analysis for the Final Rule, Chapter II; 2020 NWPR Economic Analysis at 30–31. Contrary to the predictions made in the 2020 NWPR Economic Analysis, during the year in which the 2020 NWPR was in effect, the net change made by States was deregulatory in nature. Two States which had previously protected State waters beyond the scope of ''waters of the United States'' removed these expansive protections, and no States that lacked these broader protections established them. *See* 2020 NWPR Economic Analysis at 39–41 (estimating that certain States are likely to continue their current permitting practices for dredged and fill material) and the Economic Analysis for the Final Rule, Chapter II (indicating that two of those States reduced the scope of State clean water protections after the 2020 NWPR was finalized, and none of them formally expanded protections as a direct result of the 2020 NWPR).

The agencies understand that revising State regulations and/or laws takes time, and the agencies do not know how some States might have responded if the 2020 NWPR had been in place for more than a year, but the agencies have no basis to expect that more States that currently lack protections beyond the 2020 NWPR Federal floor would have established them. Indeed, the External Environmental Economics Advisory Committee has stated that the model that the 2020 NWPR used to forecast State responses to that rule was overly optimistic with respect to the likelihood that States would address a Federal regulatory gap, in part based on the agencies' failure to fully consider States' responses to past changes to the definition of ''waters of the United States'' (*e.g.,* only three States directly increased protective regulations in response to the decision in *SWANCC* that the use of ''isolated'' non-navigable intrastate ponds by migratory birds was not by itself a sufficient basis for the exercise of Federal authority under the Clean Water Act, and the agencies' resulting change in implementation of the Act).[84] Moreover, commenters, including State entities, asserted that the Federal Government provided no assistance or support for overburdened State agencies trying to compensate for the sudden suspension in Federal protections under the 2020 NWPR. Finally, States asserted that in the absence of robust Federal protections, even if they were to expend substantial resources addressing discharges within their borders, they would not be able to limit pollutants flowing in from other States that may not have established such controls.

The agencies are also not aware of any Tribes that expanded their clean water protections to compensate for a reduction in protections under the 2020 NWPR. During the agencies' Tribal consultation and coordination for this rulemaking process, Tribes overwhelmingly indicated they lack the independent resources and expertise to protect their waters and therefore rely on Clean Water Act protections. *See* Summary of Tribal Consultation and Coordination, available in the docket for this rule. This feedback is consistent with the concerns expressed during the 2020 NWPR rulemaking process. *See, e.g.,* 85 FR 22336–22337, April 21, 2020 (''[M]any Tribes may lack the capacity to create a [T]ribal water program under [T]ribal law, to administer a program, or to expand programs that currently exist. Other Tribes may rely on the Federal government for enforcement of water quality violations . . . .'').

Given the limited capacity of many Tribes and States to regulate waters more broadly than the Federal Government and limited authority under Tribal and State law, the narrowing of Federal jurisdiction would mean that many discharges into the newly non-jurisdictional waters would no longer be subject to regulation, including permitting processes and mitigation requirements designed to protect the chemical, physical, and biological integrity of the nation's waters. The agencies have heard concerns from a broad array of co-regulators and stakeholders, including Tribes, States, scientists, and non-governmental organizations, that corroborated the agencies' data and indicated that the 2020 NWPR's reduction in the jurisdictional scope of the Clean Water Act would cause substantial environmental harms, including to the quality of paragraph (a)(1) waters, that Tribes and States lack the authority or resources to address.

[84] Prior to the 2016 Trump Administration, EPA's Science Advisory Board (SAB) had a subcommittee on environmental economics known as the Environmental Economics Advisory Committee (EEAC). When this committee was disbanded under the 2016 Administration, its members created an ad-hoc external committee. This External Environmental Economics Advisory Committee (E–EEAC) carried out an assessment of the economic analysis associated with the 2020 NWPR. *See* Keiser, D., S. Olmstead, K. Boyle, V. Flatt, B. Keeler, D. Phaneuf, J. Shapiro, and J. Shimshack (2020). *Report on the Repeal of the Clean Water Rule and its Replacement with the Navigable Waters Protection Rule to Define Waters of the United States (WOTUS).* December 2020. As of today, the EPA's SAB has reinstated the EEAC, which assessed the proposed rule's economic analysis as part of the SAB's review of the rule.

In conclusion, the agencies do not find that the 2020 NWPR is a suitable alternative to this rule.

C. This Rule

1. Summary of This Rule

This rule establishes the definition of ''waters of the United States'' for purposes of the Clean Water Act. For clarity, this rule is divided into three parts: jurisdictional waters, exclusions, and definitions. This section of the preamble addresses each provision of the rule and provides an explanation of the rule text, a response to significant comments, and the agencies' interpretation and implementation of the provisions of the rule.

The ''waters of the United States'' are defined in paragraph (a) of this rule: (1) traditional navigable waters, the territorial seas, and interstate waters (''paragraph (a)(1) waters''); (2) impoundments of ''waters of the United States'' (''paragraph (a)(2) impoundments''); (3) tributaries to traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard (''jurisdictional tributaries''); (4) wetlands adjacent to paragraph (a)(1) waters; wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or to jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (''jurisdictional adjacent wetlands''); and (5) intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) that meet either the relatively permanent standard or the significant nexus standard (''paragraph (a)(5) waters'').

The ''relatively permanent standard'' means 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. The ''significant nexus standard'' means waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters.

Paragraph (b) of this rule contains the longstanding exclusions from the pre-2015 regulations, as well as additional exclusions based on well-established practice, from the definition of ''waters of the United States.'' Paragraph (c) of this rule provides definitions for terms used in this rule.

Paragraph (a): Jurisdictional Waters

Paragraph (a)(1). This rule defines ''waters of the United States'' to include traditional navigable waters, the territorial seas, and interstate waters. The agencies are not making changes to the text or substance of the provisions of the 1986 regulations covering traditional navigable waters, the territorial seas, and interstate waters. The agencies are consolidating these three categories of waters into one paragraph at the beginning of the regulatory text. While combined into one paragraph, each category will remain distinct in separate subparagraphs. The agencies have concluded that this non-substantive change streamlines the regulatory text and increases clarity. This streamlining is not a substantive change and does not alter the agencies' longstanding interpretation and implementation of these provisions.

Paragraph (a)(2). This rule defines ''waters of the United States'' to include impoundments of ''waters of the United States.'' Impoundments are created by discrete structures (often human-built) like dams or levees that typically have the effect of raising the water surface elevation, creating or expanding the area of open water, or both. In this rule, the paragraph (a)(2) impoundments category provides that ''waters of the United States'' do not lose their jurisdictional status simply because they are impounded. In a change from the 1986 regulations, waters that are jurisdictional under paragraph (a)(5) and that are subsequently impounded do not retain their jurisdictional status by rule under the paragraph (a)(2) impoundments provision, but may still be determined to be jurisdictional if they meet the requirements of a category of ''waters of the United States'' other than paragraph (a)(2) at the time of assessment (*i.e.,* as a traditional navigable water, the territorial seas, interstate water, jurisdictional tributary, jurisdictional adjacent wetland, or paragraph (a)(5) water).

Paragraph (a)(3). This rule defines ''waters of the United States'' to include tributaries of traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard. As compared to the 1986 regulations, this rule adds the territorial seas to the list of waters to which a water may be a tributary and deletes intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) (the (a)(3) ''other waters'' provision under the 1986 regulations) from the list.

Paragraph (a)(4). Aquatic resources that meet this rule's definitions of ''wetlands'' and ''adjacent'' with regard to another jurisdictional water are assessed under this provision. The rule defines ''waters of the United States'' to include: (1) wetlands adjacent to traditional navigable waters, the territorial seas, or interstate waters; (2) wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; or (3) wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (''jurisdictional adjacent wetlands'').

Paragraph (a)(5). This rule defines ''waters of the United States'' to include intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) that meet either the relatively permanent standard or the significant nexus standard. In this paragraph, the agencies are retaining the category from the 1986 regulations sometimes referred to as ''(a)(3) waters'' or ''other waters,'' but with changes to reflect the agencies' determination of the statutory limits on the scope of ''waters of the United States'' informed by the law, the science, and agency expertise, in addition to consideration of extensive public comment on the proposed rule. Of particular importance, the agencies have replaced the 1986 regulation's broad Commerce Clause basis for jurisdiction for waters not identified in other provisions of the definition, with the relatively permanent standard and the significant nexus standard. In addition, the agencies have deleted the non-exclusive list of ''other waters'' in the 1986 regulation. Under this provision in the rule, only ''intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4)'' can be assessed for jurisdiction under the relatively permanent standard or significant nexus standard.

Paragraph (b): Exclusions

The agencies are promulgating a number of exclusions from the definition of ''waters of the United States,'' including longstanding

exclusions for prior converted cropland and waste treatment systems, and exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime. The agencies are listing these exclusions in the regulatory text in a new paragraph (b), which consolidates the exclusions together in a single regulatory section. Under this rule, where a feature satisfies the terms of an exclusion, it is excluded from jurisdiction even where the feature would otherwise be jurisdictional under paragraphs (a)(2) through (5) of this rule. Paragraph (a)(1) waters are not subject to the exclusions. The exclusions are:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Paragraph (c): Definitions

Paragraph (c) of this rule provides definitions for purposes of the rule. This rule contains several defined terms unchanged from the 1986 regulations: the definitions of ''wetlands,'' ''adjacent,'' ''high tide line,'' ''ordinary high water mark,'' and ''tidal water.'' This rule defines the term ''significantly affect'' for purposes of determining whether a water meets the significant nexus standard to mean ''a material influence on the chemical, physical, or biological integrity of'' a paragraph (a)(1) water. Under this rule, waters, including wetlands, are evaluated either alone, or in combination with other similarly situated waters in the region, based on the functions the evaluated waters perform. This rule identifies specific functions that will be assessed and identifies specific factors that will be considered when determining whether the functions provided by the water, either alone or in combination, have a material influence on the integrity of a traditional navigable water, the territorial seas, or an interstate water. These factors include the distance from a paragraph (a)(1) water; hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow; the size, density, or number of waters that have been determined to be similarly situated; landscape position and geomorphology; and climatological variables such as temperature, rainfall, and snowpack. The functions in this rule are indicators that are tied to the chemical, physical, or biological integrity of paragraph (a)(1) waters, including contribution of flow; trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants); retention and attenuation of floodwaters and runoff; modulation of temperature in paragraph (a)(1) waters; or provision of habitat and food resources for aquatic species located in paragraph (a)(1) waters.

Section IV.C of this preamble also provides guidance on implementation of each provision of this rule. In implementing this rule, the agencies generally will consider first if a water qualifies as a paragraph (a)(1) water (*i.e.,* a traditional navigable water, the territorial seas, or an interstate water). If a waterbody is determined to be a paragraph (a)(1) water, then it is jurisdictional with no need for further evaluation. If a water is not a paragraph (a)(1) water, the agencies generally will consider next whether any of the exclusions in paragraph (b) of this rule apply to the water. The exclusions in this rule do not apply to paragraph (a)(1) waters, and therefore, a traditional navigable water, the territorial seas, or an interstate water cannot be excluded under this rule, even if the water would otherwise meet the criteria for an exclusion.[85] If a water does not qualify as a paragraph (a)(1) water and the agencies determine that an exclusion is applicable (*e.g.,* waters that meet the waste treatment system exclusion, wetlands that qualify as prior converted cropland), the water would not be jurisdictional under this rule. If the water is not a paragraph (a)(1) water, and an exclusion under paragraph (b) does not apply, then the agencies generally will determine next if the water can be assessed under paragraphs (a)(2) through (4) of this rule. If the water does not meet the criteria for paragraphs (a)(1) through (4), the agencies generally will assess next if the water is jurisdictional under paragraph (a)(5) of this rule. When assessing the jurisdictional status of waters after the effective date of the final rule, regulators and the public should use the definition of ''waters of the United States'' established by this rule. For example, when assessing whether a stream is a jurisdictional tributary, regulators and the public should consider the provisions related to tributaries in the final rule.[86] If a water is not jurisdictional under paragraphs (a)(1) through (5) of this rule, then the water does not meet the definition of ''waters of the United States.''

It is important to note that some aquatic resources can potentially be assessed for jurisdiction under multiple categories of this rule. For example, certain streams, rivers, lakes, ponds, wetlands, and impoundments can be assessed as traditional navigable waters or interstate waters under paragraph (a)(1)(i) or (a)(1)(iii) of this rule. Other streams, rivers, lakes, ponds, and impoundments are situated such that they are part of the tributary system and can be assessed under paragraph (a)(3) of this rule. The agencies will assess intrastate lakes and ponds, streams, and

[85] *See also* discussion of the waste treatment system exclusion in section IV.C.7.b of this preamble, *infra.*

[86] The agencies will continue to evaluate potential enforcement actions using the regulations in place when the alleged violation occurred. For example, if a person excavated a ditch while the pre-2015 regulatory regime was in effect and the person complied with the terms of the pre-2015 regulatory regime, today's final rule does not create new liability. *See United States* v. *Lucero,* 989 F.3d 1088 (9th Cir. 2021) (explaining that the 2020 NWPR did not apply retroactively to the defendant's violations, which occurred before the 2020 NWPR became effective).

wetlands under paragraph (a)(5) of this rule only if they do not fall within paragraphs (a)(1) through (4). In any case, the agencies will identify the provision or provisions of the rule under which a determination of jurisdiction is made.

Section IV.C of this preamble provides increased clarity and substantial guidance to assist in implementing the relatively permanent standard and significant nexus standard. *See* sections IV.C.4, IV.C.5, and IV.C.6 of this preamble for additional information on how the agencies will implement these standards for tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) (these sections include guidance on identifying waterbodies on the landscape, determining which waters are ''relatively permanent, standing or continuously flowing,'' identifying waters with a ''continuous surface connection'' under the relatively permanent standard, and identifying which waters are ''similarly situated'' and ''in the region'' under the significant nexus standard).

As is typical after a rule is promulgated, the agencies have entered into a joint agency coordination memorandum to ensure the consistency and thoroughness of the agencies' implementation of this rule, which is available in the docket for the final rule. *See* Docket ID No. EPA–HQ–OW–2021–0602. As part of these coordination procedures, EPA and Corps field staff will coordinate on all draft approved jurisdictional determinations based on the significant nexus standard, and the agencies will follow a process for elevating a subset of these determinations to EPA and Corps headquarters for review as necessary. That coordination will be enhanced for waters assessed under paragraph (a)(5), and headquarters at the agencies will review all draft approved jurisdictional determinations [87] for paragraph (a)(5) waters based on the significant nexus standard. After nine months, the agencies will reevaluate this requirement and assess the implementation and coordination memorandum approach. *See* section IV.C.6 of this preamble for additional discussion.

The agencies note that Congress exempted or excluded certain discharges from the Clean Water Act or from specific permitting requirements. This rule will not affect any of the exemptions, including exemptions from section 404 permitting requirements provided by section 404(f), such as those for normal farming, ranching, and silviculture activities. 33 U.S.C. 1344(f); 40 CFR 232.3; 33 CFR 323.4. This rule will also not affect the existing statutory or regulatory exemptions or exclusions from section 402 NPDES permitting requirements, such as for agricultural stormwater discharges and return flows from irrigated agriculture, or the status of water transfers. 33 U.S.C. 1342(*l*)(1), (*l*)(2); 33 U.S.C. 1362(14); 40 CFR 122.2, 122.3(f). In addition, where waters are covered by the Clean Water Act, the agencies have adopted measures to simplify compliance with the Act such as general permits and tools for expediting the permitting process (*e.g.,* mitigation banks, in-lieu fee programs, and functional/conditional assessment tools). The agencies intend to continue to develop general permits and other simplified procedures to ensure that projects, particularly those that offer environmental or public benefits, can proceed with the necessary environmental safeguards while minimizing permitting delays.

Finally, with respect to determining whether a water meets the definition of ''waters of the United States,'' under case law and the Corps' existing regulations ''[u]nauthorized discharges into waters of the United States do not eliminate Clean Water Act jurisdiction, even where such unauthorized discharges have the effect of destroying waters of the United States.'' 33 CFR 323.2 (1987). Thus, for example, an unpermitted discharge of fill material into a jurisdictional adjacent wetland that destroys all wetland characteristics does not render that water no longer jurisdictional. Nor does an authorized discharge, filling in a part of a tributary, for example, sever jurisdiction upstream, provided that the upstream waters meet the definition of ''waters of the United States'' absent the unauthorized discharge.

2. Traditional Navigable Waters, the Territorial Seas, and Interstate Waters

a. This Rule

The agencies are not making changes to the text or substance of the provisions of the 1986 regulations covering traditional navigable waters, the territorial seas, and interstate waters. The agencies are consolidating these three categories of waters into one paragraph at the beginning of the regulatory text. While combined into one paragraph, each category will remain distinct in separate subparagraphs. The agencies have concluded that this non-substantive change streamlines the regulatory text and increases clarity. This consolidation requires corresponding changes to cross references and the numbering of other provisions in the rule. These changes increase clarity by reducing the number of cross references necessary and make practical sense because the jurisdictional status of other categories of waters relies on their connection to traditional navigable waters, the territorial seas, or interstate waters. For example, the definition of ''significantly affect'' refers simply to ''the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section'' rather than requiring multiple cross-references to three separate paragraphs. This streamlining is not a substantive change and does not alter the agencies' longstanding interpretation and implementation of these provisions.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The agencies have concluded that the non-substantive change consolidating traditional navigable waters, the territorial seas, and interstate waters into paragraph (a)(1) streamlines the regulatory text and increases clarity. These changes increase clarity by reducing the number of cross references necessary and make practical sense because the jurisdictional status of other categories of waters relies on their connection to traditional navigable waters, the territorial seas, or interstate waters. The rationale for retaining each of these three water types is provided in the relevant subsections below.

Some commenters expressed support for the categorical protection and consolidation of traditional navigable waters, the territorial seas, and interstate waters. One commenter stated that the consolidation is ''consistent with the history and text of the law.'' Several commenters opposed the consolidation of the traditional navigable waters, the territorial seas, and interstate waters provisions into one jurisdictional category, arguing that the categories of waters are distinct and therefore should remain separate. The agencies agree that each of these provisions is a distinct category but disagree that consolidating them into one paragraph has any effect on distinguishing the types of waters which fall within each category. Further, the agencies have kept the text of each category the same as in the 1986 regulations and have established separate subparagraphs for each category to ensure there is no confusion. The jurisdictional standards for each of

[87] An approved jurisdictional determination is a Corps document stating the presence or absence of ''waters of the United States'' on a parcel or a written statement and map identifying the limits of ''waters of the United States'' on a parcel. *See* 33 CFR 331.2.

the three categories are different, so the agencies will clearly identify the subparagraph under which a particular water is jurisdictional. A water which meets the test for traditional navigable waters under the Clean Water Act, for example, will be identified as jurisdictional under paragraph (a)(1)(i). Note that some waters may fall into more than one category of paragraph (a)(1) waters (*e.g.,* a water may be both a traditional navigable water and an interstate water, such as Lake Tahoe, or a water may be both a traditional navigable water and part of the territorial seas, such as the Pacific Ocean).

A commenter stated that the protection of traditional navigable waters, the territorial seas, and interstate waters should not be affected by any exclusions that the agencies may include in this rule. The agencies agree and the text of this rule is clear that the exclusions do not apply to paragraph (a)(1) waters. *See also* section IV.C.7 of this preamble. The Clean Water Act fundamentally protects these three categories of waters: traditional navigable waters are clearly encompassed within the defined term ''navigable waters''; the territorial seas are explicitly mentioned in the definition of ''navigable waters''; and, as discussed further below, interstate waters, by definition, are waters of the ''several States'' and are unambiguously ''waters of the United States.'' While the agencies have authority to draw lines excluding some aquatic features from the definition of ''waters of the United States,'' the Clean Water Act provides no such authority to the agencies to exclude waters in these three unambiguous types of ''waters of the United States'' under the statute. Even if jurisdiction over one or all of these categories of waters were ambiguous, the agencies have concluded that since these are the fundamental waters that Congress intended to protect under the Clean Water Act, and that have had longstanding and unequivocal protection, with the exception of the 2020 NWPR, it is reasonable to establish unequivocal jurisdiction over these waters. Further, the agencies have concluded that there are no policy, practical, or technical bases to apply the exclusions to these paragraph (a)(1) waters given their crucial role in the statutory regime.

Some commenters expressed support for consolidating just traditional navigable waters and territorial seas into a single category of jurisdictional waters. A commenter added that this approach is logical because these two types of waters are the only types of waters that are explicitly referenced in the operative sections of the Clean Water Act. The commenter asserted that combining these waters into one category would make the rule clearer and easier to administer. Similarly, a couple of commenters expressed concerns that the proposed rule too broadly categorized what is considered a ''foundational'' water. The 2020 NWPR consolidated the categories of traditional navigable waters and the territorial seas in the definition of ''waters of the United States'' into a single paragraph in the regulatory text in order to streamline the text but deleted the interstate waters category. 85 FR 22280, 22338, 22340 (April 21, 2020). The agencies agree that combining these waters into one category makes the rule clearer and easier to administer. However, the agencies have also combined interstate waters into the same paragraph because, as discussed above, protecting all three categories of waters is a fundamental aim of the Clean Water Act. *See* section IV.C.2.b.iii of this preamble (discussing protection under the Clean Water Act of interstate waters in the same manner as traditional navigable waters and the territorial seas). Under this rule, the jurisdictional status of the other categories of waters relies on their connection to any one of these three categories of waters—a traditional navigable water, the territorial seas, or an interstate water (and, where required, meeting either the relatively permanent standard or the significant nexus standard). Therefore, the agencies have concluded that streamlining the rule by including all three categories of these waters in one paragraph is reasonable and appropriate.

A commenter suggested that the agencies provide a definition of ''foundational waters.'' The commenter suggested that ''if the common shorthand is that the waters used for commerce, the interstate waters[,] and the territorial seas are the 'foundational waters[,]' then the additional term 'foundational waters' should be defined as such.'' The commenter asserted that this would make the rule text easier to understand and use. The agencies are not providing a definition for ''foundational waters'' because they are not using the term ''foundational waters'' in the rule text. The agencies used the phrase ''foundational waters'' in the preamble to the proposed rule simply for convenience and readability rather than writing the phrase ''traditional navigable waters, the territorial seas, and interstate waters'' repeatedly. As discussed above in this preamble, in light of the new consolidated paragraph that groups those three categories of waters together, the agencies will simply refer to those waters as ''paragraph (a)(1) waters'' in this preamble.

i. Traditional Navigable Waters

(1) This Rule

The Clean Water Act, the 1986 regulations, the 2015 Clean Water Rule, the 2019 Repeal Rule, and the 2020 NWPR all include within the scope of ''waters of the United States'' traditional navigable waters, defined by regulation as ''all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.'' *E.g.,* 33 CFR 328.3(a)(1) (2014). With respect to traditional navigable waters, the text of the 1986 regulations and the text of the 2020 NWPR are identical. The agencies did not propose to amend the longstanding text defining ''traditional navigable waters'' and are not making changes to the text in this rule. As discussed above, the agencies are consolidating three categories of waters into one paragraph at the beginning of the regulatory text, and with this consolidation, ''traditional navigable waters'' are identified in paragraph (a)(1)(i) of this rule.

The agencies also are not making changes to their longstanding interpretation of traditional navigable waters for purposes of Clean Water Act jurisdiction. Thus, these paragraph (a)(1)(i) waters include all of the ''navigable waters of the United States,'' defined in 33 CFR part 329 and by numerous decisions of the Federal courts, plus all other waters that are navigable-in-fact (*e.g.,* the Great Salt Lake, Utah and Lake Minnetonka, Minnesota). To determine whether a waterbody constitutes a paragraph (a)(1)(i) water under the regulations, relevant considerations include the agencies' regulations; prior determinations by the Corps, by EPA, and by the Federal courts; and case law. The agencies will determine whether a particular waterbody is a traditional navigable water based on application of those considerations to the specific facts in each case.

As noted above, the paragraph (a)(1)(i) waters include, but are not limited to, the ''navigable waters of the United States.'' A water body qualifies as a ''navigable water of the United States'' if it meets any of the tests set forth in 33 CFR part 329 (*e.g.,* the waterbody is (a) subject to the ebb and flow of the tide, and/or (b) the waterbody is

presently used, or has been used in the past, or may be susceptible for use (with or without reasonable improvements) to transport interstate or foreign commerce).

Traditional navigable waters also include ''all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.'' Some examples of waters that will be considered traditional navigable waters, and thus jurisdictional under this provision of this rule include: waters currently being used for commercial navigation, including commercial waterborne recreation (for example, boat rentals, guided fishing trips, or water ski tournaments); waters that have historically been used for commercial navigation, including commercial waterborne recreation; or waters that are susceptible to being used in the future for commercial navigation, including commercial waterborne recreation. *See* ''Waters that Qualify as Traditional Navigable Waters Under Section (a)(1) of the Agencies' Regulations,'' [88] available at *https://www.epa.gov/wotus/waters-qualify-traditional-navigable-waters-under-section-a1-agencies-regulations.*

2) *Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule*

Supreme Court decisions have not questioned the inclusion of traditional navigable waters in the definition of ''waters of the United States.'' *See, e.g., SWANCC,* 531 U.S. at 172 (''The term 'navigable' has at least the import of showing us 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.'').

Some commenters voiced support for the agencies' decision to interpret the scope of traditional navigable waters consistent with the agencies' longstanding approach in the document known as ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations.'' A commenter added that such an interpretation is consistent with the agencies' longstanding guidance and is familiar to Tribal and State co-regulators as well as the general public. Another commenter stated that the agencies' reference to ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations'' would create additional confusion during the implementation of this rule. The agencies are maintaining their longstanding approach to traditional navigable waters for purposes of the Clean Water Act as reflected in this well-established document. The agencies have used this guidance since 2007 and through a number of rulemakings. The 2020 NWPR continued use of this guidance, stating, ''because the agencies have not modified the definition of 'traditional navigable waters,' the agencies are retaining ['Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations'] to help inform implementation of that provision of this final rule.'' 85 FR 22281 (April 21, 2020). Given the longstanding use of the guidance, the agencies do not think it will cause confusion to continue to use it. To provide additional clarity, however, the agencies are maintaining this document as standalone guidance titled ''Waters that Qualify as Traditional Navigable Waters Under Section (a)(1) of the Agencies' Regulations,'' with minor edits to the title and to reflect that the *Rapanos* Guidance is no longer in effect, simultaneously with this rule.

After the 2020 NWPR was promulgated, the agencies issued a coordination memorandum that created some confusion. ''U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps) Process for Elevating and Coordinating Specific Draft Determinations under the Clean Water Act (CWA)'' (hereinafter, ''TNW Coordination Memorandum''). The memorandum established an implementation process by which the agencies elevate to their headquarters certain case-specific and stand-alone Clean Water Act traditional navigable water determinations concluding that a water is ''susceptible to use'' solely based on evidence of recreation-based commerce. *Id.* The TNW Coordination Memorandum merely required enhanced coordination for such determinations and did not state that a ''susceptible to use'' determination could not be solely based on evidence of recreation-based commerce. On November 17, 2021, the agencies rescinded the TNW Coordination Memorandum but kept in place the ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations.'' [89] A few commenters asserted that recreational activities are sufficient evidence to demonstrate that a water is susceptible to being used in the future for commercial navigation, thereby qualifying waters supporting recreational activities as traditional navigable waters for purposes of the Clean Water Act. Alternatively, several commenters asserted that recreational activities are not sufficient evidence to demonstrate that a water is a traditional navigable water. The Supreme Court has been clear that ''[e]vidence of recreational use, depending on its nature, may bear upon susceptibility of commercial use.'' *PPL Montana* v. *Montana,* 565 U.S. 576, 600–01 (2012) (in the context of navigability at the time of statehood); *id.* at 601 (''[P]ersonal or private use by boats demonstrates the availability of the stream for the simpler types of commercial navigation.'' (quoting *United States* v. *Appalachian Elec. Power Co.,* 311 U.S. 377, 416 (1940))); *id.* (noting that the ''fact that actual use has 'been more of a private nature than of a public, commercial sort . . . cannot be regarded as controlling''' (quoting *United States* v. *Utah,* 283 U.S. 64, 82

[88] ''Waters that Qualify as Traditional Navigable Waters Under Section (a)(1) of the Agencies' Regulations,'' began as ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations'' in Appendix D to the U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook (available at *https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2316*) that was published in 2007 concurrently with the 2007 *Rapanos* Guidance and thus is often simply referred to as ''Appendix D.'' The *Rapanos* Guidance was updated in 2008, but Appendix D has remained unchanged since 2007. Paragraph (a)(1)(i) of this rule was paragraph (a)(1) of the regulations in place when the guidance was issued, but the text of that provision has not changed through the various rulemakings defining ''waters of the United States,'' and the agencies have continued to use the guidance for determining whether a water is a ''traditional navigable water.'' *See* 80 FR 37054, 37074 (June 29, 2015) (2015 Clean Water Rule); 85 FR 22250, 22281 (April 21, 2020) (2020 NWPR). There have been no substantive changes to the guidance since it was issued on May 30, 2007. In 2021, EPA and the Army established ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations,'' as a standalone guidance document when rescinding a memorandum on traditional navigable waters finalized after the 2020 NWPR. However, for clarity the agencies have updated the title to ''Waters that Qualify as Traditional Navigable Waters Under Section (a)(1) of the Agencies' Regulations'' and deleted references to the *Rapanos* Guidance. The agencies will continue to use this guidance to determine whether a water is a ''traditional navigable water'' for the purposes of the Clean Water Act and the agencies' implementing regulations. This document is available at *https://www.epa.gov/wotus/waters-qualify-traditional-navigable-waters-under-section-a1-agencies-regulations.*

[89] U.S. Environmental Protection Agency and U.S. Department of the Army. ''Recission of June 30, 2020 Memorandum 'U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (Corps) Process for Elevating and Coordination Specific Draft Determinations under the Clean Water Act (CWA).'' November 17, 2021. Available at *https://www.epa.gov/system/files/documents/2021-11/nwpr-tnw-coordination-rescission-memo_signed-11.17.2021.pdf.*

(1931))). Therefore, the agencies are maintaining their longstanding position that commercial waterborne recreation (for example, boat rentals, guided fishing trips, or water ski tournaments) can be considered when determining if a water is a traditional navigable water.

Some commenters stated that the agencies must ensure that traditional navigable waters are not limited to just the waters that the agencies have determined to be ''navigable waters of the United States'' under section 10 of the Rivers and Harbors Act of 1899. Other commenters stated that the agencies should limit the scope of traditional navigable waters to the section 10 waters under the Rivers and Harbors Act of 1899. The agencies are not changing their longstanding position that the traditional navigable waters for purposes of the Clean Water Act include, but are not limited to, the section 10 waters under the Rivers and Harbors Act of 1899, and include any of the waters that constitute traditional navigable waters under relevant judicial decisions. *See* ''Waters that Qualify as Waters of the United States Under Section (a)(1) of the Agencies' Regulations.'' [90] The scope of the Rivers and Harbor Act of 1899 is generally narrower than the scope of the Clean Water Act. *See, e.g., 1902 Atlantic Ltd.* v. *Hudson,* 574 F. Supp. 1381, 1392–93 (E.D. Va. 1983) (explaining that ''[t]he term 'navigable waters of the United States' as used in the Rivers and Harbors Act of 1899 has a substantially different, and more limited, meaning than the term as used in the Clean Water Act'' and that ''the term has a more limited meaning, consistent with the concepts of 'navigation' and 'navigability' as of 1899''). The scope of ''navigable waters of the United States'' under the Rivers and Harbors Act of 1899 is thus more limited than the scope of traditional navigable waters for purposes of the Clean Water Act and as established in paragraph (a)(1)(i) of this rule. The Corps' regulations reflect the difference and under the Corps' regulations, ''navigable waters of the United States'' (*i.e.,* waters that are subject to section 10 of the Rivers and Harbors Act of 1899) are limited to ''those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.'' 33 CFR 329.4. Therefore, there are numerous waters that have been determined to be traditional navigable waters for purposes of the Clean Water Act, or navigable for other purposes under Federal law, but which are not ''navigable waters of the United States'' under section 10 of the Rivers and Harbors Act of 1899. For example, the Supreme Court has found that the Great Salt Lake met the test for navigability for purposes of the ownership of the bed of the Lake at the time of Utah's statehood, even though it was not part of a continuous waterborne highway of interstate commerce, but the Court of Appeals for the Tenth Circuit found that evidence insufficient to establish that the Lake is covered by the Rivers and Harbors Act of 1899. *See Utah* v. *United States,* 403 U.S. 9 (1971); *Hardy Salt Co.* v. *Southern Pacific Trans. Co.,* 501 F.2d 1156 (10th Cir. 1974). The Corps has determined the lake to be a traditional navigable water for purposes of the Clean Water Act based on the Supreme Court's finding that the water in the past met the test for navigability. The distinction the agencies have drawn between section 10 waters and traditional navigable waters for purposes of the Clean Water Act is entirely consistent with Supreme Court case law. The Supreme Court in *Kaiser Aetna* rejected the notion ''that the concept of 'navigable waters of the United States' has a fixed meaning that remains unchanged in whatever context it is being applied.'' *Kaiser Aetna* v. *United States,* 444 U.S. 164, 170 (1979). Instead, the Court cautioned that ''any reliance upon judicial precedent must be predicated upon a careful appraisal of the *purpose* for which the concept of 'navigability' was invoked in a particular case.'' *Id.* at 171 (internal quotation marks omitted) (emphasis in original). The Supreme Court further stated that the ''cases that discuss Congress' paramount authority to regulate waters used in interstate commerce are consequently best understood when viewed in terms of more traditional Commerce Clause analysis than by reference to whether the stream, in fact, is capable of supporting navigation or may be characterized as [a] 'navigable water of the United States.'' *Id.* at 174. More recently, the Supreme Court has cautioned ''that the test for navigability is not applied in the same way in [different] types of cases[,]'' referring, for example, to cases arising under the Federal Power Act, Clean Water Act, and title disputes. *PPL Montana* v. *Montana,* 565 U.S. 576, 592 (2012).

A number of commenters stated that the agencies' interpretation of traditional navigable waters was inconsistent with the test for navigability in *The Daniel Ball,* 77 U.S. 557 (1870), with the discussion of navigability in *SWANCC,* and with the plurality and Justice Kennedy's opinions in *Rapanos.* The agencies disagree. None of the opinions in *Rapanos* addressed the test for traditional navigable waters; rather, they simply cited to *The Daniel Ball*—the beginning of a long line of cases addressing navigability. As the Supreme Court has explained: ''The *Daniel Ball* formulation has been invoked in considering the navigability of waters for purposes of assessing federal regulatory authority under the Constitution, and the application of specific federal statutes, as to the waters and their beds.'' *PPL Montana,* 565 U.S. at 592 (citing *The Montello,* 20 Wall. 430, 439 (1874); *United States* v. *Appalachian Elec. Power Co.,* 311 U.S. 377, 406 & n.21 (1940) (Federal Power Act); *Rapanos,* 547 U.S. at 730–31 (plurality opinion) (Clean Water Act); *id.* at 761 (Kennedy, J., concurring in judgment) (same)). In *PPL Montana,* the Supreme Court was clear that the test for navigability has evolved since *The Daniel Ball;* it depends upon the authority being exercised by the Federal Government and is a case-specific inquiry. ''It should be noted, however, that the test for navigability is not applied in the same way in these distinct types of cases.'' 565 U.S. at 592. Of particular relevance for traditional navigable waters for the Clean Water Act, ''federal regulatory authority encompasses waters that only recently have become navigable, *see, e.g., Philadelphia Co.* v. *Stimson,* 223 U.S. 605, 634–635, 32 S.Ct. 340, 56 L.Ed. 570 (1912), were once navigable but are no longer, *see Economy Light & Power Co.* v. *United States,* 256 U.S. 113, 123–124, 41 S.Ct. 409, 65 L.Ed. 847 (1921), or are not navigable and never have been but may become so by reasonable improvements, *see Appalachian Elec. Power Co., supra,* at 407–408, 61 S.Ct. 291. With respect to the Federal commerce power, the inquiry regarding navigation historically focused on interstate commerce. *See The Daniel Ball, supra,* at 564. And, of course, the commerce power extends beyond navigation. *See Kaiser Aetna* v. *United States,* 444 U.S. 164, 173–174, 100 S.Ct. 383, 62 L.Ed.2d 332 (1979). . . . Indeed, '[e]ach application of [the *Daniel Ball*] test . . . is apt to uncover variations and refinements which require further elaboration.' *Appalachian Elec. Power Co., supra,* at 406, 61 S.Ct. 291.'' *PPL Montana,* 565 U.S. at 592–93. Thus, the agencies' interpretation of traditional navigable waters for purposes of the Clean Water Act is consistent with *The Daniel Ball* as applied by the Supreme Court.

[90] *See supra* note 88.

ii. Territorial Seas

(1) This Rule

The Clean Water Act defines ''navigable waters'' to include ''the territorial seas'' in section 502(7). The Clean Water Act then defines the ''territorial seas'' in section 502(8) as ''the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.'' The territorial seas establish the seaward limit of ''waters of the United States'' and are clearly jurisdictional under the Clean Water Act.

The Clean Water Act, the 1986 regulations, the 2015 Clean Water Rule, the 2019 Repeal Rule, and the 2020 NWPR all included ''the territorial seas'' as ''waters of the United States.'' This rule makes no changes to ''the territorial seas'' provision and retains the provision in the regulatory text, consolidated in paragraph (a)(1).

(2) Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

As described above, the Clean Water Act explicitly defines the agencies' jurisdiction to include ''the territorial seas.'' This rule confirms the agencies' jurisdiction over these waters, consistent with Congress's direction. A commenter stated that if the agencies combine traditional navigable waters, the territorial seas, and interstate waters into one category of waters in this rule, the agencies should clarify that the territorial seas represent a distinct basis for jurisdiction and are not a type of traditional navigable water. The agencies agree with this commenter that the territorial seas are an independent category of jurisdictional waters. However, in the preamble to the proposed rule, the agencies also stated that the territorial seas are a type of traditional navigable water. While most portions of the territorial seas are also traditional navigable waters, the agencies are clarifying in this rule that portions of the territorial seas that may not be navigable or capable of being used in interstate or foreign commerce are still jurisdictional if they meet the definition of the ''territorial seas'' in the Clean Water Act. The agencies did not intend to exclude any portion of the territorial seas as the term is defined in Clean Water Act section 502(8), 33 U.S.C. 1362(8). To avoid any confusion, this rule continues to list traditional navigable waters and the territorial seas as separate categories of jurisdictional waters.

iii. Interstate Waters

(1) This Rule

This rule retains the longstanding categorical protections for interstate waters, regardless of their navigability, that were established by the earliest predecessors to the 1972 Clean Water Act and remained in place except during the time period the 2020 NWPR was in effect. Interstate waters are, by definition, waters of the ''several States,'' U.S. Const. Article I, section 8, and are unambiguously ''waters of the United States.'' In addition, categorical protection of interstate waters is the construction of the Clean Water Act that is most consistent with the text of the statute, including section 303(a), its purpose and history, Supreme Court case law, and the agencies' charge to implement a ''comprehensive regulatory program'' that protects the chemical, physical, and biological integrity of the nation's waters.

The agencies interpret interstate waters under this rule to mean ''all rivers, lakes, and other waters that flow across, or form a part of, State boundaries'' based on precursor water protection statutes and practice. *See* 33 U.S.C. 466i(e) (1952) (codifying Pub. L. 80–845 section 10(e), 62 Stat. 1161 (1948)). Interstate waters thus include waters that cross or form a part of State boundaries with other States and with other countries (Canada and Mexico). Examples of such waters include portions of the Amargosa River, which flows from Nevada into a dry playa in Death Valley, California, and the Great Dismal Swamp, a wetland which crosses the border between Virginia and North Carolina. The Amargosa River is not a traditional navigable water and does not otherwise flow to a traditional navigable water or the territorial seas, but under the agencies' pre-2015 regulations and the final rule, the portion of the Amargosa River that crosses the California/Nevada border is an interstate water. Tributaries to interstate waters like the Amargosa River and wetlands adjacent to interstate waters and their tributaries are critical sources of life in desert climates. Interstate waters also include waters that meet the definition of a traditional navigable water or are tributaries of traditional navigable waters or the territorial seas, such as the portions of the Ohio River and Mississippi River that cross or serve as State boundaries; the portions of the Rio Grande that cross State boundaries (Colorado/New Mexico) or that cross the border or serve as the border between the United States and Mexico; and Lake Champlain, which crosses the New York/Vermont border and crosses the border between the United States and Canada.

Because, as explained below, the Clean Water Act unambiguously includes interstate waters, they are fundamental to the Act in the same manner as traditional navigable waters and the territorial seas. Even if the text of the Clean Water Act does not unambiguously resolve the question of jurisdiction over interstate waters, the agencies have concluded that it is reasonable to construe the statute to protect interstate waters without need for further assessment based on the history of the statute, Supreme Court case law interpreting the Act, the legislative history, and the objective of the Act to restore and maintain the integrity of the nation's waters. Therefore, this rule, like the 1986 regulations, provides Clean Water Act protections for interstate waters in the same manner as for traditional navigable waters and the territorial seas, and the following waters that meet the relatively permanent standard or significant nexus standard based on their connection to interstate waters are ''waters of the United States'': tributaries to interstate waters, wetlands adjacent to interstate waters or to their jurisdictional tributaries, and paragraph (a)(5) waters.

Interstate waters may be streams, lakes or ponds, or wetlands. The longstanding definition of ''waters of the United States'' includes interstate wetlands. As discussed in section IV.A.2.b.ii of this preamble, the Clean Water Act's statutory text, structure, and history establish that adjacent wetlands are ''waters of the United States'' covered by the Act. And, while the Supreme Court's focus in *Riverside Bayview* was on adjacent wetlands, the Court's unanimous conclusion that section 404(g)(1) provides express textual evidence ''that the term 'waters' included adjacent wetlands,'' 474 U.S at 138, is informative for interstate wetlands as well. For more than 45 years the agencies have concluded that waters, for purposes of the Clean Water Act, include wetlands. The agencies have also, for more than 45 years, concluded that some of those wetlands are ''waters of the United States,'' and among those wetlands are interstate wetlands. Because the agencies consider wetlands to be waters, the rationale for covering interstate waters based on the history of the statute, Supreme Court case law interpreting the Act, legislative history, and the objective of the Act applies with full force to interstate wetlands.

Under this provision of the rule, consistent with the pre-2015 regulatory regime, lakes, ponds, impoundments, and similar lentic (or still) water resources, as well as wetlands, crossing State boundaries are jurisdictional as interstate waters through the entirety of their delineated extent.

For streams and rivers, the agencies will determine the upstream and downstream extent of the stream or river crossing a State boundary or serving as a State boundary that should be considered the ''interstate water'' using stream order. Stream order is a common, longstanding scientific concept of assigning whole numbers to indicate the branches of a stream network. Under this method, for rivers and streams, the ''interstate water'' extends upstream and downstream of the State boundary for the entire length that the water is of the same stream order. *See* section IV.C.4.c.ii.1 of this preamble for additional information about stream order.

(2) Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

Until 1972, the predecessors of the Clean Water Act explicitly protected interstate waters independent of their navigability. The 1948 Water Pollution Control Act declared that the ''pollution of interstate waters'' and their tributaries is ''a public nuisance and subject to abatement.'' 33 U.S.C. 466a(d)(1) (1952) (codifying Pub. L. 80–845 section 2(d)(1), 62 Stat. 1156 (1948)). Interstate waters were defined without reference to navigability: ''all rivers, lakes, and other waters that flow across, or form a part of, State boundaries.'' 33 U.S.C. 466i(e) (1952) (codifying Pub. L. 80–845 section 10(e), 62 Stat. 1161 (1948)).

In 1961, Congress broadened the 1948 statute and made the pollution of ''interstate or navigable waters'' subject to abatement, retaining the definition of ''interstate waters.'' 33 U.S.C. 466g(a) (1964) (codifying Pub. L. 87–88 section 8(a), 75 Stat. 204, 208 (1961)). In 1965, Congress required States to develop water quality standards for ''interstate waters or portions thereof within such State.'' 33 U.S.C. 1160(c)(1) (1970) (codifying Pub. L. 89–234 section 5, 79 Stat. 903, 908 (1965)); *see also* 33 U.S.C. 1173(e) (1970) (retaining definition of ''interstate waters''). In the 1972 Clean Water Act, Congress abandoned the ''abatement'' approach initiated in the 1948 statute in favor of a focus on permitting for discharges of pollutants.

While the term ''navigable waters'' is ambiguous in some respects, interstate waters are waters that are clearly covered by the plain language of the definition of ''navigable waters.'' Congress defined ''navigable waters'' to mean ''the waters of the United States, including the territorial seas.'' Interstate waters are, by definition, waters of the ''several States,'' U.S. Const. section 8, and consequently, are unambiguously ''waters of the United States.'' The 1972 Clean Water Act thus reflects Congress's recognition that the degradation of water resources in one State may cause substantial harms in other States. The Supreme Court has recognized that ''the power conferred by 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. *Virginia Surface Mining & Reclamation Ass'n,* 452 U.S. 264, 282 (1981).

In addition, the text of the 1972 Clean Water Act specifically addresses ''interstate waters'' regardless of their navigability. Namely, section 303(a) of the 1972 Clean Water Act uses the term ''interstate waters'' and provides that pre-existing water quality standards for ''interstate waters'' remain in effect unless EPA determined that they were inconsistent with any applicable requirements of the pre-1972 version of the Act. 33 U.S.C. 1313(a)(1). That plain language is a clear indication that Congress intended the agencies to continue to protect the water quality of interstate waters without reference to their navigability. Excluding ''interstate waters'' as an independent category of Clean Water Act jurisdiction would disregard the plain language of section 303(a).

The Supreme Court has concluded that the 1972 Clean Water Act was ''not merely another law 'touching interstate waters,''' but rather ''occupied the field through the establishment of a comprehensive regulatory program supervised by an expert administrative agency.'' *City of Milwaukee* v. *Illinois,* 451 U.S. 304, 317 (1981) (''*City of Milwaukee*''). Thus, the 1972 amendments superseded the Federal common law of nuisance as a means to protect interstate waters in favor of a statutory ''all-encompassing program of water pollution regulation,'' *id.* at 318, and they did not curtail the scope of protected waters.

Even if the text and history of the statute and Supreme Court case law interpreting the Clean Water Act do not unambiguously resolve the issue, the situation addressed by the Supreme Court in the *City of Milwaukee* case highlights the reasonableness of the agencies' interpretation that the Act protects interstate waters. The *City of Milwaukee* litigation involved alleged discharges of inadequately treated sewage from Milwaukee, Wisconsin sewer systems directly into Lake Michigan, which also borders Illinois. As the Supreme Court noted, 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.'' *Id.* at 317. However, the Clean Water Act replaced this unpredictable and inefficient approach with ''a comprehensive regulatory program supervised by an expert administrative agency.'' *Id.* The Court reiterated that view in *Arkansas* v. *Oklahoma,* stating in the context of an NPDES permit for a discharge of pollutants to interstate waters that, while the Clean Water Act may place some limits on downstream States' participation in the permitting process, those limits ''do not in any way constrain the *EPA's* authority to require a point source to comply with downstream water quality standards.'' 503 U.S. 91, 106 (1992) (emphasis in original).

The potential for interstate harm, and the consequent need for Federal regulation, is particularly clear with respect to waterbodies that span more than one State. The alternative interpretation would leave interstate waters that do not fall within any other provisions in the definition of ''waters of the United States'' without Federal protection. Parties in different States would need to resolve concerns about upstream discharges in non-jurisdictional waters through litigation using ''often vague and indeterminate nuisance concepts and maxims of equity jurisprudence.'' *City of Milwaukee,* 451 U.S. at 317; *see also* 85 FR 22286 (April 21, 2020) (acknowledging in the 2020 NWPR that ''remedies for pollution disputes among States that do not implicate CWA sections 319(g), 401, or 402 would likely derive from federal common law under the Supreme Court's original jurisdiction. Remedies for disputes between a State and a public or private party would likely derive from State or federal common law and be heard by State or Federal courts'' (citations omitted)). Restoration of longstanding protections for interstate waters, regardless of whether they are navigable-in-fact, enables the agencies to address interstate water quality issues efficiently and effectively. The agencies interpret interstate waters to encompass all waters that Congress has sought to protect since 1948: all rivers, lakes, and

other waters that flow across, or form a part of, State boundaries. Public Law 80–845, sec. 10, 62 Stat. 55, at 1161 (1948). These waters need not meet the relatively permanent standard or significant nexus standard to be jurisdictional under the final rule.

EPA has interpreted the Clean Water Act to cover interstate waters, with the exception of the 2020 NWPR, since 1973. 38 FR 13528 (May 22, 1973) (providing that the term ''waters of the United States'' includes ''interstate waters and their tributaries, including adjacent wetlands''). In the final rule promulgated in 1977, the Corps adopted EPA's definition and included ''interstate waters and their tributaries, including adjacent wetlands'' within the definition of ''waters of the United States.'' The preamble to that rule provided an explanation for the inclusion of interstate waters: ''The affects [*sic*] of water pollution in one state can adversely affect the quality of the waters in another, particularly if the waters involved are interstate. Prior to the FWPCA amendments of 1972, most federal statutes pertaining to water quality were limited to interstate waters. We have, therefore, included this third category consistent with the Federal government's traditional role to protect these waters from the standpoint of water quality and the obvious effects on interstate commerce that will occur through pollution of interstate waters and their tributaries.'' 42 FR 37122, 37127 (July 19, 1977).

Because the Clean Water Act unambiguously includes interstate waters, they are fundamental to the Act in the same manner that traditional navigable waters and the territorial seas are. Traditional navigable waters, the territorial seas, and interstate waters cannot be protected without also protecting the waters that have a significant nexus to those waters. This rule protects interstate waters in the same manner as it protects traditional navigable waters and the territorial seas. Thus, the following waters that meet the relatively permanent standard or significant nexus standard based on their connection to interstate waters are ''waters of the United States'': tributaries to interstate waters, wetlands adjacent to interstate waters or to their jurisdictional tributaries, and paragraph (a)(5) waters. The agencies received multiple comments on the proposed rule in favor of the categorical inclusion of interstate waters as ''waters of the United States,'' as well as multiple comments arguing that categorical inclusion of interstate waters is inconsistent with the Clean Water Act. Several commenters asserted that asserting categorical jurisdiction over interstate waters is legally permissible, with some arguing that the statutory language unambiguously demonstrates that the Clean Water Act protects all interstate waters. One commenter stated that the agencies' failure to protect all interstate waters in the 2020 NWPR ''was an abdication of a core premise of the Clean Water Act's cooperative federalism.'' One commenter added that Federal jurisdiction over interstate waters protects State sovereignty, rather than threatening it, and quoted Justice Scalia's plurality opinion in *Rapanos* that ''the Act protects downstream States from out-of-state pollution that they cannot themselves regulate.'' 547 U.S. at 777. Several of the commenters discussed downstream pollution to demonstrate their general support for including interstate waters as a jurisdictional category. Many of these commenters added that including interstate waters in the definition of ''waters of the United States'' helps reduce the burden of increased pollutants from out-of-state, upstream discharges.

Commenters opposed to the categorical inclusion of interstate waters stated that such an approach unlawfully reads the notion of navigability out of the Clean Water Act. A few commenters asserted that pursuant to *SWANCC, Riverside Bayview,* and *Rapanos,* interstate waters or interstate wetlands can only be jurisdictional if they are navigable or connected to navigable waters. In support of their arguments, some commenters cited the 2020 NWPR and the order of the U.S. District Court for the Southern District of Georgia remanding the 2015 Clean Water Rule. *Georgia* v. *Wheeler,* 418 F. Supp. 3d 1336, 1358–59 (S.D. Ga. 2019) (concluding that the categorical inclusion of interstate waters exceeds the agencies' statutory authority because it ''reads the term navigability out of the CWA''). For the reasons articulated above, the agencies conclude that the interpretation of the agencies' authority over interstate waters articulated in the 2020 NWPR and in *Georgia* v. *Wheeler* is inconsistent with both the text and the history of the Clean Water Act, as well as Supreme Court case law.

A few commenters disagreed with the agencies' proposal to determine jurisdiction over tributaries to interstate waters, wetlands adjacent to interstate waters or their jurisdictional tributaries, and paragraph (a)(5) waters, by applying the relatively permanent or significant nexus standards to analyze their connection to the interstate water. Alternatively, a few commenters supported interstate waters being treated like traditional navigable waters and the territorial seas for purposes of determining the jurisdictional status of tributaries to interstate waters, wetlands adjacent to interstate waters or their jurisdictional tributaries, and paragraph (a)(5) waters. The agencies have concluded that, since interstate waters are clearly jurisdictional under the statute, the statute requires the same protections for them as the Clean Water Act does for traditional navigable waters and the territorial seas. As the scientific support for protecting tributaries, adjacent wetlands, and paragraph (a)(5) waters that satisfy the relatively permanent or significant nexus standard is the same for interstate waters as it is for traditional navigable waters and the territorial seas, the agencies have reasonably defined ''waters of the United States'' to protect such tributaries, adjacent wetlands, and paragraph (a)(5) waters.

In the proposed rulemaking, the agencies requested comment on approaches for implementing the interstate waters provision, including approaches for determining the upstream and downstream extent of a stream or river crossing a State boundary or serving as a State boundary that should be considered the ''interstate water.'' Several commenters stated that the entire length of a waterbody that is of the same stream order as the point that crosses State lines should be considered an interstate water, and therefore jurisdictional. These commenters added that where a river or stream itself forms the boundary, the entire length of stream forming the boundary should be considered an interstate water, and therefore jurisdictional. These commenters also added that any additional reach of the stream that is the same stream order as the portion forming the boundary should also be jurisdictional. One commenter stated that this stream order approach is well-understood and consistent with the longstanding pre-2015 regulatory regime and stated that it is also consistent with longstanding accepted scientific practice. Alternatively, a few commenters voiced opposition or concern for using stream order to determine the reach of an interstate water, with one commenter stating that the approach is restrictive and another stating that it could be too expansive. The agencies agree with commenters who stated that stream order is an appropriate approach for determining the upstream and downstream limits of an interstate water that is a stream or river. The agencies conclude that this

approach is reasonable and provides a method that is transparent, well-understood, predictable, and easy to implement. This approach is consistent with longstanding practice under the pre-2015 regulatory regime and thus is familiar to the agencies and the public. Additionally, this method is consistent with the agencies' approach to characterizing tributary reaches based on stream order for purposes of applying the relatively permanent standard in this rule (*see* section IV.C.4.c.ii of this preamble), and the agencies' approach to characterizing tributary reaches based on stream order to delineate the catchment for purposes of applying the significant nexus standard in this rule (*see* section IV.C.4.c.iii of this preamble).

(3) Waters That Cross a State-Tribal Bundary

The agencies requested comment in the proposed rule on whether interstate waters should encompass waters that flow across, or form a part of, boundaries of federally recognized Tribes where these waters simultaneously flow across, or form a part of, State boundaries. *See* Public Law 80–845, sec. 10, 62 Stat. 1155, at 1161 (1948). The agencies also sought comment on how to identify ''Tribal boundaries'' for purposes of implementing the interstate waters provision, such as boundaries associated with a Tribe's reservation or boundaries associated with the term ''Indian country'' as defined at 18 U.S.C. 1151.

Multiple commenters expressed support for treating waters that cross or serve as State/Tribal boundaries as interstate waters, with some commenters stating that waters that cross or serve as boundaries between the lands of different Tribes (*i.e.,* Tribal/Tribal boundaries) should also be deemed interstate waters under the rule. Other commenters did not support treating waters that cross or serve as State/Tribal boundaries as interstate waters. Some commenters provided input on which boundary should be considered a Tribal boundary for purposes of the interstate waters category, with many of those commenters expressing a preference for using ''Indian country'' as defined at 18 U.S.C. 1151 to delineate Tribal boundaries. A few commenters suggested that a category broader than ''Indian country'' should be used to adequately reflect Tribal interests and rights.

As evidenced by the feedback the agencies have received, the issue of how to address ''Tribal boundaries'' for purposes of implementing the interstate waters provision is of great importance to Tribes as well as various stakeholders. The agencies recognize the range of views expressed on this issue to date, including support for interpreting Tribal boundaries to include all waters that flow across, or form a part of, Indian country boundaries; support for finding that interstate waters include waters outside of Indian country that flow into areas where Tribes exercise treaty or other rights; opposition to interstate waters generally including waters that flow across, or form part of, Tribal boundaries; and views in between. The agencies also acknowledge commenters who raised questions regarding implementation of potential interpretations of interstate waters as applied to Tribal boundaries.

The agencies have considered the input received during pre-proposal Tribal consultation and the public comment period for the proposed rule and, at this time, are continuing to evaluate the issue of interstate waters and Tribal boundaries, including what should appropriately be considered ''Tribal boundaries'' for purposes of identifying interstate waters under the Clean Water Act. The agencies have weighed the benefits of addressing this issue now, based on the record currently before them, versus undertaking additional analysis and outreach to Tribes to gain a better understanding of Tribal boundaries as related to interstate waters and related implications via a separate process, described below, to avoid delaying the entire rule.

Based on the agencies' evaluation of the comments received and the benefits of further analysis and outreach, the agencies have decided to conduct additional analysis and outreach to inform a future action related to considering designating waters that cross a State/Tribal boundary as interstate waters under the definition of ''waters of the United States.'' The agencies recognize the importance of this issue to Tribes and are fully committed to directly engaging with Tribal governments as the agencies continue to evaluate this aspect of the scope of ''waters of the United States.''

Accordingly, the agencies will address this issue in a subsequent action after completing additional analysis and essential outreach and engagement activities with Tribes and interested stakeholders. Although the agencies are not taking a position on this specific issue at this time, a water that crosses a State/Tribal boundary may be jurisdictional if it otherwise falls within this rule's definition of ''waters of the United States.''

3. Impoundments

a. This Rule

Consistent with the proposal, this rule retains the provision in the 1986 regulations that defines ''waters of the United States'' to include impoundments of ''waters of the United States.'' Impoundments are distinguishable from natural lakes and ponds because they are created by discrete structures (often human-built) like dams or levees that typically have the effect of raising the water surface elevation, creating or expanding the area of open water, or both. Impoundments can be natural (like beaver ponds) or artificial (like reservoirs).

The agencies' implementation of the paragraph (a)(2) impoundments category [91] is based on two primary principles. First, as a matter of policy, law, and science, impoundments do not render ''waters of the United States'' no longer ''waters of the United States.'' Second, as a matter of policy and science, if an impounded water has the characteristics of another jurisdictional water, then the impoundment is jurisdictional. Based on these principles, in implementing this rule the agencies consider paragraph (a)(2) impoundments to include (1) impoundments created by impounding one of the ''waters of United States'' that was jurisdictional under this rule's definition at the time the impoundment was created, and (2) impoundments of waters that at the time of assessment meet the definition of ''waters of the United States'' under paragraph (a)(1), (a)(3), or (a)(4) of this rule, regardless of the water's jurisdictional status at the time the impoundment was created. Waters that are jurisdictional under paragraph (a)(5) are the exception to these two implementing principles. The text of this regulation states that they are not covered by paragraph (a)(2). Therefore, waters that are jurisdictional under paragraph (a)(5) do not categorically retain their jurisdictional status as ''waters of the United States''

[91] Impounded waters may be jurisdictional under provisions other than the paragraph (a)(2) impoundments provision. For example, they may be impoundments that are traditional navigable waters and would be jurisdictional under paragraph (a)(1), or they may be impounded adjacent wetlands and meet the requirements to be jurisdictional under the paragraph (a)(4) adjacent wetlands provision. To provide clarity in this preamble, when the agencies are discussing the subsection of impoundments that are jurisdictional under paragraph (a)(2) because they are impoundments of ''waters of the United States,'' the agencies will refer to ''paragraph (a)(2) impoundments.''

under paragraph (a)(2).[92] However, a subsequently impounded jurisdictional paragraph (a)(5) water may still be determined to be jurisdictional if it meets the requirements of a category of ''waters of the United States'' other than paragraph (a)(2) at the time of assessment (*i.e.,* as a traditional navigable water, the territorial seas, an interstate water, a jurisdictional tributary, a jurisdictional adjacent wetland, or a paragraph (a)(5) water).[93]

Consistent with the 1986 regulations, under this rule tributaries may be tributaries to paragraph (a)(1) or (a)(2) waters. Tributaries to paragraph (a)(2) impoundments, and wetlands adjacent to such tributaries, are jurisdictional if they meet either the relatively permanent standard or the significant nexus standard. Additionally, wetlands adjacent to paragraph (a)(2) impoundments are jurisdictional if they meet either the relatively permanent standard or the significant nexus standard. In order for a tributary to a paragraph (a)(2) impoundment to meet the relatively permanent standard, the agencies must be able to trace evidence of a flowpath (*e.g.,* physical features on the landscape, such as a channel, ditch, pipe, or swale) directly or indirectly through another water or waters, downstream from the structure that creates the paragraph (a)(2) impoundment to a paragraph (a)(1) water. When evaluating a wetland adjacent to a paragraph (a)(2) impoundment under the relatively permanent standard, field staff would assess whether the impounded water is relatively permanent, standing or continuously flowing, and then determine whether the wetland has a continuous surface connection to the impoundment. When evaluating a wetland adjacent to a jurisdictional tributary to a paragraph (a)(2) impoundment when the jurisdictional tributary meets the relatively permanent standard, field staff would determine whether the wetland has a continuous surface connection to the tributary. *See* section IV.C.4.c and section IV.C.5.c of this preamble for additional information on evaluations under the relatively permanent standard for tributaries and adjacent wetlands. For a tributary to a paragraph (a)(2) impoundment, a wetland adjacent to a paragraph (a)(2) impoundment, or a wetland adjacent to a tributary to a paragraph (a)(2) impoundment, that is assessed under the significant nexus standard, the significant nexus must be to a paragraph (a)(1) water. *See* sections IV.C.4.c and IV.C.5.c of this preamble for additional information on significant nexus evaluations for tributaries and adjacent wetlands.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The agencies have determined that as a matter of law, science, and policy, impoundments do not de-federalize a water, and therefore impoundments of ''waters of the United States'' remain ''waters of the United States.'' The Supreme Court has confirmed that damming or impounding ''waters of the United States'' does not make those waters non-jurisdictional. *See S.D. Warren Co.* v. *Maine Bd. of Envtl. Prot.,* 547 U.S. 370, 379 n.5 (2006) (''*S.D. Warren*'') (''[N]or can we agree that one can denationalize national waters by exerting private control over them.''). While *S.D. Warren* addressed the meaning of the word ''discharge'' rather than the definition of ''waters of the United States,'' the Court's conclusion regarding the jurisdictional status of a dammed river supports the agencies' longstanding interpretation of the Clean Water Act that ''waters of the United States'' remain ''waters of the United States'' even if impounded, as reflected in the 1986 regulations and continued in this rule. Essentially, the action of creating an impoundment cannot on its own render ''waters of the United States'' no longer jurisdictional.[94] The Court of Appeals for the Ninth Circuit has similarly found that ''it is doubtful that a mere man-made diversion would have turned what was part of the waters of the United States into something else and, thus, eliminated it from national concern.'' *United States* v. *Moses,* 496 F.3d 984, 988 (9th Cir. 2007), *cert. denied,* 554 U.S. 918 (2008).

Asserting Clean Water Act jurisdiction over impoundments also aligns with the scientific literature, as well as the agencies' scientific and technical expertise and experience, which confirm that impoundments have chemical, physical, and biological effects on downstream waters through surface or subsurface hydrologic connections. As discussed in section III.C of the Technical Support Document, impoundments are typically built to maintain some level of hydrologic connection between the water that is being impounded and the downstream tributary network. For example, water may pass from a reservoir to the downstream side of an impoundment by passing through a main spillway or outlet works, passing over an auxiliary spillway, or overtopping the impoundment. Indeed, berms, dikes, and similar features used to create impoundments typically do not block all water flow. Even dams, which are specifically designed and constructed to impound large amounts of water effectively and safely, generally do not prevent all water flow, but rather allow seepage under the foundation of the dam and through the dam itself. *See, e.g.,* International Atomic Energy Agency, 2003, ''Investigating Leaks in Dams & Reservoirs.'' INIS–XA–616. Vienna, Austria (''All dams are designed to lose some water through seepage.''); U.S. Bureau of Reclamation, ''Safety of Dams.'' Provo Area Office (last updated July 1, 2017) (''All dams seep, but the key is to control the seepage through properly designed and constructed filters and drains.''); Federal Energy Regulatory Commission, 2005, ''Chapter 14: Dam Safety Performance Monitoring Program.'' Engineering Guidelines for the Evaluation of Hydropower Projects. (''Seepage through a dam or through the foundations or abutments of dams is a normal condition.''). Further, as an agency with expertise and responsibilities in engineering and public works, the Corps extensively studies water retention structures like berms, levees, and earth and rock-fill dams. The agency has found that all water retention structures are subject to seepage through their foundations and abutments. *See* section III.C of the Technical Support Document.

Paragraph (a)(2) waters include impoundments created in waters that were jurisdictional under this rule's definition at the time the impoundment was created, as well as impoundments of waters that at the time of assessment are jurisdictional under paragraph (a)(1), (a)(3), or (a)(4) of this rule regardless of

[92] When an approved jurisdictional determination does not exist for an impounded water that the agencies conclude based on its characteristics could only be jurisdictional under paragraph (a)(5), the paragraph (a)(2) impoundments provision does not apply and the water will be assessed under another jurisdictional category.

[93] For example, if a stream that is not part of the tributary system of a paragraph (a)(1) water, but which is assessed under paragraph (a)(5) and is determined to meet the significant nexus standard, is lawfully impounded subsequent to the jurisdictional determination, the stream is not automatically jurisdictional as a paragraph (a)(2) water under this rule. However, the impounded stream may still meet the significant nexus standard under paragraph (a)(5) or the impounded stream may develop the characteristics of a traditional navigable water and become jurisdictional under paragraph (a)(1).

[94] Note that a Clean Water Act section 404 permit may authorize impoundment of a water such that the water is no longer jurisdictional, for example, to create a waste treatment system that is excluded from the definition of ''waters of the United States.'' In such circumstances, the water is analyzed under the regulatory exclusion where applicable, not under the impoundments provision of the definition.

the water's jurisdictional status at the time the impoundment was created.[95] This is generally consistent with the agencies' longstanding approach to impoundments. *See* U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook (2007) at 58, *available at https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Related-Resources/CWA-Guidance/* (hereinafter, ''2007 Corps Instructional Guidebook''). The agencies have concluded that it is appropriate based on relevant case law, science, and as a practical matter to interpret ''waters of the United States'' to include both impoundments of waters that qualified as ''waters of the United States'' under this rule's definition at the time of impoundment, and impoundments of waters that at the time of assessment meet the definition of ''waters of the United States'' (other than waters jurisdictional under paragraph (a)(5)). As discussed above, waters that qualified as ''waters of the United States'' at the time of impoundment (other than waters jurisdictional under paragraph (a)(5)) remain ''waters of the United States.'' And impoundments of waters that at the time of assessment fall within one of the other categories of ''waters of the United States'' in this rule (other than waters jurisdictional under paragraph (a)(5)) are jurisdictional under paragraph (a)(2).

The agencies received a variety of comments on impoundments during the public comment period. Some commenters supported the agencies' inclusion of impoundments of ''waters of the United States'' as a separate category of jurisdictional waters. A few commenters stated that the relatively permanent standard and significant nexus standard should also apply to impoundments for the purposes of jurisdiction. Some commenters agreed with the proposed rule's approach to not include impounded paragraph (a)(5) waters in the impoundments category. Many commenters requested the agencies provide greater clarity about the definition of impoundments.

After consideration of public comments and for the reasons described above and in section III.C of the Technical Support Document, the agencies affirm in this rule that impoundments of ''waters of the United States'' remain ''waters of the United States,'' except for impoundments of paragraph (a)(5) waters, which the agencies find are better assessed under other categories of this rule. As discussed above, paragraph (a)(2) impoundments of ''waters of the United States'' legally remain ''waters of the United States,'' so the agencies are not requiring an additional determination of their jurisdiction under this rule. While the agencies are not defining ''impoundment'' in this rule, in this preamble the agencies are providing additional clarity below about the types of impoundments that are and that are not considered ''waters of the United States'' under paragraph (a)(2). Additionally, section IV.C.3.c of this preamble provides implementation guidance for identifying impoundments on the landscape.

As in the proposed rule, impoundments of waters that are determined to be jurisdictional under paragraph (a)(5) are not included in this rule as paragraph (a)(2) impoundments. As discussed above, impoundments of paragraph (a)(5) waters would need to be assessed for jurisdiction in their current state under paragraph (a)(1), (a)(3), (a)(4), or (a)(5) of this rule. Thus, if a water is determined to be jurisdictional under paragraph (a)(5) and is then later lawfully impounded, it is not jurisdictional by rule under the paragraph (a)(2) impoundments provision. Instead, the impoundment of a paragraph (a)(5) water would itself need to be assessed in its current state to determine whether it is jurisdictional under one of the provisions of the rule besides paragraph (a)(2). Impounded paragraph (a)(5) waters will most likely continue to not meet any of the other categories of jurisdictional waters and will therefore need to be re-assessed under paragraph (a)(5). However, if, once impounded, such a water became, for example, a traditional navigable water, it would be jurisdictional under paragraph (a)(1) of this rule. This approach in this rule is consistent with the agencies' careful approach to jurisdiction over paragraph (a)(5) waters. For example, as discussed in sections IV.C.4 and IV.C.5 of this preamble below, the ''tributaries'' category does not include tributaries to paragraph (a)(5) waters and the adjacent wetlands category does not include wetlands adjacent to paragraph (a)(5) waters. This change from the 1986 regulations reflects the agencies' consideration of the jurisdictional concerns and limitations of the statute as informed by *SWANCC* and *Rapanos.*

c. Implementation

Under this rule, for the reasons discussed above, impounding a water that meets the definition of ''waters of the United States'' generally does not affect such water's jurisdictional status, consistent with pre-2015 practice. *See* 2007 Corps Instructional Guidebook at 58. A water can be found to be a jurisdictional impoundment under paragraph (a)(2) of this rule if (1) the impounded water met the definition of ''waters of the United States'' based on this rule's definition at the time the impoundment was created [96] (other than an impoundment of a paragraph (a)(5) water) or (2) the water that is being impounded, at the time of assessment, meets the definition of ''waters of the United States'' under paragraph (a)(1), (a)(3), or (a)(4), regardless of the water's jurisdictional status when the impoundment was created. The agencies also note that over time an impoundment of a water that does not initially meet the definition of ''waters of the United States'' can become jurisdictional under another provision of the regulation; for example, an impounded water could become navigable-in-fact and covered under paragraph (a)(1)(i) of this rule. This approach to implementation of impoundments is generally consistent with pre-2015 practice. This section of the preamble provides information for determining jurisdiction for impoundments under paragraph (a)(2) and for determining jurisdiction for tributaries of impoundments, wetlands adjacent to impoundments, and wetlands adjacent to tributaries of impoundments.

i. Determining the Presence of a Paragraph (a)(2) Impoundment

Impoundments are distinguishable from natural lakes and ponds because they are created by discrete structures (often human-built) like dams or levees that typically have the effect of raising the water surface elevation, creating or expanding the area of open water, or both. Impoundments can vary in size, with some being very small and others being very large, like Lake Mead, a reservoir on the Colorado River that is created by the Hoover Dam. Paragraph (a)(2) impoundments under this rule can include both natural impoundments (like beaver ponds) and artificial impoundments (like reservoirs). Paragraph (a)(2) impoundments under this rule can be located off-channel (*i.e.,*

[95] *See infra* for a discussion of impoundments of waters that are jurisdictional as paragraph (a)(5) waters, which are treated differently under this rule.

[96] Note, however, if an impoundment is a waste treatment system constructed prior to the 1972 Clean Water Act amendments, it is eligible for the exclusion under paragraph (b) of this rule so long as the system is in compliance with currently applicable Clean Water Act requirements, such as treating water such that discharges, if any, from the system meet the Act's requirements. *See* section IV.C.7.b of this preamble.

an impoundment with no outlet or hydrologic connection to the tributary network) or in-line with the channel (*i.e.,* an impoundment with a hydrologic connection to the tributary network).

An impoundment is jurisdictional under paragraph (a)(2) of this rule if the impounded water met the definition of ''waters of the United States'' based on this rule's definition when the impoundment was created (other than impoundments of paragraph (a)(5) waters). To determine if an impoundment meets this criterion, the water would be assessed to see if the water was jurisdictional as a paragraph (a)(1) water, tributary, or adjacent wetland based on this rule's definition at the time it was impounded. Tools that can be used for such assessment are discussed further in sections IV.C.4.c and IV.C.5.c of this preamble. Historic aerial photographs, maps, and geospatial datasets may be particularly useful in helping to determine if a water was jurisdictional under paragraph (a)(1), (a)(3), or (a)(4) of this rule at the time the impoundment was created, especially where such materials depict the aquatic system before and after the impoundment was created. Similarly, planning, engineering, and design documents, if available, may provide useful information.

Paragraph (a)(2) waters also include impoundments of waters that at the time of assessment are jurisdictional under paragraph (a)(1), (a)(3), or (a)(4) of this rule regardless of the water's jurisdictional status at the time the impoundment was created. This approach is consistent with pre-2015 practice. *See* 2007 Corps Instructional Guidebook at 58. A water that is impounded may not meet this rule's jurisdictional criteria at the time the water was originally impounded, but the water may meet this rule's jurisdictional criteria at the time of the assessment (in some cases, many years later). This is because aquatic resources generally can evolve over time as aquatic landscapes, precipitation and other climatic patterns, and other environmental conditions change, or due to human-caused changes (*e.g.,* stream modification, filling in of wetlands, water withdrawals, or effluent discharges). Impounded waters may be particularly likely to evolve as the surface waters are raised or expanded behind the impoundment. To determine if an impoundment is jurisdictional based on such changes, the impounded water would be assessed to see if it is a traditional navigable water, the territorial seas, an interstate water, a jurisdictional tributary, or a jurisdictional adjacent wetland. Tools that can be used for such assessment are discussed further in sections IV.C.4.c and IV.C.5.c of this preamble.

In assessing if an impoundment of a paragraph (a)(1) water is jurisdictional under paragraph (a)(2), the agencies would assess whether the water that is being impounded met the requirements to be a paragraph (a)(1) water under this rule either at the time of impoundment or at the time of assessment. Impoundments of paragraph (a)(1) waters that continue to meet the requirements under paragraph (a)(1) remain paragraph (a)(1) waters.

In assessing whether an impoundment of a tributary is jurisdictional under paragraph (a)(2), the agencies would first assess if the tributary either met this rule's definition of ''waters of the United States'' at the time the impoundment was created or if the tributary meets this rule's definition of ''waters of the United States'' at the time of assessment. For impoundments of tributaries that met this rule's definition of ''waters of the United States'' at the time the impoundment was created, the agencies must be able to demonstrate that at the time the impoundment was created, there was evidence of a flowpath (*e.g.,* physical features on the landscape, such as a channel, ditch, pipe, or swale) directly or indirectly through another water or waters, downstream from the structure that created the impoundment to a paragraph (a)(1) water. Thus, an impoundment of a tributary that met this rule's definition of ''waters of the United States'' at the time the impoundment was created could currently be located off-channel (*e.g.,* due to changes in hydrology) or in-line with the channel, but the flowpath would only need to be traceable at the time the impoundment was created. For impoundments of tributaries that meet this rule's definition of ''waters of the United States'' at the time of assessment, the agencies must be able to at the time of assessment trace a flowpath directly or indirectly through another water or waters, downstream from the structure that creates the impoundment to a paragraph (a)(1) water. Thus, impoundments of tributaries that meet the definition of ''waters of the United States'' at the time of assessment will always be in-line with the channel due to the flowpath requirement. This is consistent with the agencies' approach to tributaries under the final rule. *See* section IV.C.4. of this preamble. As with assessment of tributaries under this rule, while the physical flowpath from the paragraph (a)(2) impoundment to the paragraph (a)(1) water must be traceable, there is not a need to demonstrate that flow from the impoundment reaches the paragraph (a)(1) water. For an off-channel impoundment (*i.e.,* an impoundment with no outlet to the tributary network), such as an impoundment of a jurisdictional adjacent wetland, such a flowpath is not required. Under the final rule, adjacent wetlands do not require a flowpath to the tributary network, and similarly, impoundments of such adjacent wetlands do not require a flowpath. The agencies would only need to determine that the impoundment was created in a water that is currently jurisdictional under paragraphs (a)(1) through (4) or that the impoundment was created in a water that was jurisdictional under paragraphs (a)(1) through (4) at the time the impoundment was created.

In assessing whether an impoundment of an adjacent wetland is jurisdictional under paragraph (a)(2), the agencies would need to determine that the impoundment was created in an adjacent wetland that was jurisdictional at the time the impoundment was created or that is currently jurisdictional at the time of assessment. Such impoundments of adjacent wetlands may be located either off-channel or in-line with the channel, and do not require a traceable flowpath that is required for impoundments of tributaries. This is because under the final rule, adjacent wetlands do not require a flowpath to the tributary network, and similarly, impoundments of such adjacent wetlands do not require a flowpath.

Because impoundments can be jurisdictional under other categories of ''waters of the United States'' under this rule, field staff may document that the impoundment is jurisdictional under other categories. For example, if an impoundment is itself a traditional navigable water, part of the territorial seas, or an interstate water, the agencies would typically determine that the impoundment is a paragraph (a)(1) water, rather than asserting jurisdiction under paragraph (a)(2) of this rule. Field staff may document any such waters as jurisdictional under the relevant provision of the rule rather than documenting that it is jurisdictional as a paragraph (a)(2) impoundment.

Finally, as discussed above in section IV.C.3.b of this preamble, waters that are jurisdictional under paragraph (a)(5) and that are subsequently impounded do not categorically retain their jurisdictional status as ''waters of the United States'' under paragraph (a)(2). If the impoundment of the paragraph (a)(5) water does not meet the jurisdictional standards under one of

the other categories of ''waters of the United States'' in this rule (*i.e.,* as a paragraph (a)(1) water, jurisdictional tributary, or jurisdictional adjacent wetland), the impoundment would be re-assessed as a paragraph (a)(5) water. Implementation of waters assessed under paragraph (a)(5) is discussed in section IV.C.6.c of this preamble.

ii. Determining Jurisdiction for Tributaries of Impoundments, Wetlands Adjacent to Impoundments, and Wetlands Adjacent to Tributaries of Impoundments

Tributaries of paragraph (a)(2) impoundments are jurisdictional, as with all tributaries under this rule, when they meet either the relatively permanent standard or the significant nexus standard. In order to determine if a water is a tributary of a paragraph (a)(2) impoundment, the same tools and methods can be used that are discussed in section IV.C.4.c.i of this preamble to trace the flowpath to the impoundment. Field staff would then determine if the tributary should be evaluated under the relatively permanent standard or the significant nexus standard. For tributaries assessed under the relatively permanent standard, the agencies must be able to trace evidence of a flowpath downstream from the structure that creates the impoundment to a paragraph (a)(1) water. To meet the latter standard, the significant nexus must be to a paragraph (a)(1) water. Implementation of the relatively permanent standard for tributaries is discussed in more detail in section IV.C.4.c.ii of this preamble. Implementation of the significant nexus standard for tributaries is discussed in section IV.C.4.c.iii of this preamble.

For tributaries of paragraph (a)(2) impoundments that are evaluated under the relatively permanent standard, field staff would determine if the tributary has flowing or standing water year-round or continuously during certain times of the year, *see* section IV.C.4.c.ii of this preamble, and then determine whether there is evidence of a flowpath downstream from the structure that creates the impoundment to a paragraph (a)(1) water. As with all tributaries under the rule, there is no requirement under the relatively permanent standard for relatively permanent flow for the entirety of a tributary's flowpath to a downstream paragraph (a)(1) water. *See id.* Thus, under the relatively permanent standard for tributaries of paragraph (a)(2) impoundments, field staff would not need to determine that flow occurs over, through, around, or underneath the structure that creates the impoundment. Instead, the agencies will document that flow occurs from the tributary to the impoundment, either directly or indirectly through another water or waters, including non-jurisdictional features, as described in section IV.C.4 of this preamble, and that there is evidence of a flowpath downstream of the structure (*e.g.,* physical features on the landscape, such as a channel, non-jurisdictional ditch, pipe, or swale) to a paragraph (a)(1) water, either directly or indirectly through another water or waters. For example, a tributary may flow through another stream that flows infrequently, and only in direct response to precipitation, and the presence of that stream is sufficient to demonstrate that the tributary flows to a paragraph (a)(1) water.

If a wetland is adjacent to a paragraph (a)(2) impoundment and that wetland is evaluated under the relatively permanent standard, field staff would, only for purposes of determining whether the adjacent wetland meets the relatively permanent standard, assess whether the impounded water is relatively permanent, standing or continuously flowing. Next, field staff would determine whether the wetland has a continuous surface connection to the paragraph (a)(2) impoundment, consistent with section IV.C.5 of this preamble. If the paragraph (a)(2) impoundment is not relatively permanent, standing or continuously flowing, then field staff will assess the adjacent wetland under the significant nexus standard.

If a wetland is adjacent to a tributary to a paragraph (a)(2) impoundment, and the tributary meets the relatively permanent standard, the wetland would be assessed for whether it has a continuous surface connection to the tributary, consistent with section IV.C.5 of this preamble. If the adjacent wetland does not have a continuous surface connection, it will be assessed under the significant nexus standard. If the tributary does not meet the relatively permanent standard, then field staff will assess the adjacent wetland under the significant nexus standard. To apply the significant nexus standard to tributaries of paragraph (a)(2) impoundments, wetlands adjacent to those tributaries, or wetlands adjacent to paragraph (a)(2) impoundments, the agencies will assess if the waters of interest significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters using the tools and approaches described in sections IV.C.4.c.iii and IV.C.5.c.iii of this preamble. As part of that analysis, the agencies will determine if there is a surface or subsurface hydrologic connection downstream that is maintained over, through, around, or underneath the structure that creates the impoundment. Such a hydrologic connection can occur in a variety of ways, such as overtopping of the structure or through features like dam spillways, drainage and other galleries, sluiceways, culverts, pipes, diversion tunnels, or conduits that are built to maintain a hydrologic connection through the dam or levee. Subsurface hydrologic connectivity can also occur via seepage through or underneath the dam or similar structure. Field staff can document that surface or subsurface hydrologic connectivity occurs using direct observation of overtopping or a feature that is constructed to maintain a hydrologic connection, through review of construction plans for the structure, through other field observations (*e.g.,* dye tests or tracer studies, or observations of flow within the spillway such as bent over vegetation or water staining where the spillway is concrete, soil saturation, changes in vegetation above and below the structure), or through remote tools (*e.g.,* aerial photography interpretation that provides indications of wetter signatures below the dam). As stated in section IV.C.9 of this preamble, a hydrologic connection to a paragraph (a)(1) water is not necessary to determine that the water being evaluated significantly affects the integrity of paragraph (a)(1) waters, though it is one of the factors that is considered. Where such a hydrologic connection exists at the surface or subsurface, it can help to facilitate the functions that the tributary of the paragraph (a)(2) impoundment performs that impact the downstream paragraph (a)(1) water, such as contribution of flow, pollutants, sediment, and organic material. In the rare circumstances where such a hydrologic connection does not exist, the lack of such a connection can facilitate other functions, such as holding back floodwaters that could otherwise harm paragraph (a)(1) waters. *See* preamble section IV.C.9 for additional information on implementing the significant nexus standard more generally.

4. Tributaries

a. This Rule

Consistent with the proposal, this rule retains the tributary provision of the 1986 regulations, updated to reflect consideration of the law, the science, and agency expertise. The 1986 regulations defined ''waters of the United States'' to include tributaries of traditional navigable waters, interstate waters, paragraph (a)(3) ''other waters''

(a category that has been modified and codified in this rule as paragraph (a)(5) waters) and impoundments. With this rule, the agencies are adding the territorial seas to the list of waters to which tributaries may connect to constitute a jurisdictional tributary and removing paragraph (a)(3) waters from the list. This rule defines ''waters of the United States'' to include tributaries of traditional navigable waters, the territorial seas, interstate waters, or paragraph (a)(2) impoundments if the tributaries meet either the relatively permanent standard or the significant nexus standard.

The 1986 regulations do not contain a definition of ''tributary,'' and the agencies similarly are not including a definition in this rule. However, for more than 45 years, the agencies have recognized the need to protect ''the many tributary streams that feed into the tidal and commercially navigable waters . . . since the destruction and/or degradation of the physical, chemical, and biological integrity of each of these waters is threatened by the unregulated discharge of dredged or fill material.'' 42 FR 37121, 37123 (July 19, 1977). Accordingly, the agencies are maintaining their interpretation of tributary for purposes of the definition of ''waters of the United States.'' *See Rapanos* Guidance at 6 n.24. A tributary for purposes of this rule includes rivers, streams, lakes, ponds, and impoundments, regardless of their flow regime, that flow directly or indirectly through another water or waters to a traditional navigable water, the territorial seas, or an interstate water. Waters through which a tributary may flow indirectly include, for example, impoundments, wetlands, lakes, ponds, and streams. A tributary may flow through a number of downstream waters, including a non-jurisdictional tributary or non-jurisdictional features, such as a ditch excluded under paragraph (b) of this rule or an excluded waste treatment system, and jurisdictional waters that are not tributaries, such as an adjacent wetland. But to be jurisdictional, the tributary must be part of a tributary system that eventually flows to a traditional navigable water, the territorial seas, or an interstate water. The agencies will utilize the Corps' well-established definition of an ordinary high water mark (OHWM) to assist in identifying tributaries for purposes of this rule. *See* section IV.C.4.c.i of this preamble for information on using the OHWM to assist in identifying a water as a tributary for purposes of this rule. To be a jurisdictional tributary under this provision of the rule, the tributary must meet either the relatively permanent standard or the significant nexus standard.

Like the 1986 regulations, this rule includes tributaries of interstate waters since interstate waters, like traditional navigable waters and the territorial seas, are waters clearly protected by the Clean Water Act. In this rule, the agencies are adding the territorial seas to the list of waters to which tributaries may connect to constitute a jurisdictional tributary because the territorial seas are explicitly protected by the Clean Water Act. Because the territorial seas are explicitly covered by the Clean Water Act, it is reasonable and appropriate to protect tributaries to the territorial seas that meet either the relatively permanent standard or the significant nexus standard for the same reasons that tributaries to traditional navigable waters are protected. In practice, the agencies recognize that most tributaries will reach a traditional navigable water before they reach the territorial seas. Finally, consistent with the 1986 regulations, this rule includes tributaries that flow directly or indirectly through another water or waters to paragraph (a)(2) impoundments.[97]

The agencies' longstanding interpretation of the Clean Water Act includes tributaries that are natural, modified, or constructed waters. The Clean Water Act, in defining ''navigable waters,'' does not turn on any such distinctions, which have no bearing on a tributary's capacity to carry water (and pollutants) to paragraph (a)(1) waters. *See, e.g.,* Technical Support Document section II.B.iv.3 (explaining that human-made 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''). Given the extensive human modification of watercourses and hydrologic systems throughout the country, it is often difficult to distinguish, as a practical or scientific matter, between natural watercourses and watercourses that are wholly or partly modified or constructed. For example, tributaries that have been channelized in concrete or otherwise have been modified would still be tributaries for purposes of this rule so long as they contribute flow to a traditional navigable water, the territorial seas, or an interstate water, and so long as they are not excluded under paragraph (b) of this rule. Thus, tributaries can include ditches and canals.

Under this rule, swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow are not tributaries and are not jurisdictional. *See* section IV.C.7 of this preamble.

Once a water is determined to be a tributary, under this rule, the tributary must meet either the relatively permanent or significant nexus standard to be jurisdictional. The relatively permanent standard encompasses tributaries that have flowing or standing water year-round or continuously during certain times of the year. Relatively permanent waters do not include tributaries with flowing or standing water for only a short duration in direct response to precipitation. In evaluating tributaries under the significant nexus standard, the agencies will determine whether the tributaries, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters. Implementation of each of those standards for purposes of determining jurisdiction over tributaries is discussed below in section IV.C.4.c of this preamble.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

Commenters expressed a range of views on the agencies' proposed treatment of tributaries. This section of the preamble provides a summary of the major comments received on the regulatory text and the agencies' consideration of the comments. The preamble to the proposed rule also provided information about the agencies' longstanding interpretation of practice for identifying tributaries for purposes of the definition of ''waters of the United States,'' and this section also summarizes and addresses major comments received on those topics.

i. Comments on the Tributaries Provision of This Rule

Some commenters requested that the agencies include a definition of ''tributary'' in this rule. A subset of these commenters stated that the definition should include waters with a bed, bank, or other evidence of flow that contribute flow directly or indirectly to downstream paragraph (a)(1) waters. Other commenters maintained that the lack of a formal definition makes it unclear which features are tributaries and which are not. Some of these commenters stated that the lack of a

[97] *See* discussion of tributaries to paragraph (a)(2) impoundments in section IV.C.3 of this preamble.

definition left too much discretion to the agencies to identify tributaries based on physical features, which they asserted would lead to confusion. Some commenters supported the proposed approach for assessing tributaries, stating that the longstanding interpretation and practice would allow for regionalized implementation. Although the agencies are not promulgating a new definition of ''tributary'' the agencies have decades of experience implementing the 1986 regulations (which also did not include a definition of ''tributary'') and have concluded that a new regulatory definition of tributary is not required. To provide further clarity, the agencies have been careful in this preamble to articulate and explain the agencies' well-established interpretation and practices for identifying tributaries. In addition, the agencies note that while the first step under this provision of the regulation is to identify whether a water is a tributary under longstanding practice, that is not the end of the inquiry under this rule, in contrast to the 1986 regulations. A water must not only be a tributary but must also meet either the relatively permanent standard or the significant nexus standard to be jurisdictional under this provision. These standards provide important limitations that also help define the scope of the tributaries that are jurisdictional under the rule.

Commenters on the proposed rule expressed a variety of perspectives on the appropriate scope of jurisdiction for tributaries. Some commenters supported the proposal that tributaries are jurisdictional if they meet either the relatively permanent or significant nexus standard. Other commenters asserted that tributaries should meet both standards. Some commenters stated that this rule should include categorical protections for all tributaries (*e.g.,* features with an OHWM), rather than requiring case-by-case analysis, asserting that such an interpretation is supported by the science and Supreme Court case law. For the reasons described in section IV.A of this preamble, this rule defines ''waters of the United States'' to include tributaries that meet either the relatively permanent standard or the significant nexus standard on a case-specific basis.

Some commenters criticized the definition of ''tributary'' from the 2020 NWPR, while others supported that definition, stating that it was clear and logical. The 2020 NWPR defined ''tributary'' as a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or a traditional navigable water in a typical year either directly or indirectly through other tributaries, jurisdictional lakes, ponds, or impoundments, or adjacent wetlands. A tributary was required to be perennial or intermittent in a typical year. 85 FR 22251 (April 21, 2020). The definition of ''tributary'' in the 2020 NWPR failed to advance the objective of the Clean Water Act and was inconsistent with scientific information about the important effects of many types of tributaries on the integrity of downstream paragraph (a)(1) waters.

The key limitations that the 2020 NWPR created in its definition of ''tributary,'' which this rule does not adopt, are the categorical exclusion of ephemeral streams and the requirement that streams contribute flow to a traditional navigable water or territorial sea in a ''typical year.'' With respect to ephemeral streams, commenters provided a wide variety of perspectives on whether they should be jurisdictional under this rule. Some commenters asserted that the agencies' interpretation of tributary should exclude ephemeral streams. Some commenters asserted that ephemeral streams should be categorically jurisdictional under this rule. These commenters referenced the importance of ephemeral streams for providing functions like nutrient and materials transport, erosion and flood control, water quality maintenance downstream, drinking water and irrigation provisioning, groundwater recharge, and wildlife habitat. Other commenters asserted that ephemeral streams are important for buffering against the impacts of climate change, supporting Tribal communities, and providing functions in specific regions like arid areas. Another group of commenters stated that all ephemeral streams should be non-jurisdictional across the country, or non-jurisdictional in certain regions such as the arid West. These commenters asserted that ephemeral streams do not flow frequently enough or provide sufficiently important functions to impact the integrity of downstream paragraph (a)(1) waters. As discussed further in section IV.A of this preamble, the agencies are not categorically including or excluding streams as jurisdictional based on their flow regime in this rule. The agencies agree that ephemeral streams can provide many important functions for paragraph (a)(1) waters.

With respect to the ''typical year requirement'' in the 2020 NWPR definition of ''tributary,'' the agencies found it challenging and sometimes impossible to implement, for the reasons discussed in section IV.B.3.c of this preamble. The ''typical year'' requirement for tributaries was also not supported by science. Scientific information does not demonstrate that only those streams that contribute intermittent or perennial flow to a traditional navigable water or territorial sea in a ''typical year'' have significant effects on the chemical, physical, and biological integrity of larger downstream waters, including paragraph (a)(1) waters. *See* sections IV.B.3.a and IV.B.3.b of this preamble. Because the limitations in the 2020 NWPR's definition of ''tributary'' are inconsistent with science and created substantial implementation difficulties, the agencies are not adopting this definition. *See* section III.A of the Technical Support Document for more information on the agencies' rationale for the scope of tributaries covered by this rule. Streams that are tributaries, regardless of their flow regime, will be assessed under the relatively permanent or significant nexus standard per paragraph (a)(3) of this rule, and streams that are not tributaries will be assessed under the relatively permanent or significant nexus standard per paragraph (a)(5) of this rule.

Some commenters opposed as arbitrary and unsupported by the law or science the agencies' proposed approach to delete the category for intrastate lakes and ponds, streams, or wetlands that do not meet another jurisdictional category (the (a)(3) ''other waters'' provision from the 1986 regulations) as a category of waters to which tributaries may connect to be determined ''waters of the United States.'' Some of these commenters requested clarification as to how tributaries to intrastate lakes and ponds, streams, or wetlands that do not meet another jurisdictional category would be assessed. One commenter asserted that the agencies were ''excluding'' tributaries to paragraph (a)(5) waters. Streams that flow to paragraph (a)(5) waters are not excluded in this rule. Deleting the cross reference to the category for intrastate lakes and ponds, streams, or wetlands that do not meet another jurisdictional category (the (a)(3) ''other waters'' provision from the 1986 regulations) as a category of waters to which tributaries may connect reflects the agencies' consideration of the statute as a whole and the jurisdictional concerns and limitations of *SWANCC* and *Rapanos.* The agencies have concluded that a provision that authorizes consideration of jurisdiction over tributaries that meet the relatively permanent or significant nexus standard when assessed based simply on connections to such waters would have

too tenuous a connection to paragraph (a)(1) waters. However, in this rule any such streams that flow to jurisdictional paragraph (a)(5) waters could be assessed themselves under the paragraph (a)(5) waters category to determine if they meet the relatively permanent or significant nexus standard. For example, a stream that flows to a lake that meets the significant nexus standard under the paragraph (a)(5) waters provision could itself be assessed under the paragraph (a)(5) waters provision to determine whether it significantly affects the chemical, physical, or biological integrity of a paragraph (a)(1) water.

ii. Comments on the Interpretation and Implementation of the Tributaries Provision of This Rule

As discussed further above, the agencies interpret tributary for purposes of this rule to include rivers, streams, lakes, ponds, and impoundments that flow directly or indirectly through another water or waters to a traditional navigable water, the territorial seas, an interstate water, or a paragraph (a)(2) impoundment. The agencies received comments on elements of this longstanding interpretation of tributary for purposes of the ''waters of the United States.''

Some commenters disagreed with the agencies' interpretation that tributaries include certain lakes and ponds. Some of these commenters stated that lakes and ponds should comprise a separate jurisdictional category. Several commenters asserted that considering certain lakes and ponds to be tributaries could lead to overly broad jurisdiction, and one commenter requested clarification in this rule that not every feature that might be considered a lake or a pond is necessarily jurisdictional. Other commenters agreed with the agencies' longstanding approach. Lakes, ponds, and impoundments function as part of the tributary system where they contribute flow to downstream waters, and therefore it is reasonable to assess them for jurisdiction as tributaries under this rule. The agencies will continue to interpret the regulations to address lakes, ponds, and impoundments with both an inlet and outlet connected to the tributary network, as well as lakes, ponds, and impoundments with an outlet connected to the tributary network as tributaries if they contribute flow directly or indirectly through one or more waters or features that lie along the flowpath to a paragraph (a)(1) water. The agencies have extensive experience implementing this approach under pre-2015 practice. The agencies disagree that this approach will lead to overly broad jurisdiction, as these lakes, ponds, and impoundments that are tributaries must meet either the relatively permanent standard or significant nexus standard to be jurisdictional. Therefore, not every lake, pond, or impoundment is jurisdictional as a tributary or under other provisions of this rule.

Some commenters supported the agencies' longstanding interpretation that tributaries include waterbodies that flow ''directly or indirectly'' to a paragraph (a)(1) water, while other commenters asserted that tributaries must flow ''directly'' into a paragraph (a)(1) water. There is no text in the Clean Water Act supporting this limitation, and the agencies have never interpreted the Act to cover only such tributaries. Even the *Rapanos* plurality opinion did not so limit the scope of tributaries covered by the Act. 547 U.S. at 742. Moreover, the science is clear that the chemical, physical, and biological integrity of paragraph (a)(1) waters depends on the many tributaries, including headwater streams, that feed such waters. It would be impossible to restore and maintain the chemical, physical, and biological integrity as required by the Clean Water Act with a definition of ''waters of the United States'' that included solely the last tributary that flows ''directly'' into a paragraph (a)(1) water. Tributaries upstream provide key functions that support the chemical, physical, and biological integrity of paragraph (a)(1) waters. If protections for tributaries ended just above the very last one, functions like habitat for salmon spawning, baseflow to maintain water levels, and nutrient replenishment would all be at risk. *See* Technical Support Document sections I.A and III.E.ii.

A tributary may contribute flow through a number of downstream waters or features, including both non-jurisdictional features, such as a ditch excluded under paragraph (b) of this rule, and jurisdictional waters that are not tributaries, such as an adjacent wetland. However, the tributary must be part of a system that eventually flows to a paragraph (a)(1) water. Waters that are part of a system that never reaches a paragraph (a)(1) water, for example, a small system of streams that ultimately flow to a non-navigable stream in an intrastate basin with no outlet, are not jurisdictional under this provision of this rule.

Some commenters asserted that the agencies' approach to interpreting ''tributary'' would potentially allow the agencies to include wetlands as tributaries. The agencies disagree. While wetlands may be a water through which a tributary flows directly or indirectly to a paragraph (a)(1) water, the agencies do not consider that wetland to be a tributary itself. This is consistent with pre-2015 practice. Only when a wetland lies entirely below the OHWM, will it be identified as part of the tributary consistent with current practice; even then, the wetland is not identified as a tributary itself. Otherwise, such wetlands are considered adjacent wetlands and will be evaluated under paragraph (a)(4) of this final rule.

Some commenters supported the agencies' longstanding interpretation that there is no meaningful distinction among natural, human-altered, or human-made tributaries in terms of their functions, values, and influence on the integrity of downstream waters. Some commenters requested clarification as to whether both human-made and natural tributaries would be regulated in this rule. Some commenters asserted that the agencies' proposed approach to interpreting ''tributary'' is overly broad and expansive because it would potentially allow the agencies to include ditches and human-made conveyances as tributaries. The agencies disagree with commenters who asserted that the agencies' approach to human-made tributaries is overly broad and expansive. The approach is consistent with the agencies' decades-long practice and the scientific record, and such tributaries must still meet either the relatively permanent standard or the significant nexus standard to be jurisdictional under this rule. As noted above, given the extensive human modification of watercourses and hydrologic systems throughout the country, it is often difficult to distinguish between natural watercourses and watercourses that are wholly or partly human-made or human-altered. Because natural, human-altered, and human-made tributaries provide many of the same functions, especially as conduits for the movement of water and pollutants to other tributaries or directly to paragraph (a)(1) waters, the agencies have interpreted the 1986 regulations to cover such tributaries. Ditches, for example, are tributaries under this rule if they flow directly or indirectly to paragraph (a)(1) waters and they are jurisdictional tributaries if they also meet the relatively permanent standard or significant nexus standard and are not excluded from jurisdiction under this rule. *See* section IV.C.7 of this preamble for additional discussion on excluded ditches.

c. Implementation

A tributary for purposes of this rule includes rivers, streams, lakes, ponds, and impoundments that flow directly or indirectly through another water or waters to a traditional navigable water, the territorial seas, an interstate water, or a paragraph (a)(2) impoundment. A tributary may flow through a number of downstream waters, including non-jurisdictional features. This section of the preamble provides additional information on the agencies' interpretation and implementation of the tributary provision of this rule. This section first explains how to determine whether a water is a tributary for purposes of this rule. The section next explains how to determine whether a tributary is jurisdictional under the relatively permanent standard or under the significant nexus standard.

i. Determining Whether a Water Is a Tributary for Purposes of This Rule

This section describes how to (1) identify a tributary for purposes of this rule and (2) determine whether the tributary is part of the tributary system of a traditional navigable water, the territorial seas, an interstate water, or a paragraph (a)(2) impoundment.

(1) Identifying a Water as a Tributary

In implementing this rule, the agencies are maintaining their longstanding interpretation that tributaries for purposes of Clean Water Act jurisdiction include rivers, streams, lakes, ponds, and impoundments. *See* 2007 Corps Instructional Guidebook at 8, 9. As discussed above, although tributaries are required to flow directly or indirectly through another water or waters to certain downstream waters, tributaries are not required to have a specific flow regime to meet the agencies' interpretation of ''tributary.'' However, flow characteristics like duration and timing of flow will be considered in determining whether tributaries meet the relatively permanent or significant nexus standard, as described further below in sections IV.C.4.c.ii and IV.C.4.c.iii of this preamble. Lakes, ponds, and impoundments may be at the headwaters of the tributary network (*e.g.,* a lake with only an outlet to the tributary network) or farther downstream from the headwaters (*e.g.,* a lake with both an inlet and outlet connected to the tributary network). Even though such waters are considered to be lentic or ''still'' systems, such waters still contribute flow downstream at the point that they outlet to the tributary network and therefore the agencies have long concluded it is appropriate to consider such waters to be tributaries.

As discussed above in this section of the preamble, the agencies' longstanding interpretation of ''tributary'' for purposes of the definition of ''waters of the United States'' includes natural, human-altered, or human-made waterbodies that flow directly or indirectly through another water or waters to a traditional navigable water, the territorial seas, or an interstate water. *See Rapanos* Guidance at 6.

The agencies will utilize the Corps' well-established definition of an ordinary high water mark (OHWM) to assist in identifying tributaries for purposes of this rule. *See* section IV.C.8 of this preamble (adding the definition of OHWM to EPA's regulation). Tributaries typically have at least one indicator of an OHWM and, consistent with pre-2015 practice, physical OHWM characteristics are used to identify waterbodies including streams, lakes, ponds, and ditches that are present on the landscape. *See, e.g.,* ''Final Notice of Issuance and Modification of Nationwide Permits,'' 65 FR 12818, 12823–24 (March 9, 2000); 2007 Corps Instructional Guidebook; RGL 05–05 (December 7, 2005). The OHWM, a term unchanged since 1977, defines the lateral limits of jurisdiction in non-tidal ''waters of the United States,'' provided the limits of jurisdiction are not extended by adjacent wetlands. *See* 42 FR 37144 (July 19, 1977); 33 CFR 323.3(c) (1978). The regulations at 33 CFR 328.3(e) and 329.11(a)(1) list the factors to be applied. RGL 05–05 further explains these regulations. Delineation of an OHWM in tributaries relies on the identification and interpretation of physical features, including topographic breaks in slope, changes in vegetation characteristics (*e.g.,* destruction of terrestrial vegetation and change in plant community), and changes in sediment characteristics (*e.g.,* sediment sorting and deposition). Field indicators, remote sensing, and mapping information can also help identify an OHWM. The Corps continues to improve regulatory practices across the country through ongoing research and the development of regional and national OHWM delineation procedures, as described further in section IV.A.ii of the Technical Support Document. For example, the Corps has developed field indicators to help field staff identify the OHWM in common stream types in the arid West. Consistent with longstanding practice, the agencies will apply the regulations and use RGL 05–05 and applicable OHWM delineation manuals, as well as take other steps as needed to ensure that the OHWM identification factors are applied consistently nationwide. *See Rapanos* Guidance at 10–11 n.36.

The agencies will assess any discontinuity in the OHWM and, consistent with pre-2015 practice, a natural or human-made discontinuity in the OHWM does not necessarily sever jurisdiction upstream. A discontinuity may exist where the stream temporarily flows underground. Tributaries may temporarily flow underground in regions with karst geology or lava tubes, for example, maintaining similar flow characteristics underground and at the downstream point where they return to the surface. The agencies will also continue their familiar practice that a discontinuity in the OHWM also does not typically sever jurisdiction upstream where the OHWM has been removed by development, agriculture, or other land uses. For example, tributaries can be relocated below ground to allow reasonable development to occur. In urban areas, surface waters are often rerouted through an artificial tunnel system to facilitate development. *See, e.g.,* Science Report at 3–3, and sections III.A and IV.A.ii of the Technical Support Document. Underground streams are distinct from groundwater due to their very direct hydrologic connection to the portions of the tributaries that are or re-surface above ground. Typically, groundwater connections would be much slower than connections via underground streams. Tributaries that have been rerouted underground are contained within a tunnel system or other similar channelized subsurface feature, while naturally occurring subterranean streams flow within natural conduits like karst formations or lava tubes. The agencies will look for indicators of flow both above and below the discontinuity. For example, a discontinuity in the OHWM may exist due to constructed breaks (*e.g.,* culverts, pipes, or dams) [98] or natural breaks (*e.g.,* debris piles or boulder fields). Site specific conditions will continue to determine the distance up the tributary network that is evaluated to see if the feature creates a temporary break or if it severs the upstream connection and constitutes the start of the tributary system.

[98] Under past practice, the agencies have sometimes characterized bridges as artificial breaks, such as under the 2015 Clean Water Rule. *See* 80 FR 37106 (June 29, 2015). However, bridges do not necessarily create discontinuity in the OHWM, and the agencies recognize that tributaries flowing under bridges may still show evidence of an OHWM and in such circumstances would continue to be jurisdictional where they meet either the relatively permanent or significant nexus standard.

Under this rule, swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow are not tributaries and are not jurisdictional. *See* section IV.C.7 of this preamble. Because swales and erosional features were considered to be generally non-jurisdictional features under pre-2015 practice, the agencies have extensive experience differentiating between these features and tributaries on the landscape. *See Rapanos* Guidance at 11–12. Streams are waterbodies that are typically characterized by the presence of a channel and an OHWM, and lakes and ponds are waterbodies that are also typically characterized by the presence of an OHWM, in the absence of adjacent wetlands. In contrast, erosional features like gullies and rills are typically more deeply incised than streams and lack an OHWM. Similarly, swales do not have an OHWM and typically lack a more defined channel that a stream exhibits. *See* section IV.C.7 of this preamble and section III.A.v of the Technical Support Document for additional discussion on how to distinguish between tributaries, erosional features, and swales; *see* section IV.A.ii of the Technical Support Document for additional discussion on how to identify tributaries based on an OHWM.

A variety of field and remote tools can be used to determine whether a water is a tributary.[99] Due to limitations associated with some remote tools, field verification for accuracy may be necessary (*e.g.,* due to scale or vegetation cover, not all tributaries may be visible in satellite imagery and aerial photographs or mapped in the NHD). Examples of field indicators will be discussed in more detail below.

(2) Identifying Whether the Water Is Part of the Tributary System of a Paragraph (a)(1) Water

The next step in determining whether a waterbody is a tributary is to identify whether the waterbody is part of the tributary system of a paragraph (a)(1) water. The tributary must flow directly or indirectly through another water or waters to a traditional navigable water, the territorial seas, or interstate water. Waters through which a tributary may flow indirectly include, for example, impoundments, wetlands, lakes, ponds, and streams. A tributary may flow through a number of downstream waters, including non-jurisdictional features, such as a ditch excluded under paragraph (b) of this rule or an excluded waste treatment system, and jurisdictional waters that are not tributaries, such as an adjacent wetland. But, the tributary must be part of a tributary system that eventually flows to a traditional navigable water, the territorial seas, or an interstate water to be jurisdictional. A tributary may flow through another stream that flows infrequently, and only in direct response to precipitation, and the presence of that stream is sufficient to demonstrate that the tributary flows to a paragraph (a)(1) water. Tributaries are not required to have a surface flowpath all the way down to the paragraph (a)(1) water. For example, tributaries can contribute flow through certain natural and artificial breaks (including certain non-jurisdictional features), some of which may involve subsurface flow as described above in section IV.C.4.b of this preamble.

In evaluating the flowpath from a water feature, the agencies can use USGS maps; NWI data; Tribal, State, and local knowledge or maps; dye tests, tracers, or other on the ground tests; field observations; aerial photography; or other remote sensing information. The agencies can also use available models, including models developed by Federal, Tribal, State, and local governments, academia, and the regulated community.[100] These tools could be used in conjunction with field observations, data, and other desktop tools to evaluate whether a tributary flows directly or indirectly to a paragraph (a)(1) water. For tributaries to paragraph (a)(2) impoundments, a flowpath to the impoundment and to a paragraph (a)(1) water can be identified using these same tools.

ii. Determining Whether a Tributary Meets the Relatively Permanent Standard

Under this rule, tributaries that meet the relatively permanent standard are jurisdictional under the Clean Water Act as ''waters of the United States.'' In implementing the relatively permanent standard, the agencies draw key concepts from the 2020 NWPR's interpretation, but modify that rule's approach to ensure the term can be practically implemented. Specifically, under this rule the relatively permanent standard encompasses surface waters that have flowing or standing water year-round or continuously during certain times of the year. Relatively permanent waters do not include surface waters with flowing or standing water for only a short duration in direct response to precipitation. The approach in this rule would encompass tributaries considered relatively permanent under the 2020 NWPR, as well as those considered relatively permanent under the *Rapanos* Guidance, providing continuity in approach for the regulated community and other stakeholders. Tributaries that do not meet the relatively permanent standard must be assessed under the significant nexus standard. *See* section IV.C.4.c.iii of this preamble.

The agencies' interpretation of relatively permanent tributaries to include surface waters that have flowing or standing water year-round or continuously during certain times of the year is consistent with the *Rapanos* plurality's interpretation of ''waters of the United States.'' The *Rapanos* plurality interpreted ''waters of the United States'' as encompassing ''relatively permanent, standing or continuously flowing bodies of water,'' including streams, rivers, oceans, lakes, and other bodies of waters that form geographical features. 547 U.S. at 739, 742. The plurality noted that its reference to ''relatively permanent'' waters did ''not necessarily exclude streams, rivers, or lakes 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.'' *Id.* at 732 n.5 (emphasis in original); *see also* 85 FR 22289 (April 21, 2020) (citing the same language from the plurality in support of the 2020 NWPR's interpretation of relatively permanent waters).

[99] Direct observation or various remote sensing resources such as USGS stream gage data (*available at https://waterdata.usgs.gov/nwis/rt*), USGS topographic maps (*available at https://www.usgs.gov/the-national-map-data-delivery/topographic-maps*), high-resolution elevation data and associated derivatives (*e.g.,* slope or curvature metrics), Federal Emergency Management Agency (FEMA) flood zone maps (*available at https://msc.fema.gov/portal/home*), NRCS soil maps (*available at https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx*), National Hydrography Dataset (NHD) data, National Wetlands Inventory (NWI) data, maps and geospatial datasets from Tribal, State, or local governments, and/or aerial or satellite imagery can also be used. Tributaries are often observable in aerial imagery and high-resolution satellite imagery by their topographic expression, characteristic linear and curvilinear patterns, dark photographic tones, or the presence of riparian vegetation. USGS topographic maps often include different symbols to indicate mapped hydrographic features (*see* ''Topographic Map Symbols,'' *available at https://pubs.usgs.gov/gip/TopographicMapSymbols/topomapsymbols.pdf*).

[100] One such model includes the USGS StreamStats ''Flow (Raindrop) Path'' GIS tool which allows the user to click a point on a map, after which a flowpath is drawn to estimate where water may flow from that point to the stream network, eventually making its way to the ocean if the tributary network allows for it *available at https://streamstats.usgs.gov/ss/.* The StreamStats tool may potentially be used to identify the flowpath from the subject waters to the downstream paragraph (a)(1) water using the ''Flow (Raindrop) Path'' component of the tool.

The agencies have decided to implement this approach because it is consistent with the *Rapanos* plurality opinion, it reflects and accommodates regional differences in hydrology and water management, and it can be implemented using available, easily accessible tools. It will therefore be a straightforward approach for the agencies and the regulated community to implement. In addition, maintaining an interpretation that encompasses the tributaries considered relatively permanent under the pre-2015 regulatory regime and the 2020 NWPR addresses the many comments from stakeholders emphasizing the need for clarity and certainty in the scope of ''waters of the United States.''

''Flowing water'' under this rule is meant to encompass not just streams and rivers, but also lakes, ponds, and impoundments that are part of the tributary system, as such waters outlet to the tributary network and contribute flow downstream at the outlet point. In addition, ''flowing water'' under this rule is meant to encompass those tributaries that are frozen for parts of the year. Such tributaries typically have flowing water underneath the frozen surface.

The phrase ''certain times of the year'' is intended to include extended periods of standing or continuously flowing water occurring in the same geographic feature year after year, except in times of drought. The defining characteristic of relatively permanent waters with flowing or standing water continuously during only certain times of the year is a temporary lack of surface flow, which may lead to isolated pools or dry channels during certain periods of the year. The phrase ''direct response to precipitation'' is intended to distinguish between episodic periods of flow associated with discrete precipitation events versus continuous flow for extended periods of time.

A number of commenters suggested that the agencies interpret relatively permanent tributaries to include those that flow year-round or at least seasonally (*e.g.,* typically three months), consistent with the approach in the *Rapanos* Guidance. This rule encompasses tributaries that are ''relatively permanent'' under the *Rapanos* Guidance. However, the agencies have decided not to use the term ''seasonal'' from the *Rapanos* Guidance for several reasons. First, the agencies have determined that directly describing the scenarios in which waters would be ''relatively permanent'' is clearer than using the term ''seasonal,'' the meaning of which can vary and could be misunderstood to establish a specific required flow duration. *See* section IV.C.4.c.ii.1 of this preamble for further discussion of the challenges of requiring a specific flow duration. Relatively permanent flow may occur seasonally, but the phrase is also intended to encompass tributaries in which extended periods of standing or continuously flowing water are not linked to naturally recurring annual or seasonal cycles. Specifically, relatively permanent waters may include tributaries in which flow is driven more by various water management regimes and practices, such as tributaries with extensive flow alteration (*e.g.,* diversions, bypass channels, water transfers) and effluent-dependent streams. For example, in areas of the West where water withdrawals or groundwater pumping can substantially modify flow characteristics, onset and cessation of streamflow in some tributaries may be more closely tied to changes in water use associated with irrigation than with seasons of the year. In such flow-altered tributaries, streamflow may change abruptly throughout the year due to adjustments in facility operations or may vary from year to year due to changes in water rights or water management regimes. In addition, tributaries that typically flow throughout the spring may run dry in years following a drought while storage reservoirs are being refilled. When evaluating these types of artificially manipulated regimes, the agencies may consider information about the regular manipulation schedule and may potentially consider other remote resources or on-site information to assess flow frequency.

Other commenters recommended defining relatively permanent tributaries using the 2020 NWPR's terms ''perennial'' and ''intermittent.'' Relatively permanent tributaries under this rule encompass tributaries that were jurisdictional under the 2020 NWPR. However, the agencies have decided to explain directly the way that the relatively permanent standard should be implemented, rather than defining the phrase with these terms. As evidenced by the variety of comments proposing definitions for ''perennial'' and ''intermittent,'' adding these terms to this rule could cause confusion and uncertainty. Moreover, many definitions of intermittent incorporate ''seasonal'' flow, a concept that the agencies decided not to employ in this rule for the reasons discussed above. Other definitions of ''perennial'' and ''intermittent'' that commenters suggested would require specific sources of flow, which the agencies also decided not to establish in this rule because such requirements cannot readily apply to hydrologically altered waters, and for the reasons discussed in section IV.C.4.c.ii.2 of this preamble.

While this rule implements the scope of relatively permanent tributaries consistent with the approach in the 2020 NWPR, it does not retain the 2020 NWPR's requirement that the tributaries contribute surface water flow to a paragraph (a)(1) water in a ''typical year.'' *See* 85 FR 22251 (April 21, 2020). The 2020 NWPR defined a ''typical year'' as when ''precipitation and other climatic variables are within the normal periodic range (*e.g.,* seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.'' As discussed in section IV.B.3 of this preamble and section II.B.iv.1 of the Technical Support Document, the typical year analysis proved difficult to implement and yielded arbitrary and potentially outdated results. Moreover, it is not required by the plurality opinion in *Rapanos,* which simply required a ''connect[ion]'' to paragraph (a)(1) waters. *See* 547 U.S. at 742 (describing a '''wate[r] of the United States''' as ''*i.e.,* a relatively permanent body of water connected to traditional interstate navigable waters''). This rule's requirement that jurisdictional tributaries flow directly or indirectly to downstream paragraph (a)(1) waters or paragraph (a)(2) impoundments implements the plurality's ''connect[ion]'' requirement. *See also* section IV.C.4.b of this preamble.

(1) Duration and Timing of Flow for Relatively Permanent Tributaries

Many commenters recommended that the agencies establish a particular flow duration for relatively permanent waters. Suggestions ranged from a minimum of three months to 290 days. The agencies decided not to establish a minimum duration because flow duration varies extensively by region. Establishing a uniform number equally applicable to the deserts in the arid West, the Great Lakes region, and New England forests would not be scientifically sound. The agencies instead have chosen to establish a more flexible approach to implementing this rule that accounts for specific conditions in each region. Moreover, it would often be infeasible for the regulated community or agency staff to determine whether a stream ordinarily flows or whether a lake contains standing water, for example, 12 weeks as opposed to 11 weeks per year. Even if this determination was possible, such a bright line cutoff would not reflect

hydrological diversity among different regions and alterations in flow characteristics. The agencies' conclusion that a minimum duration is not feasible is consistent with the pre-2015 regulatory regime, which did not establish a bright line cutoff (though provided three months as an example of seasonal flow) and with the approach of the 2020 NWPR. *See* 85 FR 22292 (April 21, 2020) (''The agencies are not providing a specific duration (*e.g.,* the number of days, weeks, or months) of surface flow that constitutes intermittent flow, as the time period that encompasses intermittent flow can vary widely across the country based upon climate, hydrology, topography, soils, and other conditions.'').

Many factors, including climate, hydrology, topography, soils, and other conditions, may affect the period in which relatively permanent flow may occur for those relatively permanent waters that do not have continuously flowing or standing water year-round. The factors which affect streamflow and flow cessation are climatically and geographically specific and therefore the periods during which a tributary might have relatively permanent flow vary by region. Non-relatively permanent tributaries are similarly diverse, and the mechanisms which differentiate relatively permanent flow from non-relatively permanent flow also vary by region.

For example, in parts of the Southeastern United States, precipitation is distributed somewhat uniformly throughout the year, but increased evapotranspiration during the growing season can reduce surficial ground water levels and reduce or remove surface flows late in the growing season (*e.g.,* late summer or early autumn). Consequently, certain streams in the Southeast may flow primarily in the winter or early spring. Non-relatively permanent tributaries in the Southeast may often be characterized by the repeated sequence of streamflow, flow cessation, and channel drying throughout the year, where the onset of streamflow coincides with distinct rainfall events and is driven primarily by storm runoff. Streamflow in these systems may persist anywhere from a few hours to days at a time, where the cessation of flow is most often associated with termination of overland flow, hillslope runoff recession, and the depletion of water in saturated soils. Although streamflow in these tributaries may occur regularly, off and on, over the duration of a season or longer, they do not exhibit continuously flowing water for an extended period at any point during the year. In other areas of the United States, snowpack melt drives streamflow more than rainfall, and relatively permanent flow may therefore coincide with warming temperatures in the spring or early summer.

Many headwater streams in mountainous regions flow through channels incised in bedrock with no groundwater interface with the bed of the stream. Instead, these streams are often fed primarily by high elevation snowpack melt. The same scenario may also exist in Northern regions, where flows could be fed almost exclusively through melting snowpack absent elevated groundwater tables. In these regions, relatively permanent flows coincide with warming temperatures in the spring or early summer and may persist well into the summer until there are no longer enough inputs to sustain surface water, or later into autumn when more permanent sources of meltwater (*e.g.,* glaciers or snowfields) begin to freeze. Non-relatively permanent flows in these regions may occur in basins with thin layers of snow, where snow melts rapidly at the onset of spring thaw, and the snowmelt produced is not sufficient to sustain flows for an extended period and into the summer.

To determine the flow characteristics of a tributary for purposes of implementing this rule, the agencies will evaluate the entire reach of the tributary that is of the same Strahler[101] stream order (*i.e.,* from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream; *see* Technical Support Document section IV.A.ii.1). The flow characteristics of lakes, ponds, and impoundments that are part of the tributary network will be assessed in conjunction with the stream they connect to. Consistent with the pre-2015 regulatory regime, the agencies will assess the flow characteristics of a particular tributary at the farthest downstream limit of such tributary (*i.e.,* the point the tributary enters a higher order stream). *Rapanos* Guidance at 6 n.24. Where data indicate the flow characteristics at the downstream limit are not representative of the entire reach of the tributary, the flow characteristics that best characterize the entire tributary reach will be used.

(2) Source of Flow for Relatively Permanent Tributaries

Implementation of the relatively permanent standard for tributaries in this rule does not require that relatively permanent flow come from particular sources. This rule's approach is consistent with the plurality opinion in *Rapanos,* which lays out the relatively permanent standard and does not require that relatively permanent waters originate from any particular source. *See, e.g.,* 547 U.S. at 739. This rule's approach is also science-based, as the source of a tributary's flow does not influence its effect on downstream waters, including paragraph (a)(1) waters. This rule's approach is similar to the familiar approach taken in the *Rapanos* Guidance and the 2020 NWPR, which also did not specify that relatively permanent flow come from particular sources.

Sources of flow in relatively permanent tributaries may include an elevated groundwater table that provides baseflow to a channel bed. Relatively permanent flow could also result from upstream contributions of flow, effluent flow, or snowpack that melts slowly over time in certain geographic regions or at high elevations. In addition, in certain regions relatively permanent flow could result from a concentrated period of back-to-back precipitation events that leads to sustained flow through a combination of runoff and upstream contributions of flow or an elevated groundwater table that provides baseflow to the channel bed. In contrast, non-relatively permanent tributaries may flow only during or shortly after individual precipitation events (including rainfall or snowfall events). Non-relatively permanent flow may occur simply because it is raining or has very recently rained, or because a recent snow has melted.

Streamflow that occurs during the monsoon season in certain parts of the country (typically June through September in the arid West) may be relatively permanent or non-relatively permanent, depending on the conditions at the location. Many tributaries in the arid West are dominated by coarse, alluvial sediments and exhibit high transmission losses, resulting in streams that often dry rapidly following a storm event (*e.g.,* within minutes, hours, or days). These streams are not relatively permanent under this rule. However, relatively permanent flow may occur as a result of multiple back-to-back storm events throughout a watershed, during which the combination of runoff and upstream contributions of flow is high enough to exceed rates of transmission loss for an extended period of time. Relatively permanent flow may also follow one or more larger storm events, when

[101] Strahler, A.N. 1957. ''Quantitative analysis of watershed geomorphology.'' American Geophysical Union Transactions 38: 913–920.

floodwaters locally recharge the riparian aquifer through bank infiltration, which supplies sustained baseflow throughout the monsoon season.

Similar to the 2020 NWPR's approach, the agencies will consider tributaries that flow in direct response to ''snowfall'' for only a short duration during or shortly after that snowfall event to be non-relatively permanent waters under this rule. Streams that flow as a result of ''snowpack melt'' will be considered relatively permanent waters under this rule, where snowpack is defined as ''layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation (*e.g.,* in northern climes or mountainous regions).'' *See* 85 FR 22275 (April 21, 2020). Tributaries that receive effluent flow that is relatively permanent will also be assessed under the relatively permanent standard.

(3) Tools Available To Determine Whether a Tributary Meets the Relatively Permanent Standard

Section IV.C.4.c.i of this preamble discusses how to determine if features on the landscape are tributaries. Direct observations and various remote tools and resources can be used to identify tributary reaches based on stream order, and topographic characteristics can assist in determining stream order. USGS topographic map blue line symbology and contour line patterns can be used to interpret the connectivity and contribution of flow within a river network, as well as topography within an evaluation area. Elevation models, including those based on light detection and ranging (LIDAR) derived data, may also illustrate tributary connectivity and flow patterns, as well as topography. In addition, aerial and satellite imagery along with maps or geospatial mapping products (*e.g.,* NHD, NWI, soil maps, and Tribal, State, or local maps) can be used to help identify tributary reaches based on stream order. In addition to remote tools and resources, factors identified through field observations can be used to help determine the extent of a tributary reach. For example, tributary systems can be traversed to identify and characterize the branches of the network that contribute flow to a particular evaluation area. Certain geographic features (*e.g.,* non-jurisdictional ditches, swales) may also be found to contribute to a tributary's surface hydrology.

Many available resources and tools can assist in determining whether tributaries are relatively permanent. For instance, the agencies have been working to develop regionalized streamflow duration assessment methods (SDAMs, *available at https://www.epa.gov/streamflow-duration-assessment*), which are rapid field-based assessment methods that can be used to classify streamflow duration and assist in determining whether tributaries are ''relatively permanent.'' These methods rely on physical and/or biological field indicators, such as the presence of hydrophytic vegetation and benthic macroinvertebrates, that can be collected or observed in a single site visit to determine the flow duration of a tributary in a reliable and rapid way. EPA, the Corps, and the State of Oregon developed a regionalized SDAM that has been validated for use throughout the Pacific Northwest (*available at http://www.epa.gov/measurements/streamflow-duration-assessment-method-pacific-northwest*). EPA and the Corps have also developed a beta SDAM for the arid West (*available at https://www.epa.gov/streamflow-duration-assessment/beta-streamflow-duration-assessment-method-arid-west*) and the Western Mountains (*available at https://www.epa.gov/streamflow-duration-assessment/beta-streamflow-duration-assessment-method-western-mountains*). EPA and the Corps are working to develop additional regionalized SDAMs in other parts of the country. Other agencies have developed similar tools that may be useful in implementing this rule.[102] The agencies, co-regulators, and stakeholders can use the regionalized field indicators from SDAMs to quickly and easily identify tributaries that are relatively permanent as interpreted by the agencies under this rule.

Remote or desktop tools can also help the agencies and the public better understand streamflow and whether tributaries have continuously flowing or standing water year-round or during certain times of the year for more than for a short duration in direct response to precipitation.[103] Satellite imagery and aerial photographs showing visible water on multiple dates can provide evidence as to whether tributaries have relatively permanent flow. Aerial photographs may show other indicators commonly used to identify the presence of an OHWM.[104] These indicators may include the destruction of terrestrial vegetation, the absence of vegetation in a channel, and stream channel morphology with evidence of scour, material sorting, and deposition. These indicators from aerial photographs can be correlated to the presence of USGS stream data to support an assessment of flow characteristics for a tributary.

In addition to satellite imagery and aerial photographs, desktop tools, such as a regional regression analysis and the Hydrologic Modeling System (HEC–HMS), provide for the hydrologic estimation of stream discharge in tributaries under regional conditions. The increasing availability of LIDAR-derived data can also be used to help implement this rule.[105] Potential LIDAR-indicated tributaries can be correlated with aerial photography or high-resolution satellite imagery interpretation and USGS stream gage data, to reasonably conclude the presence of an OHWM and shed light on the flow characteristics.

Regional field observations can be used to verify desktop assessments of the relative permanence of a tributary, when necessary. Geomorphic indicators could include active/relict floodplains, substrate sorting, clearly defined and continuous bed and banks, depositional bars and benches, and recent alluvial deposits. Hydrologic indicators might

[102] *E.g.,* the Streamflow Methodology for Identification of Intermittent and Perennial Streams and Their Origins, developed by the North Carolina Division of Water Quality, *available at https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Policies_Guides_Manuals/StreamID_v_4point11_Final_sept_01_2010.pdf.*

[103] These tools include local maps, StreamStats by the USGS (*available at https://streamstats.usgs.gov/ss/*), Probability of Streamflow Permanence (PROSPER) by the USGS, which provides streamflow permanence probabilities during the summer for stream reaches in the Pacific Northwest (*available at https://www.usgs.gov/centers/wyoming-montana-water-science-center/science/probability-streamflow-permanence-prosper*), and NRCS hydrologic tools and soil maps. Other tools include regional desktop tools that provide for the hydrologic estimation of a discharge sufficient to generate intermittent or perennial flow (*e.g.,* a regional regression analysis or hydrologic modeling), or modeling tools using drainage area, precipitation data, climate, topography, land use, vegetation cover, geology, and/or other publicly available information. Some models that are developed for use at the reach scale may be localized in their geographic scope. NOAA national snow analyses maps can facilitate the evaluation of seasonal flow from snowmelt (*available at https://www.nohrsc.noaa.gov/nsa/*), as can NRCS sources (*available at https://www.wcc.nrcs.usda.gov/snow/*), and hydrographs that may indicate a large increase in stream discharge due to the late spring/early summer thaws of melting snow.

[104] *See* definition of OHWM in section IV.C.8.d of this preamble and *https://www.erdc.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/486085/ordinary-high-water-mark-ohwm-research-development-and-training/.*

[105] Where LIDAR data have been processed to create elevation data such as a bare earth model, detailed depictions of the land surface are available and subtle elevation changes can indicate a tributary's bed and banks and channel morphology. Visible linear and curvilinear incisions on a bare earth model can help identify the flow characteristics of a water in greater detail than aerial photography interpretation alone. Several tools (*e.g.,* TauDEM, Whitebox, GeoNet) can assist in developing potential stream networks based on contributing areas, curvature, and flowpaths using GIS.

include wrack/drift deposits, hydric soils, or water-stained leaves. Biologic indicators could include aquatic mollusks, crayfish, benthic macroinvertebrates, algae, and wetland or submerged aquatic plants. As noted above, the agencies are developing SDAMs for use throughout the country which evaluate and interpret these indicators and can show whether tributaries have continuously flowing or standing water year-round or during certain times of the year for more than a short duration in direct response to precipitation. Ultimately, multiple indicators, data points, and sources of information may be used to determine whether a water, including a tributary, is relatively permanent.

iii. Determining Whether a Tributary Meets the Significant Nexus Standard

In evaluating tributaries under the significant nexus standard, the agencies will determine whether the tributaries, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters. *See* section IV.C.9 of this preamble for additional discussion on the definition of ''significantly affect'' in this rule, including the factors that will be evaluated and the functions that will be assessed as part of a significant nexus analysis. The agencies consider tributaries and their adjacent wetlands to be ''similarly situated'' waters. The agencies consider similarly situated waters to be ''in the region'' when they lie within the catchment area of the tributary of interest. Identifying the catchment area for purposes of this significant nexus analysis is described below. The agencies developed this updated evaluation method from the current pre-2015 implementation approach informed by their experience, the best available science, Supreme Court decisions, and public comments. Accordingly, in implementing the significant nexus standard under this rule, all tributaries and adjacent wetlands within the catchment area of the tributary of interest will be analyzed as part of the significant nexus analysis.[106]

For purposes of a significant nexus analysis, the agencies will identify the ''region'' as the catchment that drains to and includes the tributary of interest. A catchment is the area of the land surface that drains to a specific location for a specific hydrologic feature. Catchments will be delineated from the downstream-most point of the tributary reach of interest and include the land uphill that drains to that point. For example, if the tributary of interest is a second order stream, the catchment would be delineated from the point that the second order stream enters a third order stream. *See* discussion of stream order in section IV.C.4.c.ii.1 of this preamble. Topography and landscape position influence the size and configuration of a catchment.

There are many existing spatial analysis tools that can be used to delineate catchments quickly and reliably in most parts of the country. USGS topographic maps can be manually interpreted to delineate catchments based on the location of the outlet point (the downstream-most point of the tributary of interest where the tributary enters a higher order stream), using calculations informed by topographic contours, the alignment of topographic high spots, and grouping of lower, valley bottoms. Various GIS tools, web applications, and automated modeling systems can also delineate catchments based on one or more of the many factors that can influence drainage, including surface topography, climate, land use, the presence of hydrologic sinks, topology of sewer systems, and design of wastewater treatment plant service areas.[107]

After identifying the catchment, the next step is to identify the tributaries within the catchment under the agencies' longstanding interpretation of tributary, *see* section IV.C.4.a of this preamble above, and any of their adjacent wetlands within the catchment area. *See* section IV.C.5 of this preamble for additional discussion on how to identify adjacent wetlands. The agencies' longstanding practice in conducting the significant nexus analysis is to assess a tributary in combination with wetlands that meet the definition of ''adjacent'' under the regulations. *Rapanos* Guidance at 10. This approach to the significant nexus analysis recognizes the ecological relationship between the tributaries and their adjacent wetlands, and the role those similarly situated waters have in influencing the chemical, physical, or biological integrity of paragraph (a)(1) waters. *See* section III.E.iii of the Technical Support Document. For purposes of this rule, the agencies will therefore assess the tributaries and their adjacent wetlands in a catchment. If the tributaries in the region, including the tributary under assessment, have no adjacent wetlands, the agencies consider only the factors and functions of the tributaries in determining whether there is a significant effect on the chemical, physical, or biological integrity of downstream paragraph (a)(1) waters. If any of the tributaries in the region, including the tributary under assessment, have adjacent wetlands, the agencies will consider the factors and functions of the tributaries, including the tributary under assessment, together with the functions performed by the wetlands adjacent to the tributaries in the catchment, in evaluating whether a significant nexus is present.

In conducting a significant nexus analysis under this rule, the agencies will evaluate available hydrologic information (*e.g.,* gage data, precipitation records, flood predictions, historic records of water flow, statistical data, personal observations/records, etc.) and physical indicators of flow including the presence and characteristics of a reliable OHWM. To understand the chemical, physical, and biological functions provided by tributaries and their adjacent wetlands, and the effects those functions have on paragraph (a)(1) waters, it is important to use relevant geographic water quality data in conjunction with site-specific data from field sampling and hydrologic modeling. *See* section IV.C.9.c of this preamble for additional discussion on implementing the significant nexus analysis; *see also* section IV.C.10 of this preamble.

5. Adjacent Wetlands

a. This Rule

Consistent with the proposal, this rule retains the adjacent wetlands provision of the 1986 regulations, with amendments to reflect the agencies' interpretation of the statutory limits on the scope of the ''waters of the United States'' informed by the law, the science, and agency expertise. Aquatic resources that meet this rule's definitions of ''wetlands'' and ''adjacent'' are assessed under this provision where they are adjacent to traditional navigable waters, the territorial seas, interstate waters,

[106] This implementation approach to the region for purposes of the significant nexus standard is a change from the *Rapanos* Guidance. *See* section IV.C.9.c of this preamble for additional discussion on implementing the significant nexus analysis.

[107] NHDPlus provides delineated catchments for individual stream segments by linking the mapped stream network to the landscape. In addition, StreamStats by the USGS (*available at https://streamstats.usgs.gov/ss/*) is a map-based web tool that can delineate drainage areas for streams and estimate flow characteristics for selected sites based on stream gage data, basin characteristics, climate, etc. EPA's EnviroAtlas Interactive Map (*available at https://www.epa.gov/enviroatlas/enviroatlas-interactive-map*) has a wide variety of tools that can help delineate catchments, including a tool that illustrates how precipitation will flow over the land surface, mapped elevation profiles for selected tributaries, and designations of upstream and downstream watersheds within a stream network.

impoundments of jurisdictional waters, and tributaries.

As discussed further in section IV.C.8.a of this preamble, in this rule the agencies are retaining their longstanding definition of ''wetlands'' from the 1986 regulations: ''Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.''

Additionally, as discussed further in section IV.C.8.b of this preamble, in this rule the agencies are retaining their longstanding definition of ''adjacent'' unchanged for most of the past 45 years, which provides: ''Adjacent means bordering, contiguous, or neighboring. Wetlands 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.' '' Under this definition, adjacency is focused on the distance between the wetland and the jurisdictional water. Whether the distance between the wetland and the jurisdictional water qualifies the wetland as bordering, contiguous, or neighboring (and therefore ''adjacent'') depends on the factual circumstances. The agencies have three well-established criteria to determine adjacency; if any one of the criteria is met, the wetland is ''adjacent,'' but may require further analysis to determine if it is ''waters of the United States.'' *See Rapanos* Guidance at 5–8. First, there is an unbroken surface or shallow subsurface connection to a jurisdictional water, which can be established, for example, where the wetland directly abuts the jurisdictional water or by a non-jurisdictional physical feature that provides the direct connection between the wetland and a jurisdictional water, such as a pipe, culvert, non-jurisdictional ditch, or flood gate, that has at least periodic flow. Second, the wetland is physically separated from a jurisdictional water by human-made dikes or barriers, or natural landforms (*e.g.,* river berms, beach dunes). Or third, the wetland's proximity to a jurisdictional water is reasonably close such that ''adjacent wetlands have significant effects on water quality and the aquatic ecosystem.'' *Riverside Bayview,* 474 U.S. at 135 n.9. The agencies conclude that close proximity between an adjacent wetland and a jurisdictional water means the wetland can modulate water quantity or water quality in the jurisdictional water, and the jurisdictional water can modulate water quantity or quality in the wetland. *See* section IV.C.5.c of this preamble for further discussion on the implementation of this provision and the three criteria. The agencies have not established a specific distance limitation in the rule beyond which wetlands are never adjacent because whether a wetland is reasonably close such that the wetland can modulate water quantity or quality in the jurisdictional water or the jurisdictional water can modulate water quantity or quality in the wetland as part of the same aquatic ecosystem, depends on regional variations in climate, landscape, and geomorphology. But the agencies can state based on nearly 45 years of implementation of this definition that in a substantial number of cases, adjacent wetlands abut (touch) a jurisdictional water. And, on the whole, nationwide, adjacent wetlands are within a few hundred feet from jurisdictional waters (and in the instances where the distance is greater than a few hundred feet, adjacency is likely supported by a pipe, non-jurisdictional ditch, karst geology, or some other feature that connects the wetland directly to the jurisdictional water). Because of regional variability and its effects on proximity for purposes of adjacency, wetlands in the arid West—where rainfall is generally lower, evaporation rates are higher, and riparian areas and floodplains do not extend far from the tributary network—are likely to be much closer than a few hundred feet to be considered adjacent under this rule. On the other hand, where the jurisdictional water is wide, topography is flat lending to larger floodplains and riparian areas, and rainfall is higher, wetlands are more likely to be determined to be reasonably close where they are a few hundred feet from that tributary because the site-specific conditions contribute to the close relationship between the wetland and the jurisdictional water, including any unbroken surface or shallow subsurface hydrologic connections between the waters.

While bright-line rules (for example, wetlands that are more than a specific number of feet from a jurisdictional water are not ''adjacent'') are easiest to understand and implement, convenience is not the only goal the agencies must consider in administering the Clean Water Act. Because the relationship between a wetland and a proximate jurisdictional water can depend upon a number of site-specific factors, like climate, geomorphology, landscapes, hydrology, and size of the jurisdictional water (*e.g.,* the ocean compared to a headwater stream), and because the central purpose of the Act is to protect the integrity of the nation's waters, a more nuanced analysis is required. While science says that all things being equal, distance, location in a riparian area or floodplain, or discrete hydrologic connections are more likely to strengthen the relationship between a wetland and a nearby water, science does not provide bright lines on appropriate distances to determine adjacency. In implementing this provision over the years, the agencies have worked hard to balance the desire for clarity and predictability with the agencies' scientific understanding of the resources Congress has charged the agencies with protecting. The agencies have carefully considered options for nationally applicable bright lines with respect to adjacency, such as establishing that any wetland within a certain number of feet from a jurisdictional tributary is *per se* jurisdictional, in order to facilitate implementation of the Clean Water Act and to minimize the burden on both landowners and the agencies to evaluate the scope of ''waters of the United States.'' However, the United States is a vast country with many different types of waters, watersheds, landscapes, and hydrology. In fact, in the 2015 Clean Water Rule the agencies sought to establish a distance-based bright line for determining adjacency. As discussed in section IV.B.1 of this preamble, that rule was immediately challenged, and the distance-based limitations were a substantial factor in many of the challenges. As the Supreme Court itself has recognized, the scope of Clean Water Act jurisdiction does not easily lend itself to bright lines: ''In sum, we recognize that a more absolute position . . . may be easier to administer. But, as we have said, those positions have consequences that are inconsistent with major congressional objectives, as revealed by the statute's language, structure, and purposes.'' *Maui,* 140 S. Ct. at 1477. Ultimately, for purposes of this rule, the agencies concluded that there was not a reasoned basis, consistent with the text of the statute, to establish such a regulatory bright line.

The adjacent wetlands provision in the 1986 regulations defined ''waters of the United States'' to include wetlands adjacent to traditional navigable waters, interstate waters, paragraph (a)(3) ''other waters,'' impoundments of ''waters of the United States,'' tributaries, and the territorial seas. This rule provides additional constraints on jurisdiction relative to the 1986 regulatory text by

defining ''waters of the United States'' to include: (1) wetlands adjacent to traditional navigable waters, the territorial seas, and interstate waters; (2) wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph (a)(2) impoundments or jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and (3) wetlands adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard. In other words, for wetlands adjacent to waters that are not paragraph (a)(1) waters, an additional showing of a continuous surface connection to a relatively permanent water or of a significant nexus to a paragraph (a)(1) water is required. The determination of whether a wetland is ''adjacent'' is distinct from whether an ''adjacent'' wetland meets the relatively permanent standard; however, wetlands that have a continuous surface connection to a relatively permanent water meet the definition of ''adjacent'' and thus are a subset of adjacent wetlands. *See* section IV.C.5.c of this preamble for further information related to implementing the final rule's adjacent wetlands provision.

Under this rule, the relatively permanent standard and the significant nexus standard are independent jurisdictional standards. Under the relatively permanent standard for adjacent wetlands, wetlands meet the continuous surface connection requirement if they physically abut, or touch, a relatively permanent paragraph (a)(2) impoundment or a jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard, or if the wetlands are connected to these waters by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert. A natural berm, bank, dune, or similar natural landform between an adjacent wetland and a relatively permanent water does not sever a continuous surface connection to the extent it provides evidence of a continuous surface connection. Again, the determination of whether a wetland is ''adjacent'' under the rule is distinct from whether an ''adjacent'' wetland has a continuous surface connection. *See* section IV.C.5.c of this preamble, below, for further discussion of implementation of the final rule's adjacent wetlands provision.

The agencies have amended the regulatory text from the proposed rule to be clearer that a wetland adjacent to but lacking a continuous surface connection to a tributary that is relatively permanent must be assessed under the significant nexus standard. For example, if a wetland is ''neighboring'' to a tributary that is relatively permanent, and thus ''adjacent,'' but lacks a continuous surface connection to that tributary, the wetland would need to be assessed under the significant nexus standard in order to determine its jurisdictional status. This is consistent with pre-2015 practice under the *Rapanos* Guidance for wetlands adjacent to relatively permanent tributaries and was the agencies' intent under the proposed rule language. *See Rapanos* Guidance at 8; 86 FR 69423 (''Wetlands adjacent to relatively permanent tributaries but that lack a continuous surface connection to such waters would then be assessed under the significant nexus [standard], along with the tributary.'').

In addition, under this rule, wetlands adjacent only to paragraph (a)(5) waters cannot be considered for jurisdiction under the paragraph (a)(4) adjacent wetlands category, which represents a change from the 1986 regulations. Instead, such wetlands could be considered for jurisdiction solely under paragraph (a)(5) of this rule.

Further, in this rule, the agencies are deleting the parenthetical from the 1986 regulations that limited the scope of jurisdictional adjacent wetlands to wetlands adjacent to waters ''(other than waters that are themselves wetlands)'' for the reasons discussed below.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The agencies received numerous comments on the scope and implementation of the adjacent wetlands provision.

i. Comments on the Adjacent Wetlands Provision

The agencies received a wide range of comments on adjacent wetlands. Some commenters stated that they agreed with the agencies' approach in the proposed rule for adjacent wetlands, with several adding that they believed the proposed rule's approach to adjacency was consistent with prior practice, the relevant case law, the statute, the Constitution, or congressional intent. Other commenters disagreed and stated that the agencies' approach was not consistent with case law, the statute, the Constitution, or congressional intent. Many of those commenters stated that wetlands should only be jurisdictional if they meet the relatively permanent standard. Other commenters requested greater jurisdictional protections for wetlands due to the many functions that they provide that benefit downstream waters, with some commenters requesting that adjacent wetlands be treated as categorically jurisdictional, similar to the 2015 Clean Water Rule.

After careful consideration of public comments and for the reasons described in this preamble, the agencies are promulgating the adjacent wetlands provision of this rule with minimal changes to the proposed rule. For wetlands adjacent to paragraph (a)(1) waters, adjacency alone supports jurisdiction. For wetlands that are adjacent to waters that are not paragraph (a)(1) waters, like tributaries, this rule establishes an additional limitation on jurisdiction. In that case, the adjacent wetlands are jurisdictional only if they meet either the relatively permanent standard or the significant nexus standard. The agencies agree with commenters who stated that the proposed rule's approach to adjacent wetlands was generally consistent with prior practice and consistent with the relevant case law, the statute, the Constitution, and congressional intent, and thus disagree with commenters who took the contrary view. This rule defines ''waters of the United States'' to include adjacent wetlands and reflects the agencies' interpretation of the statutory limits on the scope of the ''waters of the United States'' informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, relevant Supreme Court decisions, the scientific record, the agencies' experience and technical expertise, and consideration of public comments on the proposed rule. The agencies disagree with commenters who stated that only adjacent wetlands that meet the relatively permanent standard should be considered jurisdictional. As discussed further in section IV.A.3.a.ii of this preamble, the agencies have concluded that the relatively permanent standard is administratively useful but is insufficient as the sole standard for geographic jurisdiction under the Clean Water Act because it is inconsistent with the Act's text and objective. Protecting only waters that meet the relatively permanent standard also runs counter to the scientific principles underlying protection of water quality. The agencies thus are promulgating an approach to adjacent wetlands that includes, but that is not limited to, the relatively permanent standard. The ecological relationship between jurisdictional waters and their adjacent wetlands is well documented in the scientific literature and reflects their physical proximity as well as shared hydrological and biological characteristics. The scientific literature

also supports the conclusion that adjacent wetlands, either alone or in combination with similarly situated waters, provide many important functions that can significantly affect the chemical, physical, and biological integrity of paragraph (a)(1) waters. *See* Technical Support Document section III.B. Section IV.A of this preamble provides additional information about the legal basis for the agencies' conclusions in this rule and the scientific support for the rule's provisions regarding adjacent wetlands. The agencies are not making additional categorical determinations of jurisdiction based on the significant nexus standard, as described further in section IV.A of this preamble. Even under the 2020 NWPR, which purported to enhance clarity, a landowner could not tell simply by looking at their property whether it contained ''waters of the United States'' because, in the case of adjacent wetlands, it was necessary to determine (1) whether the property contained a wetland as defined in the regulations, (2) whether there was evidence of a continuous surface connection between the wetland and a water that was part of the tributary network of a traditional navigable water or the territorial seas, (3) whether there was evidence that the continuous surface connection occurred in a ''typical year,'' as the rule defined that term, and (4) in the case of a continuous surface connection based on inundation, whether the inundation originated in the jurisdictional water (relevant to adjacency under that rule) or the wetland (irrelevant to adjacency under that rule).

The challenge inherent in establishing bright lines to address the complex and variable ways in which waters move in different regions across the country is longstanding. As the Supreme Court itself has recognized, the scope of Clean Water Act jurisdiction does not easily lend itself to bright lines: ''In sum, we recognize that a more absolute position . . . may be easier to administer. But, as we have said, those positions have consequences that are inconsistent with major congressional objectives, as revealed by the statute's language, structure, and purposes.'' *Maui,* 140 S. Ct. at 1477. Further, as early Supreme Court decisions recognized, the Clean Water Act replaced a system whereby water quality protection had to be resolved through litigation in which courts had to apply ''often vague and indeterminate nuisance concepts and maxims of equity jurisprudence.'' *City of Milwaukee,* 451 U.S. at 317. The Clean Water Act 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). Shrinking Federal jurisdiction, as the 2020 NWPR did, for example, would place many waters back within the ''vague and indeterminate'' legal regime that the Supreme Court recognized the Clean Water Act was designed to replace. *See* 451 U.S. at 317.

The agencies also received a variety of comments critiquing or supporting various past practice and rulemaking approaches to adjacency including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR. The agencies are retaining their longstanding definition of adjacency and establishing an approach to adjacency that is generally consistent with the pre-2015 regulatory regime, with some changes to implementation discussed below. The agencies are rejecting certain aspects of the 2020 NWPR's approach to adjacent wetlands for the reasons discussed in this section and section IV.B.3 of this preamble. The definition of ''adjacent wetlands'' in the 2020 NWPR failed to advance the objective of the Clean Water Act. It also was inconsistent with scientific information about the important effects of wetlands that do not abut jurisdictional waters and that lack evidence of specific surface water connections to such waters on the integrity of paragraph (a)(1) waters. In addition, key elements of the 2020 NWPR's definition of ''adjacent wetlands'' were extremely difficult to implement. These deficiencies are reflected in substantial losses of Federal protections on the ground. *See* section IV.B.3 of this preamble. The agencies are maintaining the approach of the pre-2015 regulatory regime and the 2015 Clean Water Rule under which wetlands adjacent to traditional navigable waters, the territorial seas, and interstate waters are jurisdictional without need for further determinations, but the agencies are not determining that any additional adjacent wetlands are categorically jurisdictional in this rule. The agencies have authority to determine which tributaries and their adjacent wetlands are jurisdictional either through regulations or adjudication. *See Rapanos,* 547 U.S. at 780–81 (Kennedy, J., concurring in the judgment); *see also NLRB* v. *Bell Aerospace Co.,* 416 U.S. 267, 294 (1974). With respect to wetlands adjacent to waters other than paragraph (a)(1) waters, the agencies have decided to proceed through case-specific jurisdictional determinations under this rule, rather than through categorical determinations by rule.

The agencies will continue to assert jurisdiction over wetlands adjacent to traditional navigable waters, the territorial seas, and interstate waters without need for further assessment, as they did under the 1986 regulations and the *Rapanos* Guidance. Indeed, in *Rapanos,* at least five Justices agreed that wetlands adjacent to traditional navigable waters are ''waters of the United States.'' *See Rapanos,* 547 U.S. at 780 (Kennedy, J., concurring in the judgment) (''As applied to wetlands adjacent to navigable-in-fact waters, the Corps' conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone.''), *id.* at 810 (Stevens, J., dissenting) (''Given that all four Justices who have joined this opinion would uphold the Corps' jurisdiction in both of these cases—and in all other cases in which either the plurality's or Justice Kennedy's test is satisfied—on remand each of the judgments should be reinstated if *either* of those tests is met.''); *see also Riverside Bayview,* 474 U.S. at 134 (''[T]he 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.''); *Rapanos* Guidance at 5. Moreover, ample scientific information makes clear that the health and productivity of rivers and lakes, including paragraph (a)(1) waters, depends upon the functions provided by upstream tributaries, adjacent wetlands, and paragraph (a)(5) waters. Under this rule, the agencies also define ''waters of the United States'' to include wetlands adjacent to the territorial seas without need for further assessment, as they did under the 1986 regulations, as the territorial seas are categorically protected under the Clean Water Act. Additionally, under this rule the agencies continue to define ''waters of the United States'' to include wetlands adjacent to interstate waters without need for further assessment since interstate waters, like traditional navigable waters and the territorial seas, are waters clearly protected by the Clean Water Act. *See* section IV.C.2 of this preamble for further discussion of traditional navigable waters, the territorial seas, and interstate waters.

The agencies are retaining the 1986 regulations' coverage of wetlands adjacent to paragraph (a)(2)

impoundments and wetlands adjacent to tributaries to paragraph (a)(2) impoundments, updated to include the requirement that the wetlands also meet either the relatively permanent or significant nexus standard. As discussed above in section IV.C.3 of this preamble, the agencies' longstanding interpretation of the Clean Water Act is that ''waters of the United States'' remain ''waters of the United States'' even if impounded. Since the impoundment does not ''denationalize'' the ''waters of the United States,'' *see S.D. Warren,* 547 U.S. at 379 n.5, the agencies similarly interpret the Clean Water Act to continue to protect wetlands adjacent to the paragraph (a)(2) impoundment and adjacent to jurisdictional tributaries to the impoundment where those wetlands meet the relatively permanent standard or the significant nexus standard. *See* section IV.C.3 of this preamble for additional discussion of impoundments under this rule.

The agencies are also deleting the cross reference to paragraph (a)(5) waters as waters to which wetlands may be adjacent to be determined ''waters of the United States'' under the adjacent wetlands category of this rule. This change reflects the agencies' consideration of the jurisdictional concerns and limitations of the statute, informed by *SWANCC* and *Rapanos.* The agencies have concluded that a provision that authorizes consideration of jurisdiction over adjacent wetlands that meet the relatively permanent or significant nexus standard when assessed based simply on connections to paragraph (a)(5) waters would have too tenuous a connection to paragraph (a)(1) waters. Rather, any such wetlands that are adjacent only to paragraph (a)(5) waters would be assessed themselves under paragraph (a)(5) of this rule to determine if they meet the relatively permanent or significant nexus standard. For example, a wetland adjacent to a lake that meets the significant nexus standard under paragraph (a)(5) would itself need to be assessed under paragraph (a)(5) to determine whether it significantly affects the chemical, physical, or biological integrity of a paragraph (a)(1) water. *See* section IV.C.6.c of this preamble for further discussion on implementation of paragraph (a)(5) waters.

The agencies have removed the parenthetical ''(other than waters that are themselves wetlands)'' from the regulatory text because it has caused confusion for the public and the regulated community and is unnecessary. The parenthetical from the 1986 regulations limited the scope of jurisdictional adjacent wetlands to wetlands adjacent to waters ''(other than waters that are themselves wetlands).'' Under that provision, a wetland was not jurisdictional simply because it was adjacent to another adjacent wetland or to a wetland jurisdictional under paragraph (a)(3) of the 1986 regulations. The provision has created confusion under the pre-2015 regulatory regime, as some have asserted that a wetland that is indeed adjacent to a jurisdictional tributary, but that is separated from that tributary by another adjacent wetland, should not be determined to be a jurisdictional adjacent wetland because of that parenthetical. Several commenters discussed the parenthetical in the 1986 regulation's ''adjacent wetlands'' category. Most of those commenters were in favor of removing the parenthetical, claiming that it created ''confusion'' and citing concerns that the parenthetical could improperly limit jurisdiction of wetlands. Other commenters voiced support for keeping the parenthetical. Some even suggested that the parenthetical flatly excluded all wetlands that are adjacent to other wetlands, regardless of any other considerations. These interpretations are inconsistent with the agencies' intent and longstanding interpretation of the parenthetical. *See Universal Welding & Fabrication, Inc.* v. *U.S. Army Corps of Eng'rs,* 708 Fed. Appx. 301, 303 (9th Cir. 2017) (observing that ''[d]espite the subject wetland's adjacency to another wetland, the Corps determined that its regulatory authority was not precluded by the parenthetical language within [section] 328.3(a)(7), which it interpreted as prohibiting the exercise of jurisdiction over a wetland only if *based upon* that wetland's adjacency to another wetland'' and holding that the Corps' interpretation is ''the most reasonable reading of the regulation's text''). Therefore, to streamline the regulation and provide additional clarity, the agencies have deleted the text of the parenthetical in this rule. In addition, wetlands adjacent to interstate wetlands or wetlands adjacent to tidal wetlands (which are traditional navigable waters) are jurisdictional under this rule, consistent with the 1986 regulations and longstanding practice.

ii. Comments on the Interpretation and Implementation of the Adjacent Wetlands Provision

The agencies will continue to implement a number of longstanding interpretations of ''adjacent'' based on scientific principles and practical administration of the definition with this rule. As stated previously, the agencies consider wetlands ''adjacent'' if one of the following three criteria is satisfied. First, there is an unbroken surface or shallow subsurface connection to jurisdictional waters. All wetlands that directly abut jurisdictional waters have an unbroken surface or shallow subsurface connection because they physically touch the jurisdictional water. Wetlands that do not directly abut a jurisdictional water may have an unbroken surface or shallow subsurface connection to jurisdictional waters. Water does not need to be continuously present in the surface or shallow subsurface connection. Second, they are physically separated from jurisdictional waters by human-made dikes or barriers, or natural landforms (*e.g.,* river berms, beach dunes). Or third, their proximity to a jurisdictional water is reasonably close. Wetlands that meet one of these three criteria are considered bordering, contiguous, or neighboring for purposes of this rule.

Several commenters provided input on these three criteria. Some commenters stated that shallow subsurface hydrologic connections are appropriate to consider for adjacency, while others stated that such connections should not be considered. Several commenters stated that there are regional differences in proximity relevant to adjacency. Some commenters stated that wetlands should be considered adjacent even if they are separated by human-made dikes or barriers, natural river berms, beach dunes and the like, while other commenters did not support that view.

The agencies agree with commenters who stated that shallow subsurface connections can be relevant to adjacency and will continue to use the criteria from pre-2015 practice that an unbroken shallow subsurface connection between a wetland and another water can demonstrate adjacency.

While this rule does not explicitly identify regional factors that influence what is ''reasonably close'' for purposes of adjacency, the agencies recognize there may be site-specific factors (*e.g.,* topography) that influence what is ''reasonably close.'' This rule does not establish specific distance limitations for adjacency, which helps ensure that site-specific and regional factors can be considered when a wetland is being evaluated (*see* section IV.C.5.c of this preamble, below).

The agencies agree with commenters who supported the 1986 regulation's definition of ''adjacent'' to include wetlands even if they are separated by

natural landforms or human-made barriers for the reasons discussed in sections IV.A.2.b.ii (explaining that the agencies' longstanding definition of ''adjacent,'' which includes such wetlands, is a reasonable foundation for this rule), and IV.C.8.b of this preamble, and section III.B.ii of the Technical Support Document.

c. Implementation

Under this provision of the rule, wetlands adjacent to traditional navigable waters, the territorial seas, or interstate waters are jurisdictional and do not need further analysis to determine if they are ''waters of the United States.'' Further, wetlands adjacent to paragraph (a)(2) impoundments and to jurisdictional tributaries are assessed for jurisdiction under the relatively permanent standard or significant nexus standard. Wetlands adjacent to but lacking a continuous surface connection with tributaries that are relatively permanent must be assessed under the significant nexus standard.

i. Determining the Presence of an Adjacent Wetland

Before determining if a wetland is jurisdictional, the agencies first determine if the wetland in question meets the definition of ''wetlands'' under this rule (*see* section IV.C.8.a of this preamble).

In identifying wetlands, the agencies will ordinarily consider all wetlands within a wetland mosaic collectively. The agencies have long considered wetland mosaics to be delineated as one wetland. Wetland mosaics are landscapes where wetland and non-wetland components are too closely associated to be easily delineated or mapped separately, and the wetlands in the mosaic generally act as a single ecological unit. In certain regions where wetland mosaics are common, Corps regional wetland delineation manuals address how to delineate such wetlands. Longstanding practice is that wetlands in the mosaic are not individually delineated, but that the agencies consider the entire mosaic and estimate percent wetland in the mosaic. *See* Technical Support Document section IV.A.iii. These longstanding implementation approaches for purposes of jurisdictional determinations are supported by the science (*see* Technical Support Document section IV.A.iii) and the technical expertise the agencies have developed through years of performing these assessments.

Once a feature is identified as a wetland, if the wetland itself is not jurisdictional under paragraph (a)(1) of this rule as a traditional navigable water (such as a tidal wetland) or an interstate water, the agencies assess whether it is adjacent to a traditional navigable water, territorial sea, interstate water, paragraph (a)(2) impoundment, or jurisdictional tributary. Wetlands are ''adjacent'' if they are ''bordering, contiguous, or neighboring.'' The agencies consider the entire wetland to be ''adjacent'' if any part of the wetland is ''adjacent.''

Under this rule's definition and consistent with the agencies' longstanding definition, adjacency is focused on the distance between the wetland and the jurisdictional water. Whether the distance between the wetland and the jurisdictional water qualifies the wetland as bordering, contiguous, or neighboring (and therefore ''adjacent'') depends on the factual circumstances, so the agencies will assess adjacency using the three criteria noted above in section IV.C.5.a of this preamble. This section of the preamble explains each of the criteria in further detail. These criteria are consistent with the text of the regulation, the underlying scientific rationale for defining ''waters of the United States'' to include adjacent wetlands, and pre-2015 practice. *See Rapanos* Guidance at 5–6.

The longstanding definition, by its terms, does not require flow from the wetland to the jurisdictional water or from the jurisdictional water to the wetland (although such flow in either direction can be relevant to the determination of adjacency). The Supreme Court in *Riverside Bayview* in deferring to the Corps' ecological judgment about the relationship between waters and their adjacent wetlands as an ''adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act,'' rejected an argument that such wetlands had to be the result of flow in a particular direction to be adjacent: ''This holds true even for wetlands that are not the result of flooding or permeation by water having its source in adjacent bodies of open water. The Corps has concluded that wetlands may affect the water quality of adjacent lakes, rivers, and streams even when the waters of those bodies do not actually inundate the wetlands. For example, wetlands that are not flooded by adjacent waters may still tend to drain into those waters. In such circumstances, the Corps has concluded that wetlands may serve to filter and purify water draining into adjacent bodies of water, and to slow the flow of surface runoff into lakes, rivers, and streams and thus prevent flooding and erosion. In addition, adjacent wetlands may 'serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic . . . species.' '' 447 U.S at 134 (citing 33 CFR 320.4(b)(2)(iv), (v), (vii) (1985)).

Wetlands with an unbroken surface or shallow subsurface connection to jurisdictional waters are adjacent, including those wetlands that directly abut a jurisdictional water (*i.e.,* they are not separated by uplands, a berm, dike, or similar barrier from the OHWM of the water to which they are adjacent). All wetlands that directly abut jurisdictional waters have an unbroken surface or shallow subsurface connection because they physically touch the jurisdictional water. An unbroken surface or shallow subsurface connection to jurisdictional waters can also be established by a non-jurisdictional physical feature or discrete conveyance that supports at least periodic flow between the wetland and a jurisdictional water, such as a pipe, culvert, non-jurisdictional ditch, or flood gate. Water does not have to be continuously present in this hydrologic connection and the flow between the wetland and the jurisdictional water may move in either or both directions.

A shallow subsurface hydrologic connection is predominantly lateral water flow through a shallow subsurface layer. Such flows may be found, for example, in wetlands on slopes, where water seeps through surface soils to downstream waters, in soils with a restrictive horizon, in the hyporheic zone, or in karst systems. A shallow subsurface connection also exists, for example, when the adjacent wetland and the water to which it is adjacent are in contact with the same shallow aquifer or with the same shallow water table which fluctuates within the soil profile, sometimes rising to or near the ground surface. Shallow subsurface connections can also be maintained as water moves through karst topography, and through confined human-made subsurface conveyance systems such as drain tiles and storm sewers. Shallow subsurface connections may be found below the ordinary root zone (below 12 inches), where other wetland delineation factors may not be present. A variety of factors may reflect the presence of a shallow subsurface connection, including position of the wetland in the landscape (for example, on a slope above the jurisdictional waters), stream hydrographs, soil surveys (for example, exhibiting indicators of high transmissivity over an impermeable

layer), and information indicating that the water table in the stream is lower than the shallow subsurface. The agencies may also utilize direct observations in the field or tracer studies to demonstrate shallow subsurface flow. Shallow subsurface connections convey water quickly through the soil and impact surface water directly within hours or days rather than the months or years it may take long pathways to reach surface waters. However, neither shallow subsurface connections nor any type of groundwater, shallow or deep, are themselves ''waters of the United States.'' Some examples of wetlands that are adjacent under the final rule due to an unbroken surface or shallow subsurface connection include wetlands that are connected to a tributary via karst topography, which provide a direct subsurface hydrologic connection between the wetlands and the tributary and that is traceable via a dye test, even if those wetlands are more than several hundred feet from the tributary; and wetlands within a couple of hundred feet of a tributary, where the subsurface hydrologic connection is demonstrated via soil maps which demonstrate continuous hydric soils with indicators of high transmissivity over an impermeable layer between the tributary and the proximate wetlands. *See* Technical Support Document section III.B.ii for additional information on surface and shallow subsurface hydrologic connections.

If a wetland is separated from a jurisdictional water by man-made dikes or barriers, natural river berms, beach dunes, and the like, then the wetlands are adjacent under this rule, consistent with the 1986 regulations. No additional identification of a hydrologic connection between the wetland and the jurisdictional water is required for such wetlands to be considered adjacent. For example, a wetland that is separated from a jurisdictional tributary simply by a 40-foot road meets the longstanding definition of adjacent. It is also important to note that natural river berms are formed by sediment deposits accumulating at or near stream banks during flood events. Such berms vary in height from inches to feet, and also can be quite wide. With respect to beach dunes and similar natural landforms, more than one dune may exist between an adjacent wetland and jurisdictional water (including primary and secondary dunes), because beach dunes typically function as an interdunal system (particularly on barrier islands). For example, interdunal wetlands which are located between dune ridges would be adjacent.

In some cases, a wetland may be separated from a jurisdictional water by more than one human-made dike or barrier or multiple types of barriers and landforms (*e.g.,* a wetland separated by a human-made barrier and a natural river berm). The agencies will assess such wetlands consistent with the other adjacency criteria previously described (*i.e.,* by identifying the presence of an unbroken surface or shallow subsurface connection or determining that their proximity to a jurisdictional water is reasonably close).

For purposes of determining whether a wetland is ''adjacent,'' artificial structures do not divide a wetland if a hydrologic connection is maintained between the divided portions of the wetland. Rather, the wetland is treated as one wetland. For example, if a wetland is divided by a road, a culvert could maintain a hydrologic connection. The agencies may also consider if a subsurface hydrologic connection is maintained, using indicators such as hydric soils, the permeability of the artificial structure, and/or the permeability of the soils below the artificial structure.

Wetlands are also adjacent when their proximity to a jurisdictional water is reasonably close. The Supreme Court in *Riverside Bayview* deferred to the Corps' judgment that adjacent wetlands ''that form the border of or are in reasonable proximity to'' other ''waters of the United States'' ''may be defined as waters under the Act.'' *Riverside Bayview,* 474 U.S. at 134. Where the wetland is reasonably close to the jurisdictional water, the agencies have concluded that ''adjacent wetlands have significant effects on water quality and the aquatic ecosystem.'' *Id.* at 135 n.9. The close proximity between an adjacent wetland and a jurisdictional water means the wetland can modulate water quantity and water quality in the jurisdictional water, and the jurisdictional water can modulate water quantity and water quality in the wetland. For example, wetlands typically help to store floodwaters, pollutants, and sediments that could otherwise reach the jurisdictional water to which they are adjacent. They can also provide flow contributions to the jurisdictional waters to which they are adjacent during high hydroperiods, where water spills from the wetland to the nearby jurisdictional water, and such contributions of flow are facilitated by the wetland's close proximity to the jurisdictional water. The proximate jurisdictional waters can serve as important sources of water for adjacent wetlands, for example, through overtopping events where flow from the jurisdictional waters is stored in the wetlands. While under this rule the agencies are not establishing distance limits for adjacency, the agencies recognize that as the distance between the wetland and jurisdictional water increases, the reasonableness of the connection between the waters will generally decrease, particularly in the absence of the type of surface or shallow subsurface connections described above, and a finding of adjacency is less likely. The distance between a jurisdictional water and its adjacent wetlands may vary by region, as well as based on site-specific factors within regions. In practice, under this criterion, the agencies have found that adjacent wetlands are on the whole, nationwide, within a few hundred feet of jurisdictional waters. This can vary from site to site and region to region due to differences in climate, geomorphology, landscape setting, hydrology, soils, vegetation, elevation, size of the jurisdictional water, and other site-specific variables.

Field data, including visual observations, can assist with determining if a wetland is adjacent. In addition, a variety of remote tools can help to assess adjacency, including maps, high-resolution elevation data, aerial photographs, and high-resolution satellite imagery. For example, visual observation, NWI and USGS topographic maps, elevation data, and NHD data may identify a physical barrier or illustrate the location of the traditional navigable water, territorial sea, interstate water, paragraph (a)(2) impoundment, or jurisdictional tributary; the wetland's proximity to the jurisdictional water; and the nature of topographic relief between the two aquatic resources. Visual observations, aerial photographs, or high-resolution satellite imagery may illustrate hydrophytic vegetation from the boundary (*e.g.,* OHWM for non-tidal waters or high tide line for tidal waters) of the traditional navigable water, the territorial seas, the interstate water, the paragraph (a)(2) impoundment, or the jurisdictional tributary to the wetland boundary, or the presence of water or soil saturation. Soil samples or NRCS soil maps may identify the presence of hydric soil types, soil saturation, or potential surface or subsurface hydrologic connections. Additionally, methods that overlay depressions on the landscape with hydric soils and hydrophytic vegetation can be used to identify likely wetlands and hydrologic connections. Field work can help

confirm the presence and location of the OHWM or high tide line of the jurisdictional water and can provide additional information about the wetland's potential adjacency to that water.[108]

ii. Determining Whether an Adjacent Wetland Meets the Relatively Permanent Standard

Wetlands that are adjacent to paragraph (a)(1) waters are jurisdictional without the need for further analysis. Wetlands adjacent to paragraph (a)(2) impoundments and wetlands adjacent to jurisdictional tributaries must meet a second requirement to be jurisdictional as ''waters of the United States'' under this rule—they must satisfy either the relatively permanent standard or the significant nexus standard.

Under this rule, adjacent wetlands meet the relatively permanent standard if they have a continuous surface connection to a relatively permanent paragraph (a)(2) impoundment or a jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard. As discussed previously in this section of this preamble, wetlands that have a continuous surface connection to such waters are a subset of adjacent wetlands. Wetlands that do not have a continuous surface connection but are adjacent to paragraph (a)(2) impoundments or jurisdictional tributaries will be evaluated for jurisdiction under the significant nexus standard. *See also* section IV.C.5.c.iii of this preamble.

A continuous surface connection does not require a constant hydrologic connection. Rather, the agencies will identify a continuous surface connection consistent with the *Rapanos* plurality opinion, which indicates that the continuous surface connection requirement is a ''physical-connection requirement.'' 547 U.S. at 751 n.13; *see also Rapanos* Guidance at 7. Wetlands meet the continuous surface connection requirement if they physically abut or touch a relatively permanent paragraph (a)(2) impoundment or a jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard. Wetlands also meet the continuous surface connection requirement if they are connected to relatively permanent waters by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert. This is because a ditch or other such feature can serve as a physical connection that maintains a continuous surface connection between an adjacent wetland and a relatively permanent water. This approach to the continuous surface connection is supported by the scientific literature, case law, and the agencies' technical expertise and experience. As the Court of Appeals for the Sixth Circuit has explained, ''it does not make a difference whether the channel by which water flows from a wetland to a navigable-in-fact waterway or its tributary was manmade or formed naturally.'' *United States* v. *Cundiff,* 555 F.3d 200, 213 (6th Cir. 2009) (''*Cundiff*'') (holding wetlands were jurisdictional under the *Rapanos* plurality where plaintiff created a continuous surface connection by digging ditches to enhance the acid mine drainage into the creeks and away from his wetlands).

Similarly, a natural berm, bank, dune, or similar natural landform between an adjacent wetland and a relatively permanent water does not sever a continuous surface connection to the extent it provides evidence of a continuous surface connection. This approach is consistent with the agencies' interpretation in the 2020 NWPR that natural berms and similar natural landforms ''are indicators of a direct hydrologic surface connection as they are formed through repeated hydrologic events.'' 85 FR 22311 (April 21, 2020). As the 2020 NWPR explained, ''a natural river berm can be created by repeated flooding and sedimentation events when a river overtops its banks and deposits sediment between the river and a wetland.'' *Id.* (citing Science Report at A–7). The 2020 NWPR noted that the adjacent wetland could have been formed at the same time as or after the formation of the natural river berm due to repeated flooding and the impeded return flow created by the berm. Natural banks can also provide evidence of a continuous surface connection because the processes that result in their formation can also be representative of the interconnected relationship between the wetlands and the relatively permanent water. Adjacent wetlands may be separated by a bank from a relatively permanent water due to an elevation difference between the bank and the water (*e.g.,* when the stream is incised). The surface water flow of a tributary over time can erode a channel, which creates a bank separating the tributary from the adjacent wetland. *See* 85 FR 22311 (April 21, 2020). In addition, the presence of a beaver dam between a wetland and a relatively permanent water can be evidence of a continuous surface connection between the two features, even if the dam itself blocks surface hydrologic flow for periods of time. Beach dunes may also separate adjacent wetlands and relatively permanent waters. Beach dunes are sometimes formed through wind erosion which results in the sand surface interacting with the water table, providing enough hydrology to create wetlands. Beach dunes may also be formed when water levels drop in lakes or from historic glacial retreat. Many interdunal wetlands have seasonally variable hydroperiods where they may be dry during periods of low rainfall. All of these processes and the resulting natural berm, bank, dune, or similar natural landform indicate that the wetlands are integrated and ''inseparably bound up'' with the relatively permanent waters. *See* 85 FR 22280 (April 21, 2020) (citing *Rapanos,* 547 U.S. at 732 (Scalia, J., plurality opinion)). The agencies recognize that not all natural berms, banks, dunes, and similar natural landforms demonstrate evidence of a continuous surface connection. For example, an adjacent wetland may be separated from a relatively permanent water by a relict landform like a natural berm that no longer interacts hydrologically with the tributary network. Such relict barriers do not demonstrate evidence of a continuous surface connection and may in fact sever the continuous surface connection.

While natural barriers may at times occur within a floodplain, the existence of a floodplain (and other land masses similar to a floodplain, such as a riparian area or fluvial terrace) generally is not sufficient to indicate a continuous surface connection. Wetlands separated from jurisdictional waters by cliffs, bluffs, or canyon walls also typically do not have a continuous surface connection, and thus would be assessed under the significant nexus standard. However, if these cliffs, bluffs, or canyon walls have gaps or built structures (*e.g.,* culverts, pipes, or waterfalls) that provide for a continuous surface connection between the adjacent wetlands and the relatively permanent water, this type of connection would satisfy the physical connection requirement for a continuous surface connection. The same is true for dikes or other artificial barriers with gaps or structural components that allow for a continuous surface connection. For example, an upland levee that separates an adjacent wetland from a tributary that is relatively permanent may have gaps along the length of the levee that

[108] Field work may include, *e.g.,* traversing the landscape from the traditional navigable water, territorial sea, interstate water, paragraph (a)(2) impoundment, or jurisdictional tributary to the wetland and examining topographic and geomorphic characteristics, as well as hydrologic and biologic indicators.

provide for a physical connection between the wetlands and the tributary that satisfies the requirement for a continuous surface connection.

Some commenters asserted that the agencies' use of the relatively permanent standard in the proposed rule is inconsistent with the *Rapanos* plurality opinion because it does not require a continuous hydrologic connection for adjacent wetlands to be jurisdictional, with one commenter referencing the agencies' statement in the proposed rule that a continuous surface connection ''does not require surface water to be continuously present between the wetland and the tributary.'' Another commenter asserted that the proposed rule's approach to adjacent wetlands is inconsistent with the *Rapanos* plurality opinion because it allows for the continuous surface connection requirement to be satisfied by physical connections such as non-jurisdictional ditches with an irregular flow surface connection requirement. The agencies disagree that the approach in this rule is inconsistent with the plurality opinion. The plurality opinion indicates that ''continuous surface connection'' is a ''physical connection requirement.'' *Rapanos,* 547 U.S. at 751 n.13 (referring to ''our physical-connection requirement'' and later stating that *Riverside Bayview* does not reject ''the physical-connection requirement''). This approach to the continuous surface connection requirement is consistent with the *Rapanos* Guidance. *Rapanos* Guidance at 7 & n.28. A continuous surface connection is not the same as a continuous surface *water* connection, by its terms and in effect. Therefore, because the plurality opinion requires only a ''continuous surface connection,'' the relatively permanent standard in this rule, consistent with the plurality opinion, does not require surface water to be continuously present between the wetland and the tributary. The agencies also disagree that it is inconsistent with the plurality opinion for adjacent wetlands to be considered to meet the continuous surface connection requirement if they are connected to relatively permanent waters by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert. This is because a ditch or other such feature can serve as a physical connection that maintains a continuous surface connection between an adjacent wetland and a relatively permanent water. This approach to the continuous surface connection is supported by the scientific literature, case law, and the agencies' technical expertise and experience. *See Cundiff,* 555 F.3d at 213.

The agencies agree with commenters who stated that a continuous surface connection does not require the continuous presence of surface water between the adjacent wetland and relatively permanent paragraph (a)(2) impoundment or jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard, and the agencies continue this longstanding approach in this rule. The agencies' approach is consistent with science, as well as the longstanding regulatory definition of ''wetlands,'' which does not require such aquatic resources to contain surface water. *See* 33 CFR 328.3(b)(2014) and 40 CFR 232.2 (2014)(defining wetlands as ''areas that are inundated or *saturated* by surface or *ground water* at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions'' (emphasis added)); *see also* Technical Support Document section III.B. Since wetlands frequently do not contain surface water, a requirement for continuous surface water between a relatively permanent water and adjacent wetlands would be illogical as a scientific and practical matter.

The agencies have a variety of tools for determining whether adjacent wetlands have a continuous surface connection to relatively permanent waters, or if they are separated from them by natural landforms or artificial barriers, including the same tools used to establish adjacency. Visual observations, high-resolution satellite imagery, NRCS soil maps, USGS topographic maps, and NHD data may show soil saturation, surface flow patterns and infrastructure crossings (*e.g.,* roads) that can be used to indicate possible culvert locations. Visual observations, high-resolution satellite imagery, elevation data such as LIDAR-based topographic models, and USGS topographic maps may identify the presence of swales that are located between a wetland and a relatively permanent water. Similar tools (described below) and visual observations can be used to identify the potential presence of natural landforms that can maintain a continuous surface connection and the potential presence of breaks that may sever a continuous surface connection. Distinguishing between landforms like upland breaks and natural berms can be facilitated by assessing their linear extent and continuity, or observations on how they hydrologically interact with an associated relatively permanent water.

To assess whether wetlands are separated from relatively permanent waters by natural landforms or artificial barriers, the agencies can rely upon a variety of tools. For example, USGS topographic maps may show topographic highs between the wetland and relatively permanent water, or simple indices can be calculated based on topography to indicate where these separations occur and their linear extent. FEMA flood zone or other floodplain maps may indicate constricted floodplains along the length of the tributary channel with physical separation of flood waters. High-resolution elevation data can illustrate topographic highs between a wetland and tributary channel that extend along the length of a tributary's channel. Aerial photographs or high-resolution satellite imagery may illustrate upland vegetation along the tributary channel between the wetland and tributary channel, or bright soil signatures indicative of higher ground. NRCS soil maps may identify mapped linear, upland soil types along the tributary channel. Field work may help to confirm the presence and location of the OHWM of a tributary that is relatively permanent. In addition, field work may confirm whether there is a continuous physical connection between the wetland and the tributary, or identify breaks that may sever the continuous surface connection.[109]

iii. Determining Whether an Adjacent Wetland Meets the Significant Nexus Standard

The agencies note again that the determination of adjacency and the determination of a significant nexus are different and that there are two key differences. First, adjacency is about the relationship between a wetland and a jurisdictional water and is based on reasonable proximity, whereas significant nexus is about the functions provided by an adjacent wetland to a paragraph (a)(1) water–the significant nexus assessment is not to the jurisdictional water to which the wetland is adjacent (if the jurisdictional water is a paragraph (a)(1) water, it is jurisdictional without a case-specific significant nexus assessment). Second, a wetland must meet the adjacency standard on its own, whereas a significant nexus assessment is based on whether an adjacent wetland alone or in combination with other similarly situated waters significantly affects the

[109] Field work may include, *e.g.,* traversing the landscape from the tributary to the wetland and examining topographic and geomorphic characteristics, the linear extent of those features, as well as hydrologic and biologic indicators.

integrity of a paragraph (a)(1) water. Once a wetland has been determined to be ''adjacent,'' if the adjacent wetland does not meet the relatively permanent standard, the agencies will conduct a significant nexus analysis to assess if the wetland is jurisdictional.

Under the regulations, the adjacent wetlands which do not meet the relatively permanent standard and for which a significant nexus analysis must be conducted are: (1) adjacent wetlands that lack a continuous surface connection to a relatively permanent paragraph (a)(2) impoundment or a jurisdictional tributary when the jurisdictional tributary meets the relatively permanent standard, and (2) wetlands adjacent to a paragraph (a)(2) impoundment or a tributary when the paragraph (a)(2) impoundment or the tributary is not relatively permanent. In evaluating such adjacent wetlands under the significant nexus standard, the agencies will determine whether the wetlands, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters. *See* section IV.C.9 of this preamble for additional discussion on the definition of ''significantly affect'' in this rule, including the factors that will be evaluated and the functions that will be assessed as part of a significant nexus analysis. The agencies consider tributaries and their adjacent wetlands to be ''similarly situated'' waters. The agencies consider similarly situated waters to be ''in the region'' when they lie within the catchment area of the tributary of interest. Therefore, in implementing the significant nexus standard under this rule, all tributaries and adjacent wetlands within the catchment area of the tributary of interest will be analyzed as part of the significant nexus analysis.

For a significant nexus analysis, the region would be the catchment that drains to and includes the tributary to which the wetland in question is adjacent. A catchment is the area of the land surface that drains to a specific location for a specific hydrologic feature, such as a tributary. Catchments will be delineated from the downstream-most point of the tributary reach to which the wetland is adjacent and include the land uphill that drains to that point, as discussed in further detail in section IV.C.4.c of this preamble and its subsections.

After identifying the catchment, the next step is to identify the tributaries within the catchment under the agencies' longstanding interpretation of tributary, *see* section IV.C.4.a of this preamble, and their adjacent wetlands within the catchment area, *see* section IV.C.5.c.i of this preamble. When evaluating whether an adjacent wetland meets the significant nexus standard, the agencies will consider the factors in the final rule, along with the functions of the tributaries in the catchment together with the functions performed by the wetlands adjacent to the tributaries in the catchment, including the subject wetland, in relation to the chemical, physical, or biological integrity of the paragraph (a)(1) water. This approach to the significant nexus analysis recognizes the ecological relationship between wetlands and the tributaries to which they are adjacent, and the role those similarly situated waters have in influencing the chemical, physical, or biological integrity of paragraph (a)(1) waters. *See* Technical Support Document section III.E.

Section IV.C.9.c of this preamble discusses a variety of tools and sources of information that can be used to assess significant effects on the chemical, physical, and biological integrity of paragraph (a)(1) waters. Remote tools, field indicators and observational methods, and datasets can all assist in determining whether adjacent wetlands meet the significant nexus standard. In addition, a variety of modeling approaches can be used to quantify the connectivity and cumulative effects of wetlands, including non-floodplain wetlands, on other waters, as discussed further in section IV.A.v of the Technical Support Document.[110]

6. Waters Not Identified in Paragraphs (a)(1) Through (4)

a. This Rule

Paragraph (a)(5) of this rule defines ''waters of the United States'' to include ''intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4)'' that meet either the relatively permanent standard or the significant nexus standard. Waters in this category in the 1986 regulations were sometimes referred to as ''(a)(3) waters'' or ''other waters.'' With this rule, the agencies have made important changes to the 1986 regulations to reflect the agencies' construction of the statutory limits on the scope of ''waters of the United States'' informed by 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.'' Of particular importance, the agencies have replaced the broad Commerce Clause basis for jurisdiction from the 1986 regulations for waters not identified in other provisions of the definition with the relatively permanent standard and the significant nexus standard. Because the relatively permanent standard and the significant nexus standard require connections to a paragraph (a)(1) water, and the significant nexus standard further requires that waters significantly affect paragraph (a)(1) waters, this provision of the rule is substantially narrower than the 1986 regulations. The 1986 regulations, for example, authorized the assertion of jurisdiction over waters from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

The agencies are including a provision for intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of the rule because such waters can provide functions that restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters. *See* section IV.A.2.c.iii of this preamble. For example, a large lake that is very close to a tributary or paragraph (a)(1) water, but that is not part of the tributary system, would be non-jurisdictional if the agencies did not include the category for assessing such waters under paragraph (a)(5) in this rule, even if that lake provides many functions that significantly affect a traditional navigable water.

The agencies have streamlined and clarified the provision for paragraph (a)(5) waters as compared to the 1986 regulations. The agencies have added the requirement that these waters must meet either the relatively permanent standard or significant nexus standard to be ''waters of the United States.'' In addition, the agencies have deleted the non-exclusive list of ''other waters'' that was featured in paragraph (a)(3) of the 1986 regulations. Under the final rule's new paragraph (a)(5) provision, only ''intrastate lakes and ponds, streams, or wetlands not identified in paragraphs

[110] Some examples include the Soil and Water Assessment Tool (SWAT, *available at https://swat.tamu.edu/*), the Hydrologic Simulation Program in Fortran (*available at https://www.epa.gov/ceam/hydrological-simulation-program-fortran-hspf*), and DRAINMOD for Watersheds (DRAINWAT, *available at https://www.bae.ncsu.edu/agricultural-water-management/drainmod/*). Other examples of models applicable to identifying effects of wetlands on downstream waters include the USGS hydrologic model MODFLOW (*available at https://www.usgs.gov/mission-areas/water-resources/science/modflow-and-related-programs?qt-science_center_objects=0#qt-science_center_objects*) and the USGS flow simulation model VS2DI (*available at https://www.usgs.gov/software/vs2di-version-13*).

(a)(1) through (4)'' can be assessed for jurisdiction under the relatively permanent standard or significant nexus standard. As discussed further below, however, the agencies have concluded that the more specific water types previously listed in paragraph (a)(3) of the 1986 regulations nonetheless generally fall within one of the four water types listed in paragraph (a)(5) of this rule.

Finally, the agencies have moved the provision for paragraph (a)(5) waters to the end of the section of the regulation which defines the categories of jurisdictional waters, since paragraph (a)(5) waters are those that are not covered by the preceding categories. As a result, ''other waters'' are now in paragraph (a)(5) of this rule. In light of these changes to the regulatory text, the agencies refer to these waters as ''those not identified in paragraphs (a)(1) through (4)'' or ''paragraph (a)(5) waters'' for purposes of this rule.

Waters assessed under paragraph (a)(5) meet the relatively permanent standard if they are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to a paragraph (a)(1) water or a tributary that is relatively permanent. The agencies will assess waters under paragraph (a)(5) to determine if they are relatively permanent using a similar approach to the one described for tributaries in section IV.C.4 of this preamble, and the agencies will assess a continuous surface connection between waters assessed under paragraph (a)(5) and a paragraph (a)(1) water or a tributary that is relatively permanent using the approach described for adjacent wetlands in section IV.C.5 of this preamble. Waters assessed under paragraph (a)(5) meet the significant nexus standard if they significantly affect the chemical, physical, or biological integrity of a traditional navigable water, the territorial seas, or an interstate water. *See* section IV.C.6.c of this preamble for further discussion on implementation of these standards for waters assessed under paragraph (a)(5). The agencies also note that the characteristics of a water considered for jurisdiction under paragraph (a)(5) can change over time such that it meets the requirements for consideration under another category of ''waters of the United States.'' For example, a river that does not drain to a paragraph (a)(1) water could potentially become a traditional navigable water, for instance, if it is impounded and becomes a navigable-in-fact reservoir. Such water would then be assessed as a traditional navigable water under paragraph (a)(1)(i) of the final rule. Similarly, a wetland that historically was not adjacent can become an adjacent wetland, for example, if a ditch is constructed that connects the wetland to a jurisdictional tributary. Such a wetland would then be considered under paragraph (a)(4) of the final rule due to the unbroken surface connection to a jurisdictional water via the ditch.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The agencies received numerous comments on whether to include a category for waters that do not fall within one of the more specific categories in the definition of ''waters of the United States'' and the standard upon which to base jurisdiction over such waters, as well as on implementation of this provision of the rule.

i. Comments on the Provision for Waters That Do Not Fall Within One of the More Specific Categories

Some commenters expressed general support for including a category for waters that do not fall within one of the more specific categories in this rule, while others opposed including such a category. Many commenters requested clarification of the category for waters that do not fall within one of the more specific categories. Many commenters addressed the agencies' legal authority to assert jurisdiction over waters that do not fall within one of the more specific categories. Some commenters asserted that following the Supreme Court's decisions in *SWANCC* and *Rapanos,* the agencies lack authority to assert jurisdiction over such waters. Other commenters stated that the proposed rule's approach to such waters is legally defensible. Several commenters further stated that the proposed rule does not go far enough in protecting waters that do not fall within one of the more specific categories and asserted that broader protection would be consistent with *Rapanos, SWANCC,* and *Maui.*

The agencies disagree that the agencies lack authority to assert jurisdiction over waters that do not fall within one of the more specific categories. The agencies' regulations have long had provisions for case-specific determinations of jurisdiction over waters that did not fall within the other jurisdictional categories. *See* section IV.A.2.b of this preamble. Such waters under this rule can be assessed under paragraph (a)(5), and they are only jurisdictional if they meet the relatively permanent standard or significant nexus standard. The agencies have thus established limits on the scope of these waters consistent with the law, the science, and agency expertise. *See* section IV.A of this preamble. In addition, the agencies have carefully considered the limitations on their authority under the Clean Water Act, especially concerning paragraph (a)(5) waters. The agencies have made a number of changes to the 1986 regulations that collectively ensure the definition of ''waters of the United States'' remains well within statutory and constitutional limits. Those changes include replacing the broad Commerce Clause basis for jurisdiction over paragraph (a)(5) waters with the narrower relatively permanent and significant nexus standards, eliminating jurisdiction over tributaries and adjacent wetlands based on their connection to paragraph (a)(5) waters, and eliminating jurisdiction by rule over impoundments of paragraph (a)(5) waters. *See* sections IV.A.3.a.i, IV.C.3, IV.C.4, and IV.C.5 of this preamble. In addition, as discussed further in the implementation section below, the agencies are intending to continue a thoughtful, careful approach to implementation and coordination for paragraph (a)(5) waters.

The agencies also received numerous comments on the standard to be used for determining jurisdiction over waters that do not fall within one of the more specific categories. Some commenters supported the proposed rule's requirement that such waters meet either the relatively permanent standard or the significant nexus standard. However, other commenters did not support this approach. One commenter recommended that the agencies not apply the relatively permanent standard to waters that do not fall within one of the more specific categories because it would be duplicative. Specifically, the commenter asserted that waters that meet the relatively permanent standard as described in the proposed rule would always meet the jurisdictional criteria for another rule category. A few commenters disagreed with applying the significant nexus standard to waters that do not fall within one of the more specific categories, asserting that it goes beyond the scope of jurisdiction contemplated by Justice Kennedy in *Rapanos.* Many other commenters opposed the proposed rule's removal of the interstate and foreign commerce jurisdictional basis for protecting waters that do not fall within one of the more specific categories. Commenters expressed that this basis would protect many important waterways which provide valuable public health,

agricultural, recreational, drinking water, ecological, and economic services important to local, regional, and national interests.

Under the 1986 regulations, ''other waters'' (such as intrastate rivers, lakes, and wetlands that were not otherwise jurisdictional under other sections of the rule) could be determined to be jurisdictional if the use, degradation, or destruction of the water could affect interstate or foreign commerce. This rule amends the 1986 regulations to delete all the provisions referring to authority over activities that ''could affect interstate or foreign commerce'' and replaces them with the relatively permanent and significant nexus standards. Thus, this rule would provide for case-specific analysis of waters not addressed by any other provision of the definition to determine whether they are ''waters of the United States'' under the relatively permanent or significant nexus standards.

The text of the 1986 regulations reflected the agencies' interpretation at the time, based primarily on the legislative history of the Clean Water Act, that the jurisdiction of the Act extended to the maximum extent permissible under the Commerce Clause of the Constitution. While *SWANCC* did not invalidate the 1986 regulations' ''other waters'' provision or any other parts of the 1986 regulations' definition of ''waters of the United States,'' the Court cautioned that that it ''assum[es] that Congress does not casually authorize administrative agencies to interpret a statute to push the limit of congressional authority.'' 531 U.S. at 172–73. Therefore, the agencies conclude that asserting jurisdiction over non-navigable, intrastate waters based solely on whether the use, degradation, or destruction of the water could affect interstate or foreign commerce pushes the limit of the Clean Water Act where those waters do not significantly affect paragraph (a)(1) waters. This rule thus replaces the interstate commerce test with the relatively permanent and significant nexus standards. As discussed in section IV.A of this preamble, the agencies have concluded 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 relatively permanent standard is included in the rule because it provides important efficiencies and additional clarity for regulators and the public by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. Thus, this rule gives effect to the Clean Water Act's broad terms and environmentally protective aim as well as its limitations.

Accordingly, waters that do not fall within one of the more specific categories identified in paragraphs (a)(1) through (4) of this rule may still be jurisdictional. This is consistent with the text of the statute, relevant Supreme Court case law, and the science. *See* section IV.A of this preamble and Technical Support Document section III.D. The *Rapanos* plurality concluded, ''relatively permanent, standing or continuously flowing bodies of water,'' 547 U.S. at 739, that are connected to traditional navigable waters, *id.* at 742, and waters with a ''continuous surface connection'' to such water bodies, *id.* (Scalia, J., plurality opinion), are ''waters of the United States'' under the relatively permanent standard. Without paragraph (a)(5), a relatively permanent lake that is not a tributary and is not a wetland, but which nonetheless has a continuous surface connection to a traditional navigable water, could not be evaluated for jurisdiction. Justice Kennedy concluded that *SWANCC* held that ''to constitute ' ''navigable waters'' ' under the Act, a water or wetland must possess a 'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made.'' *Id.* at 759 (citing *SWANCC,* 531 U.S. at 167, 172). Many lakes and ponds that are not part of the tributary system and that do not qualify as a paragraph (a)(1) water can only be assessed under paragraph (a)(5) of this rule. There is no basis in the statute or the science for excluding a lake or pond from the definition of ''waters of the United States'' that is situated on the landscape in a similar manner as an adjacent wetland, solely because it is a lake and not a wetland.

Multiple commenters stated that the proposed rule's inclusion of waters that do not fall within one of the more specific categories would impermissibly assert jurisdiction over a wide range of features that are far from traditional navigable waters and that have only minor volumes of flow. A few commenters suggested that although the proposed rule recognizes the importance of the strength of connection, particularly the distance of such waters to navigable waters, it suggests that the agencies may rely too much on scientific principles when making jurisdictional determinations in a manner that improperly expands the scope of the agencies' authority. Another commenter asserted that the agencies should not consider water functions that indicate isolation between water features as a basis for finding a significant nexus for waters that do not fall within one of the more specific categories.

The agencies disagree that this rule's category for waters that do not fall within one of the more specific categories, paragraph (a)(5), improperly expands the scope of their authority. The agencies have not only narrowed this category from the 1986 regulations by replacing the broad Commerce Clause provisions with the relatively permanent standard and the significant nexus standard, but they have also made additional changes from the 1986 regulations in order to ensure that they are not pushing the outer limits of the authority granted to them by Congress under the Clean Water Act. *See* section IV.A.3.a.i of this preamble. Impoundments of waters jurisdictional under paragraph (a)(5) no longer remain jurisdictional by rule. Tributaries to waters jurisdictional under paragraph (a)(5) are not tributaries under paragraph (a)(3) of this rule and must themselves be assessed under paragraph (a)(5). Wetlands adjacent to waters jurisdictional under paragraph (a)(5) are not adjacent wetlands under paragraph (a)(4) of this rule and must themselves be assessed under paragraph (a)(5). In addition, as discussed further below, the agencies have established enhanced coordination procedures for waters assessed under the significant nexus standard under paragraph (a)(5) in order to ensure that such jurisdictional determinations are consistent with this rule. The agencies have also carefully defined ''significantly affect,'' and have drawn upon the scientific literature to identify the factors and functions that will be used to make significant nexus determinations. *See* section IV.C.9 of this preamble. In addition, the agencies will be appropriately relying on both scientific principles and requirements of the relatively permanent standard or the significant nexus standard when assessing jurisdiction under this provision of the rule. As described in section IV.A.2.c.iii of this preamble, paragraph (a)(5) waters can provide functions that restore and maintain the chemical, physical, and biological integrity of paragraph (a)(1) waters. Therefore, the agencies have determined that including the category for paragraph (a)(5) waters in this rule best advances the objective of the Clean Water Act. The agencies disagree with the commenter that asserted that the agencies should not consider water functions that indicate isolation between water features as a basis for finding a significant nexus. That

position is contrary to Justice Kennedy's opinion on the role the absence of a hydrologic connection should play in a significant nexus analysis. *See Rapanos,* 547 U.S. at 786 (Kennedy, J., concurring in the judgment) (''Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system.''). That argument is also inconsistent with the science regarding the functions that waters that do not fall within one of the more specific categories provide to paragraph (a)(1) waters. *See* Technical Support Document section III.D.

Many commenters stated that certain types of wetlands should be categorically protected in the rule category for waters that do not fall within one of the more specific categories, such as Carolina and Delmarva bays, pocosins, prairie potholes, vernal pools, and other non-floodplain wetlands, because they provide functions that protect the chemical, physical, or biological integrity of paragraph (a)(1) waters. These commenters also stated that these waters provide valuable public health, agricultural, recreational, drinking water, ecological, and economic services important to local, regional, and national interests. The agencies acknowledge commenters who discussed the functions that these waters can provide. Agencies may choose to proceed via rulemaking or adjudication. *NLRB* v. *Bell Aerospace Co.,* 416 U.S. 267, 294 (1974) (''[T]he choice between rulemaking and adjudication lies in the first instance within the [agency's] discretion.''). With respect to the significant nexus standard in particular, Justice Kennedy stated that the agencies could proceed to determine waters jurisdictional through regulations or adjudication. *See* 547 U.S. at 780–81. The agencies have concluded that adjudication of which waters assessed under paragraph (a)(5) are within Clean Water Act protections through case-specific application of the significant nexus standard or the relatively permanent standard under this rule, is appropriate. Therefore, the agencies are not categorically including or excluding waters that do not fall within one of the more specific categories as jurisdictional under this rule. *See also* section III.D of the Technical Support Document for more information on the agencies' rationale for evaluating waters under paragraph (a)(5). Waters assessed under paragraph (a)(5) will be evaluated using the relatively permanent standard or significant nexus standard to determine their jurisdictional status.

Some commenters expressed that the category for waters that do not fall within one of the more specific categories is too ambiguous or too inclusive of waters that they believed should not be protected. The agencies disagree with commenters who asserted that the category for waters that do not fall within one of the more specific categories should be removed, or that the category is too confusing or overly broad. Waters assessed under paragraph (a)(5) in this rule are only jurisdictional if they meet the relatively permanent standard or the significant nexus standard. The agencies have also amended this provision of the rule to more clearly identify the types of waters addressed by this provision of the rule. Additionally, a category for waters that do not fall within one of the more specific categories is a longstanding and generally familiar category of waters included in the definition of ''waters of the United States'' under the 1986 regulations. The agencies have extensive experience implementing the relatively permanent standard and significant nexus standard for wetlands, streams, lakes, and ponds, which are the types of resources that are assessed under paragraph (a)(5) of this rule, and so will be able to use their experience and implementation resources to ensure consistency of jurisdictional determinations.

The 1986 regulations contained a non-exclusive list of water types that could be jurisdictional if they were not jurisdictional under the other provisions of the definition: ''[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 agencies sought comment in the proposed rule on whether it would be helpful to the public to delete the list of water types or to otherwise provide more clarity to the list of water types in the regulation. Commenters provided a variety of perspectives on the specific list of waters in the 1986 regulations. Several commenters recommended that the agencies clarify that the example list of waters is illustrative and not exhaustive. Commenters requested additions to the example list of waters, such as Delmarva bays, vernal pools, and seepage lakes. Other commenters requested that certain features be excluded from the example list of waters, such as prairie potholes. Some commenters expressed confusion as to why the example list from the 1986 regulations included ''intermittent streams'' but not ''ephemeral streams.''

In this rule, the agencies have made changes to the 1986 regulations to clarify the list of water types that can be jurisdictional under this provision, and to clarify that waters assessed under paragraph (a)(5) include waters that do not meet the requirements under paragraphs (a)(1) through (4) of this rule. The list of water types in the 1986 regulations led to confusion as it was sometimes incorrectly read as an exclusive list. There has also been confusion about some of the listed water types. For example, the list includes intermittent streams and was meant to allow for jurisdictional evaluation of intermittent streams that do not fall within the other categories (such as intermittent streams that are not tributaries to the requisite water types but which under the 1986 regulations could affect interstate commerce and under the proposed rule could meet the significant nexus standard). The list was not meant to imply that intermittent streams were not jurisdictional under the tributary provision of the 1986 regulations. In addition, a flowing aquatic feature that is human-made or human-altered but which is neither a jurisdictional tributary nor an excluded ditch would be assessed as a stream under paragraph (a)(5).

Paragraph (a)(5) of this rule identifies as ''waters of the United States'' ''intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4)'' that meet either the relatively permanent standard or significant nexus standard. Removing the list of water types from the 1986 regulations is not meant to imply that any of the water types listed in the 1986 regulations are *not* potentially subject to jurisdiction; rather, the revised list of water types is intended to more clearly inform the public of the types of waters that can be assessed for jurisdiction under paragraph (a)(5), and in this rule the list is intended to be exclusive. The revised list is also streamlined for clarity. The agencies have concluded that the more specific water types previously listed in paragraph (a)(3) of the 1986 regulations fall within one of the four water types in the rule. For example, prairie potholes were in the list of water types in the 1986 regulations and, depending upon the characteristics of a particular prairie pothole, they may fall within the wetlands water type on the list (where they meet the regulatory definition of wetlands) or they may be lakes or ponds. Other examples include sloughs, as they typically fall within the wetlands water type or the streams

water type, and playa lakes, which may fall within the lakes or ponds water type depending upon their size. Finally, the list of water types included in paragraph (a)(5) does not reflect a conclusion that these waters are categorically jurisdictional; rather, these waters are only jurisdictional if the subject waters meet either the relatively permanent standard or the significant nexus standard.

ii. Comments on Interpretation and Implementation of Paragraph (a)(5) Waters

The agencies received many comments supporting, opposing, or recommending changes related to the implementation of the category for waters that do not fall within one of the more specific categories. Some commenters asserted that the proposed rule lacked sufficient implementation guidance, and one commenter specifically stated that the proposed rule lacked sufficient guidance as to how the agencies will apply the significant nexus standard to waters that do not fall within one of the more specific categories. A few commenters recommended an approach for including waters that do not fall within one of the more specific categories as jurisdictional in a manner similar to adjacent wetlands, with some arguing that this approach would streamline the permitting process, and others stating general support for this approach. A number of commenters recommended that the agencies adopt regionalized implementation approaches for certain types of waters that do not fall within one of the more specific categories, such as prairie potholes, Carolina Bays, and Indiana dune and swale wetland complexes. The agencies acknowledge commenters who requested additional implementation guidance in the final rule, and additional guidance has been added to this rule including for the significant nexus standard. *See* section IV.C.6.c of this preamble for additional discussion on implementation of the significant nexus standard for waters assessed under paragraph (a)(5). While the agencies' intended implementation approach for paragraph (a)(5) waters has some differences from the implementation approach for adjacent wetlands, as described further below, the agencies have determined that the approach is reasonable and implementable. This rule does not preclude the agencies from taking into account regional considerations as part of the significant nexus analysis, but the agencies are not explicitly including regional criteria in the rule to ensure they have the flexibility to address local conditions.

Under the pre-2015 regulatory regime, the agencies established coordination procedures for paragraph (a)(3) ''other waters.'' *See* 68 FR 1991, 1995 (January 15, 2003) (''*SWANCC* Guidance'') (''[F]ield staff should seek formal project-specific Headquarters approval prior to asserting jurisdiction over such waters, including permitting and enforcement actions.''). Several commenters stated that the agencies should retain the requirement for field staff to request headquarters review of approved jurisdictional determinations for waters that do not fall within one of the more specific categories in this rule. These commenters stated that review of the scientific justification for a conclusion under the significant nexus standard must be conducted by senior officials for accuracy and thoroughness, and agency headquarters should provide such oversight. In contrast, several commenters stated that the agencies should abandon the requirement for field staff to request headquarters review of approved jurisdictional determinations for waters that do not fall within one of the more specific categories. These commenters stated that headquarters review should not be necessary because agency field staff have considerable experience with and expertise regarding the significant nexus standard. The commenters also stated that requiring headquarters review would equate to continued exclusion of waters that do not fall within one of the more specific categories but should be provided Clean Water Act protection. Finally, commenters asserted that reducing the number of approved jurisdictional determinations needing review by agency headquarters would streamline the permitting process.

As discussed further below, the agencies have established coordination procedures under which the agencies' headquarters will review all draft approved jurisdictional determinations for waters assessed under paragraph (a)(5) based on the significant nexus standard. This approach represents enhanced oversight by headquarters staff over approved jurisdictional determinations for waters assessed under paragraph (a)(5) to ensure implementation consistency and to gather more robust data about the number and types of waters under paragraph (a)(5) evaluated by the agencies, any regional or geographic issues, and the information and implementation resources needed to make approved jurisdictional determinations for this category.

c. Implementation

This rule provides for case-specific analysis of waters not addressed by any other provision of the definition to determine whether they are ''waters of the United States'' under the relatively permanent or significant nexus standards. Waters assessed under paragraph (a)(5) meet the relatively permanent standard if they are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to a paragraph (a)(1) water or tributary that is relatively permanent. Waters assessed under paragraph (a)(5) meet the significant nexus standard if they ''significantly affect'' the chemical, physical, or biological integrity of a paragraph (a)(1) water.

The agencies will generally assess jurisdiction over aquatic resources based on the requirements in paragraphs (a)(1) through (4) under this rule before assessing jurisdiction over aquatic resources based on paragraph (a)(5). Examples of aquatic resources that could be assessed for jurisdiction under paragraph (a)(5) include a stream that does not meet the agencies' interpretation of a tributary because it does not contribute flow directly or indirectly to a paragraph (a)(1) water or a paragraph (a)(2) impoundment; a wetland that does not meet this rule's definition of ''adjacent''; or a lake or pond that does not meet the agencies' interpretation of a tributary because it is not connected to the tributary network. A ditch that does not meet the agencies' interpretation of tributary could also be assessed for jurisdiction under paragraph (a)(5), so long as the ditch does not meet the terms of the paragraph (b)(3) exclusion. The preamble to the proposed rule stated that consistent with previous practice, the agencies would not assess whether a ditch was jurisdictional under the paragraph (a)(3) ''other waters'' provision. 86 FR 69433 (December 7, 2021). However, the agencies have reconsidered this statement and determined that under previous practice, the agencies did in fact assess whether ditches were jurisdictional under the paragraph (a)(3) ''other waters'' provision, and the agencies will continue to assess ditches that are not excluded under paragraph (b)(3) under the relevant jurisdictional categories in this final rule. The following sections of the preamble cover how to identify waters assessed under paragraph (a)(5) on the landscape, implementation of the relatively permanent standard for waters assessed under paragraph (a)(5), and implementation of the significant nexus

standard for waters assessed under paragraph (a)(5).

i. Identifying Waters Assessed Under Paragraph (a)(5) on the Landscape

Under this rule, waters that will be assessed for jurisdiction under paragraph (a)(5) are: intrastate lakes and ponds, streams, and wetlands that do not meet the requirements to be considered under paragraphs (a)(1) through (4) of this rule. The agencies will identify waters assessed under paragraph (a)(5) on the landscape using the implementation tools that have previously been described for these aquatic resources (*see* sections IV.C.4 and IV.C.5 of this preamble). The agencies can draw upon a variety of remote- and field-based methods, including a variety of mapping resources for identifying aquatic resources.

ii. Implementing the Relatively Permanent Standard for Waters Assessed Under Paragraph (a)(5)

Waters assessed under paragraph (a)(5) meet the relatively permanent standard if they are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to a paragraph (a)(1) water or a tributary that is relatively permanent. The agencies have decided to implement this approach consistent with the *Rapanos* plurality opinion, and it reflects and accommodates regional differences in hydrology and water management and can be implemented using available, easily accessible tools. *See* sections IV.C.4.c and IV.C.5.c of this preamble.

The agencies intend to identify relatively permanent waters under paragraph (a)(5) using a similar approach to the one described for relatively permanent tributaries in section IV.C.4.c.ii of this preamble. In summary, relatively permanent waters under paragraph (a)(5) include surface waters that have flowing or standing water year-round or continuously during certain times of the year. Relatively permanent waters under paragraph (a)(5) include certain rivers and streams that have ''flowing water.'' The phrase ''standing water'' is intended to describe waters that are lentic or ''still'' systems, such as lakes, ponds, and impoundments, which are characterized by standing water and do not have a flowing outlet to the tributary system. In the context of waters assessed under paragraph (a)(5), the phrase ''standing water'' can also describe certain wetlands that are characterized by standing water (*e.g.,* many swamps). Relatively permanent waters under paragraph (a)(5) do not include features with flowing or standing water for only a short duration in direct response to precipitation. These features may include, for example, certain wetlands that are not characterized by standing water (*e.g.,* many pocosin wetlands). *See* section IV.C.4.c.ii of this preamble for a description of implementation tools that can be used to identify relatively permanent waters under paragraph (a)(5).

The agencies intend to identify a continuous surface connection between waters assessed under paragraph (a)(5) and a paragraph (a)(1) water or a tributary that is relatively permanent using the approach described for adjacent wetlands in section IV.C.5.c of this preamble (although waters assessed under paragraph (a)(5) are not subject to the adjacency requirement for jurisdictional adjacent wetlands). In summary, there must be a continuous surface connection on the landscape for waters assessed under paragraph (a)(5) to be jurisdictional under the relatively permanent standard. However, a continuous surface connection does not require a constant hydrologic connection. Waters assessed under paragraph (a)(5) can meet the continuous surface connection requirement if they are connected to a paragraph (a)(1) water or a tributary that is relatively permanent by a discrete feature like a non-jurisdictional ditch, swale, pipe, or culvert. Similarly, a natural berm, bank, dune, or similar natural landform between a water assessed under paragraph (a)(5) and a paragraph (a)(1) water or a tributary that is relatively permanent does not sever a continuous surface connection to the extent it provides evidence of a continuous surface connection. *See* section IV.C.5.c of this preamble for a description of implementation tools that can be used to assess a continuous surface connection for a water assessed under paragraph (a)(5).

Under this rule, certain aquatic resources that do not meet the jurisdictional requirements for tributaries or adjacent wetlands could be jurisdictional as paragraph (a)(5) waters under the relatively permanent standard. For example, lakes and ponds that are not connected to a tributary system but are relatively permanent waters and have a continuous surface connection to a paragraph (a)(1) water or a tributary that is relatively permanent, could be jurisdictional as paragraph (a)(5) waters. To illustrate, a relatively permanent lake that is located near a tributary that meets the relatively permanent standard, but is separated by a natural berm, to the extent the berm provides evidence of a continuous surface connection, is jurisdictional as a paragraph (a)(5) water under the relatively permanent standard. *See* section IV.C.4.c.ii of this preamble. Similarly, a relatively permanent oxbow pond located near a traditional navigable water and connected to that traditional navigable water via a swale that provides a continuous surface connection between the pond and the traditional navigable water is jurisdictional as a paragraph (a)(5) water under the relatively permanent standard.

iii. Implementing the Significant Nexus Standard for Waters Assessed Under Paragraph (a)(5)

Waters assessed under paragraph (a)(5) that do not meet the relatively permanent standard may be found jurisdictional under the significant nexus standard. Waters assessed under paragraph (a)(5) meet the significant nexus standard if they significantly affect the chemical, physical, or biological integrity of a traditional navigable water, the territorial seas, or an interstate water. Examples of waters assessed under paragraph (a)(5) include familiar types of waters like lakes and ponds, streams, and wetlands that have been the subject of significant nexus analyses under the tributaries and adjacent wetlands provisions of the pre-2015 regulations since the *Rapanos* Guidance was issued. *See* section IV.C.9 of this preamble for additional discussion on the definition of ''significantly affect'' in this rule, including the factors that will be considered and the functions that will be assessed as part of a significant nexus analysis. Consistent with longstanding practice, the agencies will assess these waters based on best professional judgment informed by the best available information.

In implementing the significant nexus standard, the agencies generally intend to analyze waters under paragraph (a)(5) individually to determine if they significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water. This approach reflects the agencies' consideration of public comments, as well as implementation considerations for waters assessed under paragraph (a)(5). While the agencies' regulations have long authorized the assertion of jurisdiction on a case-specific basis over waters that do not fall within the other jurisdictional provisions, since *SWANCC* and the issuance of the *SWANCC* Guidance with its requirement of headquarters approval over determinations under that

provision, the agencies have not in practice asserted jurisdiction over paragraph (a)(3) ''other waters'' under the pre-2015 regulatory regime.[111]

Some commenters specifically addressed implementation of the significant nexus standard for waters that do not fall within one of the more specific categories, with commenters supporting and opposing aggregation of such waters as part of a significant nexus analysis. Commenters opposing aggregation requested that the agencies assess water features individually to determine their significance to chemical, physical, or biological integrity of downstream paragraph (a)(1) waters. Commenters supporting aggregation of waters that do not fall within one of the more specific categories stated that such an approach was consistent with *Rapanos* and the science. The agencies addressed such waters individually on a case-by-case basis under pre-2015 practice and have concluded at this time that individual assessments are practical and implementable for significant nexus determinations for waters assessed under paragraph (a)(5).

iv. Joint Agency Coordination on Waters Assessed Under Paragraph (a)(5)

As is typical after a rule is promulgated, the agencies have entered into an agreement via a joint agency coordination memorandum to ensure the consistency and thoroughness of the agencies' implementation of this rule. As part of these coordination procedures, EPA and Corps field staff will coordinate on all draft approved jurisdictional determinations [112] based on the significant nexus standard, and the agencies will follow a process for elevating a subset of these determinations to headquarters for review as necessary. That coordination will be enhanced for waters assessed under paragraph (a)(5) to ensure this provision is carefully implemented and to gather more robust data about the number and types of waters assessed under paragraph (a)(5) by the agencies, any regional or geographic issues, and the information and implementation resources needed to complete approved jurisdictional determinations for this category. As part of these coordination procedures, headquarters at the agencies will review all draft approved jurisdictional determinations for waters assessed under paragraph (a)(5) based on the significant nexus standard. The agencies do not intend for this coordination to result in the exclusion of paragraph (a)(5) waters that meet the significant nexus standard and are thus jurisdictional under this rule, but rather to serve as an additional check as to whether one of the jurisdictional standards is met. In addition, the agencies have established timelines for the review of certain draft approved jurisdictional determinations to ensure that there will not be unnecessary delay. Moreover, the coordination will enable the agencies to quickly address any potential inconsistencies, and that will enhance the efficiency of the approved jurisdictional determination process under this rule. Finally, after the memorandum is in effect for nine months, the agencies will reevaluate this requirement and assess the implementation and coordination approach, including assessing the scope and need for the coordination process.

7. Exclusions

The agencies are including in the final rule regulatory text several exclusions from the definition of ''waters of the United States,'' including longstanding exclusions for prior converted cropland and waste treatment systems, and exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime. The regulatory text for this rule excludes the following features:

- waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- prior converted cropland;
- ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- artificially irrigated areas that would revert to dry land if the irrigation ceased;
- artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and
- swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

These features were excluded by regulation or general practice under the pre-2015 regulatory regime and each of the subsequent rules defining ''waters of the United States.'' These exclusions from the definition provide important clarity on which features are and are not jurisdictional. As described in more detail below, to provide further clarity and certainty to the public, the agencies are codifying exclusions in the regulatory text for the features described in the proposed rule preamble as generally non-jurisdictional. Note that the word ''features'' when used in section IV.C.7 of this preamble refers broadly to landscape elements that may be evaluated in a determination of jurisdiction, *e.g.,* streams, ponds, swales, wetlands, and depressions.

The agencies are listing these exclusions in the regulatory text in a new paragraph (b) which consolidates the exclusions together in a single regulatory section. With this change, the regulatory text now identifies jurisdictional waters in paragraph (a), exclusions in paragraph (b), and definitions in paragraph (c). This change is consistent with the 2015 Clean Water Rule and 2020 NWPR, which both organized the regulatory text into these three paragraphs. This organizational structure clearly delineates waters that are jurisdictional from those waters and features that are excluded and provides a familiar and clear framework for the regulations. This reorganization does not affect the substance of the definition of ''waters of the United States.''

As explained in this rule's regulatory text, where a feature satisfies the terms of an exclusion, it is excluded from jurisdiction even where the feature would otherwise be jurisdictional under any of paragraphs (a)(2) through (5) of this rule. In such an instance, the feature is not considered ''waters of the United States.'' However, where a feature satisfies the terms of an exclusion but would otherwise be jurisdictional under paragraph (a)(1) of

[111] Note that when the 2015 Clean Water Rule was in effect, the agencies did assert jurisdiction over waters that would have been known as paragraph (a)(3) ''other waters'' by rule if they were adjacent waters as defined by that rule and on a case-specific basis if they fell within the provisions requiring case-specific significant nexus determinations. The 2020 NWPR also asserted jurisdiction over certain lakes and ponds that would have been jurisdictional as paragraph (a)(3) ''other waters.''

[112] An approved jurisdictional determination is ''a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel.'' 33 CFR 331.2.

this rule, the feature is not excluded.[113] For example, where applicable, the exclusion in this rule for ditches excludes a ditch that is excavated wholly in dry land, drains only dry land, and does not carry a relatively permanent flow of water. However, all tidally-influenced ditches are jurisdictional under paragraph (a)(1)(i) of the rule because they are ''subject to the ebb and flow of the tide,'' and therefore the exclusion is not applicable to those ditches. In addition, if a ditch was excavated in dry land very close to a territorial sea and, over time due to erosion, sea level rise, or other factors, the ditch develops a hydrologic connection to the territorial sea and becomes tidally-influenced, the ditch would then be considered jurisdictional under paragraph (a)(1) of this rule and would no longer be excluded. This is consistent with the agencies' longstanding position that a feature is not excluded where it would otherwise be jurisdictional as a traditional navigable water, territorial sea, or interstate water. *See* 51 FR 41217 (November 13, 1986) (explaining that ''[n]on-tidal drainage and irrigation ditches excavated on dry land'' are generally not considered ''waters of the United States'' under the 1986 regulations but not including similar language for tidally-influenced ditches). The Clean Water Act fundamentally protects these three categories of waters: traditional navigable waters are clearly encompassed within the defined term ''navigable waters''; the territorial seas are explicitly mentioned in the statutory definition of ''navigable waters''; and, as discussed further in section IV.C.2.b.iii of this preamble, interstate waters are, by definition, waters of the ''several States'' and are unambiguously ''waters of the United States.'' While the agencies have authority to draw lines excluding some aquatic features from the definition of ''waters of the United States,'' the Clean Water Act provides no such authority to the agencies to exclude waters in these three unambiguous types of ''waters of the United States'' under the statute. Even if jurisdiction over one or all of these categories of waters were ambiguous, the agencies have concluded that since these are the fundamental waters that Congress intended to protect under the Clean Water Act, and that have had longstanding and unequivocal protection, with the exception of the 2020 NWPR, it is reasonable to establish unequivocal jurisdiction over these waters. Further, the agencies have concluded that there are not policy, practical, or technical bases to apply the exclusions to these paragraph (a)(1) waters given their crucial role in the statutory regime. The agencies recognize that the 2020 NWPR allowed certain traditional navigable waters and the territorial seas to be excluded from jurisdiction if they satisfied the terms of certain exclusions. The 2020 NWPR did not provide a rationale for this aspect of the final rule. The agencies are restoring historic practice and, consistent with the Clean Water Act and as discussed above, are ensuring the protection of all paragraph (a)(1) waters in this rule.

The exclusions reflect the agencies' longstanding practice and technical judgment that certain waters and features are not subject to the Clean Water Act. The exclusions are also guided by Supreme Court precedent. The plurality opinion in *Rapanos* noted that there were certain features that were not primarily the focus of the Clean Water Act. *See* 547 U.S. at 734. In this section of the rule, the agencies are promoting regulatory certainty by expressly stating that certain waters and features are not subject to jurisdiction under the Clean Water Act. Based on decades of implementation experience, the agencies have determined that waters that satisfy the terms of an exclusion are not ''waters of the United States.'' Clearly identifying these exclusions in this rule is an important aspect of the agencies' policy goal of providing clarity and certainty. The categorical exclusions in this rule will simplify the process of determining jurisdiction, and they reflect the agencies' determinations of the lines of jurisdiction based on case law, policy determinations, and the agencies' experience and expertise.

In addition, even when the features described below are not ''waters of the United States'' because they are excluded (*e.g.,* certain ditches, swales, gullies, erosional features), these and other non-jurisdictional features may be relevant to the analysis of whether *another* water meets the final rule's definition of ''waters of the United States.'' For example, consistent with longstanding practice, excluded surface features may still contribute to a hydrologic connection relevant for asserting jurisdiction (*e.g.,* between an adjacent wetland and a jurisdictional water). *See* section IV.C.5 of this preamble; *Rapanos* Guidance at 12. Discharges to these non-jurisdictional features may also be subject to certain Clean Water Act regulations. For example, a discharge from a point source to a non-jurisdictional ditch that connects to a jurisdictional water may require a Clean Water Act section 402 permit. *See Rapanos* Guidance at 12. In addition, non-jurisdictional ditches may themselves function as point sources (*i.e.,* ''discernible, confined, and discrete conveyances''), such that discharges of pollutants from these features could require a Clean Water Act permit. *See also Rapanos,* 547 U.S. at 743–44. While not the focus of this section, subsurface features that are non-jurisdictional may also be relevant to assessing jurisdiction of water features. *See* sections IV.C.4 and IV.C.5 of this preamble.

Several commenters requested that the agencies exclude features from the definition of ''waters of the United States'' beyond those longstanding exclusions and historically non-jurisdictional features identified in the proposed rule. For example, several commenters requested that the agencies exclude stormwater control features, wastewater and drinking water treatment systems, and water recycling structures from the definition of ''waters of the United States.'' The agencies are not excluding these or other additional features in this rule. The proposed additional exclusions would not achieve the agencies' goal of maintaining consistency with the pre-2015 regulatory regime while continuing to advance the objective of the Clean Water Act. This approach is consistent with the agencies' intent in this rule to interpret ''waters of the United States'' to mean the waters defined by the longstanding 1986 regulations, with amendments to reflect the agencies' interpretation of the statutory limits on the scope of the ''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 case law, and the agencies' experience and technical expertise, in addition to consideration of extensive public comment on the proposed rule. However, even for features that are not explicitly excluded, the agencies will continue to assess jurisdiction under this rule on a case-specific basis. As part of this case-specific assessment, the agencies will continue to consider whether the feature in question is excavated or created in dry land, the flow of water in the feature, and other factors. In addition, some of the features that commenters asked the agencies to exclude may already be covered by one or more of the exclusions the agencies are including in this rule. For example, certain features that convey stormwater may be excluded as ditches under this

[113] *See also* discussion of the waste treatment system exclusion in section IV.C.7.b of this preamble, *infra.*

rule. Similarly, some of the features that commenters mentioned, like sheetflow, are not waters at all and would not be considered ''waters of the United States.'' Even though certain features may not be explicitly excluded, the agencies will not assert Clean Water Act jurisdiction over features that do not satisfy the definition of ''waters of the United States'' articulated in paragraph (a) of this rule.

Several commenters requested that the agencies explicitly exclude groundwater in this rule's regulatory text while other commenters requested that the agencies not exclude groundwater from jurisdiction under this rule. In this rule, the agencies are not adding an exclusion for groundwater to the regulatory text because groundwater is not surface water and therefore does not fall within the possible scope of ''navigable waters.'' There is thus no need for a regulatory exclusion. This position is longstanding and consistent with Supreme Court case law. The agencies have never taken the position that groundwater falls within the scope of ''navigable waters'' under the Clean Water Act. *See, e.g.,* 80 FR 37099–37100 (June 29, 2015) (explaining that the agencies have never interpreted ''waters of the United States'' to include groundwater); 85 FR 22278 (April 21, 2020) (explaining that the agencies have never interpreted ''waters of the United States'' to include groundwater). This position was recently confirmed by the U.S. Supreme Court. *Maui,* 140 S. Ct. at 1472 (''The upshot is that Congress was fully aware of the need to address groundwater pollution, but it satisfied that need through a variety of state-specific controls. Congress left general groundwater regulatory authority to the States; its failure to include groundwater in the general EPA permitting provision was deliberate.''). While groundwater itself is not jurisdictional as ''waters of the United States,'' discharges of pollutants to groundwater that reach a jurisdictional surface water require a NPDES permit where the discharge through groundwater is the ''functional equivalent'' of a direct discharge from the point source into navigable waters. *Maui,* 140 S. Ct. at 1468. Groundwater that is not jurisdictional includes both shallow and deep groundwater, even where such shallow subsurface water serves as a hydrologic connection that is assessed in determining if another water is jurisdictional. Groundwater drained through subsurface drainage systems also is not jurisdictional. When groundwater emerges on the surface, for example when it becomes baseflow in streams or joins spring fed ponds, it is no longer considered to be groundwater under this rule.

While groundwater is not jurisdictional under the statute or this rule, many States include groundwater in their definitions of ''waters of the State'' and therefore may subject groundwater to State regulation. Indeed, the Clean Water Act incentivizes State protection of groundwater. For example, grants to States under Clean Water Act section 319 may support management programs that include groundwater quality protection activities as part of a comprehensive nonpoint source pollution control program. 33 U.S.C. 1329(h)(5)(D). In addition, groundwater quality is regulated and protected through several other legal mechanisms, including the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and various Tribal, State, and local laws.

Several commenters suggested that wetlands that develop entirely within the confines of a non-jurisdictional feature should be considered part of the excluded feature and not be considered ''waters of the United States.'' The agencies agree with these commenters and find that wetlands that develop entirely within the confines of an excluded feature are not jurisdictional. This interpretation is consistent with the agencies' longstanding approach to this issue and with the agencies' rationale for excluding these features. This approach also provides environmental benefits because it removes the incentive for parties to clear vegetation from an excluded feature to prevent that vegetation from developing into a wetland and becoming jurisdictional, thus allowing vegetation within the confines of an excluded feature to provide water quality benefits for the duration of its existence.

However, a wetland may be located both within and outside the boundaries of a non-jurisdictional feature or entirely outside the boundaries of non-jurisdictional feature. In these circumstances, the wetland will be evaluated under this rule's provisions for ''adjacent wetlands'' and paragraph (a)(5) ''intrastate lakes and ponds, streams, or wetlands'' and not considered as part of the non-jurisdictional feature. It is important to note, however, that although some low gradient depressional areas are colloquially referred to as ''swales,'' these areas do not meet the regulatory exclusion's criteria for swales that are discrete topographic features ''characterized by low volume, infrequent, or short duration flow.'' As such, the agencies would not consider wetlands forming within low gradient depressional areas to be ''within the confines of a non-jurisdictional feature,'' and such wetlands would be assessed to determine if they meet any of the provisions of this rule.

While the agencies evaluate whether any exclusions apply when making approved jurisdictional determinations for purposes of efficiency, the person asserting that the water at issue is excluded under the Clean Water Act or that the person's activities at issue in the case are exempt under the Act, may have information that is material to proving that the exclusion or exemption applies. There are circumstances where, absent this information from the requestor, the agency will be unable to determine that an exclusion applies. While the requestor is not required to provide information regarding applicability of the exclusions to the agencies during the jurisdictional determination process, it is to their benefit to do so because the person asserting that a water is excluded or that a person's activities are exempt under the Clean Water Act bears the burden of proving that the exclusion or exemption applies. *See, e.g., United States* v. *Akers,* 785 F.2d 814, 819 (9th Cir. 1986) (''Akers must establish that his activities are exempt.''). Where the agencies, based on the information that they have in the record, are unable to conclude that an exclusion applies, the agencies will assess the water to see if it meets the jurisdictional criteria of this rule under paragraphs (a)(1) through (5).

a. Prior Converted Cropland

i. This Rule

This rule repromulgates the regulatory exclusion for prior converted cropland first codified in 1993, which provided that prior converted cropland is ''not 'waters of the United States.''' This rule restores longstanding and familiar practice under the pre-2015 regulatory regime. The rule maintains consistency and compatibility between the agencies' implementation of the Clean Water Act and the U.S. Department of Agriculture's (USDA) implementation of the Food Security Act by providing that prior converted cropland under the Clean Water Act encompasses areas designated by USDA as prior converted cropland. Areas USDA has not so designated are not eligible for this Clean Water Act exclusion. The Clean Water Act exclusion for prior converted cropland only covers wetlands and does not exclude other types of non-wetland aquatic resources (*e.g.,* tributaries,

ponds, ditches) that are located within the prior converted cropland area.

The exclusion would cease upon a change in use that renders the area no longer available for the production of agricultural commodities. For example, areas used for any agricultural purposes, including agroforestry, as well as areas left idle, generally remain available for the production of agricultural commodities. In response to requests from commenters to increase the clarity of the exclusions through the regulatory text, the agencies are noting in the regulations that this exclusion encompasses areas that USDA has designated as prior converted cropland, and that the exclusion will cease when the area has changed use so that it is no longer available for the production of agricultural commodities, such as when it has been filled for development.

The agencies are also retaining the longstanding provision that ''for purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.'' This categorical exclusion for prior converted cropland will simplify the process of determining jurisdiction while providing certainty to farmers seeking to conserve and protect land and waters pursuant to Federal law. It reflects the agencies' determinations of the lines of jurisdiction based on the case law, policy determinations, and the agencies' experience and expertise.

ii. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The concept of prior converted cropland originates in the wetland conservation provisions of the Food Security Act of 1985, 16 U.S.C. 3801 *et seq.* These provisions were intended to disincentivize the conversion of wetlands to croplands. Under the Food Security Act wetland conservation provisions, farmers who convert wetlands to make possible the production of an agricultural commodity crop may lose eligibility for certain USDA program benefits, unless an exemption applies. If a farmer had converted wetlands to cropland prior to December 23, 1985, however, then the land is considered prior converted cropland and the farmer does not lose eligibility for benefits if the area is further manipulated.[114] USDA defines a prior converted cropland for Food Security Act purposes in its regulations as ''converted wetland where the conversion occurred prior to December 23, 1985, an agricultural commodity had been produced at least once before December 23, 1985, and as of December 23, 1985, the converted wetland did not support woody vegetation and did not meet the hydrologic criteria for farmed wetland.'' 7 CFR 12.2. USDA defines an agricultural commodity, in turn, as ''any crop planted and produced by annual tilling of the soil, including tilling by one-trip planters, or sugarcane.'' *Id.* at 12.2; *see also* 16 U.S.C. 3801(a)(1).

In 1993, EPA and the Corps codified an exclusion for prior converted cropland from the definition of ''waters of the United States'' regulated pursuant to the Clean Water Act. The exclusion stated, ''[w]aters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.'' 58 FR 45008, 45036 (August 25, 1993); 33 CFR 328.3(a)(8) (1994); 40 CFR 230.3(s) (1994). The 1993 preamble stated that EPA and the Corps would interpret the prior converted cropland exclusion consistent with the definition in the National Food Security Act Manual (NFSAM) published by the USDA Soil Conservation Service, now known as USDA's Natural Resource Conservation Service (NRCS). 58 FR 45031 (August 25, 1993). It cited the NFSAM definition of prior converted cropland as ''areas that, prior to December 23, 1985, were drained or otherwise manipulated for the purpose, or having the effect, of making production of a commodity crop possible. [Prior converted] cropland is inundated for no more than 14 consecutive days during the growing season and excludes pothole or playa wetlands.'' *Id.* The agencies chose not to codify USDA's definition of prior converted cropland, ensuring that they would retain flexibility to accommodate changes USDA might make. *Id.* at 45033.

The purpose of the exclusion, as EPA and the Corps explained in the 1993 preamble, was to ''codify existing policy,'' as the agencies had not been implementing the Clean Water Act to regulate prior converted cropland, and to ''help achieve consistency among various federal programs affecting wetlands.'' *Id.* The 1993 preamble further stated that excluding prior converted cropland from ''waters of the United States'' was consistent with protecting aquatic resources because ''[prior converted cropland] has been significantly modified so that it no longer exhibits its natural hydrology or vegetation. . . . [Prior converted] cropland has therefore been significantly degraded through human activity and, for this reason, such areas are not treated as wetlands under the Food Security Act.'' *Id.* at 45032. The agencies explained that ''in light of the degraded nature of these areas, we do not believe that they should be treated as wetlands for the purposes of the CWA.'' *Id.*

The 1993 preamble stated that, consistent with the NFSAM, an area would lose its status as prior converted cropland if the cropland is ''abandoned,'' meaning that crop production ceases and the area reverts to a wetland state. *Id.* at 45034. Specifically, the 1993 preamble stated that prior converted cropland that now meets wetland criteria will be considered abandoned unless ''once in every five years it has been used for the production of an agricultural commodity, or the area has been used and will continue to be used for the production of an agricultural commodity in a commonly used rotation with aquaculture, grasses, legumes, or pasture production.'' *Id.* at 45034.

Three years later, the Federal Agriculture Improvement and Reform Act of 1996 amended the Food Security Act and clarified that this ''abandonment'' principle did not apply to prior converted cropland. *See* Public Law 104–127, 110 Stat. 988–89 (1996). Additional amendments clarified that any certification by the Secretary, including those of prior converted cropland, remain valid and in effect as long as it continues to be available for agricultural purposes, a new approach referred to as ''change in use.'' H.R. Conf. Rep. No. 104–494, at 380 (1996). EPA and the Corps did not address the 1996 amendments in rulemaking. In 2005, the Corps and NRCS issued a joint Memorandum to the Field in an effort to again align the Clean Water Act section 404 program with the Food Security Act by adopting the principle that a wetland can lose prior converted cropland status following a ''change in use.'' The Memorandum stated, ''[a] certified [prior converted] determination made by NRCS remains valid as long as the area is devoted to an agricultural use. If the land changes to a non-agricultural use, the [prior converted] determination is no longer applicable and a new wetland determination is required for CWA purposes.'' It defined ''agricultural use'' as ''open land planted to an agricultural crop, used for the production of food or fiber, used for haying or grazing, left idle per USDA

[114] A farmer that ''commenced conversion'' of a wetland prior to December 23, 1985, could also be eligible for a prior converted cropland designation, subject to certain limitations. 7 CFR 12.2, 12.5(b)(2).

programs, or diverted from crop production to an approved cultural practice that prevents erosion or other degradation.'' The agencies rescinded the 2005 Memorandum on January 28, 2021, following publication of the 2020 NWPR.

One district court set aside the Corps' adoption of ''change in use'' on the grounds that it was a substantive change in Clean Water Act implementation that the agencies had not issued through notice and comment rulemaking. *New Hope Power Co.* v. *U.S. Army Corps of Eng'rs,* 746 F. Supp. 2d 1272, 1282 (S.D. Fla. 2010). Following *New Hope Power,* the agencies did not implement ''change in use'' in areas subject to the court's jurisdiction.

The 2015 Clean Water Rule repromulgated the exclusion for prior converted cropland without any changes from the 1993 regulations, as did the 2019 Repeal Rule. The 2020 NWPR also repromulgated the exclusion but defined prior converted cropland for purposes of the Clean Water Act for the first time since 1993. The 2020 NWPR provided that an area is prior converted cropland if ''prior to December 23, 1985, [it] was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible.'' 85 FR 22339 (April 21, 2020); 33 CFR 328.3(c)(9). The 2020 NWPR's term ''agricultural product'' potentially extended prior converted cropland status far beyond those areas USDA considers prior converted cropland for purposes of the Food Security Act. Specifically, USDA's regulation defining prior converted cropland refers to conversion that makes possible production of an ''agricultural commodity,'' a defined term, while the 2020 NWPR defined prior converted cropland to encompass any area used to produce an ''agricultural product,'' a term not used in the regulations that introduced ambiguity and further distinguished the Clean Water Act's prior converted cropland exclusion from USDA's approach. *Compare* 7 CFR 12.2 *with* 33 CFR 328.3(c)(9). The absence of a definition in the 2020 NWPR for the term ''agricultural product'' or any explanation as to how it may differ from an ''agricultural commodity'' was unclear and undermined the original purpose of the exclusion, which was to help achieve consistency among Federal programs affecting wetlands. *See* 58 FR 45031 (August 25, 1993).

Furthermore, the 2020 NWPR's approach to prior converted cropland substantially reduced the likelihood that prior converted cropland would lose its excluded status because it provided that an area would remain prior converted cropland for purposes of the Clean Water Act unless the area is abandoned and reverts to wetlands, and defined abandonment to occur when prior converted cropland ''is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years.'' 85 FR 22320 (April 21, 2020). The 2020 NWPR then presented a broad interpretation of ''agricultural purposes,'' including but not limited to crop production, haying, grazing, idling land for conservation uses (such as habitat; pollinator and wildlife management; and water storage, supply, and flood management); irrigation tailwater storage; crawfish farming; cranberry bogs; nutrient retention; and idling land for soil recovery following natural disasters such as hurricanes and drought. *Id.* at 22321. Under the 2020 NWPR, prior converted cropland maintained its excluded status if it was used at least once in the five years preceding a jurisdictional determination for any of these agricultural purposes. These wetlands could then have been filled and paved over during that five-year term without triggering any Clean Water Act regulatory protection.

This rule restores the exclusion's original purpose of maintaining consistency among Federal programs addressing wetlands while furthering the objective of the Clean Water Act. 58 FR 45031–32 (August 25, 1993). Some commenters asserted that prior converted cropland should not be categorically excluded because there is no legal or scientific basis to exclude areas from the protections of the Clean Water Act that maintain some wetland characteristics or could be restored to be wetlands. The agencies disagree. As the agencies explained in 1993, ''effective implementation of the wetlands provisions of the Act without unduly confusing the public and regulated community is vital to the environmental protection goals of the Clean Water Act.'' *Id.* at 45031. The 1993 preamble emphasized that statutes other than the Clean Water Act have become essential to the Federal Government's effort to protect wetlands. The wetlands protection effort will be most effective if the agencies administering these other statutes have, to the extent possible, ''consistent and compatible approaches to insuring wetlands protection.'' *Id.* at 45031–32. This rule's return to implementing USDA's approach to prior converted cropland will help enhance the consistency and compatibility of the Federal Government's multi-pronged wetlands protection efforts, thereby enhancing their effectiveness.

Some commenters asked that the agencies codify a particular definition of prior converted cropland; some recommended codifying USDA's definition and others advocated codifying the definition in the 2020 NWPR. The agencies instead decided to clarify that the exclusion encompasses prior converted cropland designated by USDA, and no additional areas. This clarification provides certainty and transparency as well as flexibility. The agencies chose not to codify the 2020 NWPR's definition because that interpretation does not carry out the original purpose of the exclusion, which is to ensure consistency among Federal wetland protection programs while protecting the integrity of the nation's waters.

iii. Implementation

This rule will implement the prior converted cropland exclusion so that it encompasses all areas designated by USDA, and no additional areas. USDA interprets prior converted cropland to be a ''converted wetland where the conversion occurred prior to December 23, 1985, an agricultural commodity had been produced at least once before December 23, 1985, and as of December 23, 1985, the converted wetland did not support woody vegetation and did not meet the hydrologic criteria for farmed wetland.'' 7 CFR 12.2. The 2020 NWPR introduced ambiguity by saying that prior converted cropland applies to certain areas used for ''agricultural products,'' as opposed to ''agricultural commodities.'' In addition, the 2020 NWPR was unclear regarding the extent to which the agencies should designate areas not subject to a USDA designation as prior converted cropland under the Clean Water Act. The agencies are restoring clarity and consistency with USDA's approach by implementing the exclusion as only applying to areas USDA has designated, which include areas where commodity crops were produced prior to December 23, 1985, and that meet the other applicable criteria. This is consistent with the agencies' longstanding approach to the exclusion. *See* 58 FR 45033 (August 25, 1993) (''[R]ecognizing [NRCS]'s expertise in making these [prior converted] cropland determinations, we will continue to rely generally on determinations made by [NRCS].''). USDA defines agricultural commodity crops to mean ''any crop planted and produced by annual tilling of the soil, including tilling by one-trip planters, or sugarcane.'' 7 CFR 12.2.

The agencies have also decided to enhance consistency between prior converted cropland under the Food

Security Act and under the Clean Water Act, without undermining the goals of the Clean Water Act, by implementing the exclusion as ceasing upon the area's ''change in use.'' The agencies view a ''change in use'' as an action that would make the prior converted cropland no longer available for the production of an agricultural commodity. In response to requests from commenters to clarify the scope of exclusions in the regulatory text, the regulation specifies that the exclusion will cease upon change in use, and that a change in use means that the prior converted cropland is no longer available for the production of an agricultural commodity.

Consistent with USDA's interpretation, a ''change in use'' would not occur ''[a]s long as the area is devoted to the use and management of the land for production of food, fiber, or horticultural crops.'' 7 CFR 12.30(c)(6). The agencies do not interpret changes in use to include discharges associated with agricultural uses identified in the Corps' and NRCS's 2005 Memorandum to the Field, such as planting of agricultural crops, production of food or fiber, haying or grazing, idling consistent with USDA programs, or diversion from crop production for purposes of preventing erosion or other degradation, as these uses keep the land available for future production of agricultural commodities. Similarly, an area may retain its prior converted cropland status if it is used for any of the agricultural purposes identified in the 2020 NWPR preamble, which ''includ[e] but [are] not limited to idling land for conservation uses (*e.g.,* habitat; pollinator and wildlife management; and water storage, supply, and flood management); irrigation tailwater storage; crawfish farming; cranberry bogs; nutrient retention; and idling land for soil recovery following natural disasters like hurricanes and drought,'' as well as ''crop production, haying, and grazing,'' so long as the area remains available for the production of agricultural commodities. *See* 85 FR 22321 (April 21, 2020). Consistent with USDA practice, an area has not experienced a change in use if, for example, it transitions into a long-term rotation to agroforestry or perennial crops, such as vineyards or orchards, or if it lies idle and the landowner passively preserves the area for wildlife use. Generally speaking, idling the land retains its availability for the production of an agricultural commodity. Implementing ''change in use'' consistent with USDA's implementation of the Food Security Act fulfills the exclusion's purpose of promoting consistency among Federal programs affecting wetlands. *See* 58 FR 45031 (August 25, 1993). Under the Food Security Act, a wetland certification made by the Secretary is only valid so long as the area is devoted to an agricultural use. 16 U.S.C. 3822(a)(4). Because the wetland conservation provisions of the Food Security Act only apply to the production of agricultural commodities, a prior converted cropland designation becomes moot for USDA purposes once land is removed from agricultural use.

A ''change in use'' is a proposed or planned modification of prior converted cropland for filling and development, so that the area would no longer be available for commodity crop production after development. For example, if prior converted cropland is left idle for several years and reverts to wetland, and the property is then sold for conversion to a residential development, the discharge of dredged or fill material from development would require prior authorization under Clean Water Act section 404. Plans or proposals for development may include applications for Clean Water Act section 404 permits or other Federal, State, or local permits for residential, commercial, or industrial development; energy infrastructure; mining; or other non-agricultural uses. On the one hand, the agencies recognize that plans and proposals do not themselves change the characteristics of a wetland, and that some do not come to fruition. On the other hand, the agencies would like to provide certainty and fair notice to landowners and other persons about the status of the areas under their control while they are in the planning stage. Interpreting a change in use as only occurring when heavy machinery begins actually dredging and filling a wetland, and potentially violating the Clean Water Act, would not provide the certainty and fair notice necessary to appropriately plan development. To address these considerations, the agencies will interpret the prior converted cropland designation to continue to apply to a farmer's use of prior converted cropland for agricultural purposes even after development plans or proposals have been developed, and even after land has been sold. However, the prior converted cropland designation would not be available to the developer for the same parcel once proposals or plans for development have begun, even prior to a discharge occurring in the wetland.

Some commenters stated that, for example, building houses in an area should not constitute a ''change in use,'' because the houses could potentially be removed and the area returned to commodity crop production. The agencies disagree. A ''change in use'' includes areas that have undergone soil disturbance such that substantial effort, such as the removal of concrete or other permanent structures, would be required to enable the production of agricultural commodities. The agencies interpret availability for commodity crop production to mean that it is reasonably conceivable that the area in its current condition could be returned to crop production. Areas that will be developed for residential, commercial, or industrial use; energy infrastructure; mining; or other non-farming related activities will not meet this standard of availability for commodity crop production.

The agencies will not implement the exclusion using the ''abandonment'' approach, which the 2020 NWPR implemented instead of ''change in use,'' as ''abandonment'' is not consistent with USDA's approach or with the purposes of the Clean Water Act. Generally speaking, under the 2020 NWPR's approach to abandonment, an area would only regain jurisdictional status if the area has not been used for agricultural purposes at least once in every five years and the area reverts to a wetland that meets the definition of ''waters of the United States.'' For example, under abandonment, if prior converted cropland is used for an agricultural purpose, such as grazing, two years prior to being sold for conversion to a residential development, discharges of dredged or fill material from the construction of the residential development into the wetlands during the three years remaining in the five-year abandonment time frame would not require authorization under Clean Water Act section 404, even though those discharges have nothing to do with farming. In contrast, under the ''change in use'' approach that the agencies will implement under this rule, the reverted wetland area would regain jurisdictional status if it meets the definition of ''waters of the United States'' and is subject to a ''change in use,'' meaning that it is no longer available for production of an agricultural commodity.

The abandonment approach implemented in the 2020 NWPR presents three key concerns. First, it incentivizes disturbance of the area by a farmer once every five years to retain the exclusion. Second, it creates a substantial loophole in Clean Water Act section 404 protections by allowing any form of development of otherwise jurisdictional wetlands without

authorization, so long as it occurs within five years of use of the area for agricultural purposes. Third, it undermines governmental coordination and efficiency because it is not consistent with USDA's approach to prior converted cropland.

A number of commenters urged the agencies to maintain the 2020 NWPR's approach to implementing prior converted cropland, emphasizing that on a national scale, developing wetlands, such as for purposes of mining or other industrial uses, could provide billions of dollars to farmers. The agencies have concluded that this potential financial benefit to farmers does not effectuate the original purpose of the exclusion, which was to promote consistency among Federal clean water protection programs in order to help restore and maintain the nation's waters. Moreover, the exclusion was originally intended to allow farmers to farm their land. The financial benefit the commenters cite comes from selling farmland to be developed. Further facilitating these sales does nothing to support farmers who seek to continue to farm and could even undermine their incentives to do so. By contrast, the agencies' approach in this rule strikes an appropriate balance between effectuating the goals of the Clean Water Act and the purposes of the exclusion. It aligns implementation of the Food Security Act and the Clean Water Act as much as possible while providing farmers with clarity that routine farming and related activity conducted in prior converted croplands will not require Clean Water Act authorization.

The agencies' approach to prior converted cropland under this rule also imposes less of a burden on farmers than the approach under the 2020 NWPR. Under the 2020 NWPR, an area was not considered abandoned so long as it is used for or in support of agricultural purposes at least once in the immediately preceding five years. The 2020 NWPR's preamble explained that prior converted cropland would not be considered abandoned if it were idled or lay fallow ''for conservation or agricultural purposes.'' 85 FR 22320 (April 21, 2020). By contrast, under ''change in use,'' the land will not lose its prior converted cropland status so long as it remains available for crop production, regardless of whether the purpose for idling the land was related to conservation or agricultural purposes. In other words, under this rule, a farmer could maintain prior converted cropland status without needing to demonstrate that the area was used for in support of agricultural purposes at least once in the immediately preceding five years or had been idled for conservation or agricultural purposes.

The exclusion for prior converted cropland does not apply to areas designated by USDA as meeting other Food Security Act exemptions, including exemptions for farmed wetlands, or areas that meet the USDA definition of wetlands and do not have a valid prior converted cropland designation. This rule would maintain the provision promulgated in 1993 that EPA retains final authority to determine whether an area is subject to the requirements of the Clean Water Act. The presence of a jurisdictional wetland, or any jurisdictional water in an agricultural setting, in no way affects the availability of exemptions for discharges associated with many farming activities pursuant to Clean Water Act section 404(f).

b. Waste Treatment System

i. This Rule

This rule in paragraph (b)(1) retains the agencies' longstanding waste treatment system exclusion, with no changes from the proposed rule. Specifically, this rule provides that ''[w]aste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act'' are not ''waters of the United States.'' This language is the same as the agencies' 1986 regulation's waste treatment system exclusion,[115] with a ministerial change to delete the exclusion's cross-reference to a definition of ''cooling ponds'' that no longer exists in the Code of Federal Regulations, and the addition of a comma that clarifies the agencies' longstanding implementation of the exclusion as applying only to systems that are designed to meet the requirements of the Act.

ii. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

EPA first promulgated the waste treatment system exclusion in a 1979 notice-and-comment rulemaking revising the definition of ''waters of the United States'' in the agency's NPDES regulations. 44 FR 32854 (June 7, 1979). A ''frequently encountered comment'' was that ''waste treatment lagoons or other waste treatment systems should not be considered waters of the United States.'' *Id.* at 32858. EPA agreed, except as to cooling ponds that otherwise meet the criteria for ''waters of the United States.'' *Id.* The 1979 revised definition of ''waters of the United States'' thus provided that ''waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.'' *Id.* at 32901 (40 CFR 122.3(t) (1979)).

The following year, EPA revised the exclusion, but again only in its NPDES regulations, to clarify its application to treatment ponds and lagoons and to specify the type of cooling ponds that fall outside the scope of the exclusion. 45 FR 33290, 33298 (May 19, 1980). EPA also decided to revise this version of the exclusion to clarify that ''treatment systems created in [waters of the United States] or from their impoundment remain waters of the United States,'' while ''[m]anmade waste treatment systems are not waters of the United States.'' *Id.* The revised exclusion read: ''[w]aste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.'' The provision further provided that the exclusion ''applies only to manmade bodies of water which neither were originally created in waters of the United States (such as a disposal area in wetlands) nor resulted from the impoundment of waters of the United States.'' 45 FR 33424 (May 19, 1980) (40 CFR 122.3).

Two months following this revision, EPA took action to ''suspend[ ] a portion'' of the waste treatment system exclusion in its NPDES regulations in response to concerns raised in petitions for review of the revised definition of ''waters of the United States.'' 45 FR 48620 (July 21, 1980). EPA explained that industry petitioners objected to limiting the waste treatment system exclusion to manmade features, arguing that the revised exclusion ''would require them to obtain permits for discharges into existing waste treatment systems, such as power plant ash ponds, which had been in existence for many years.'' *Id.* at 48620. The petitioners argued that ''[i]n many cases, . . . EPA had issued permits for discharges from, not into, these systems.'' *Id.* Agreeing that the regulation ''may be overly broad'' and ''should be carefully reexamined,'' EPA announced that it was ''suspending [the] effectiveness'' of the sentence limiting the waste treatment system exclusion to manmade bodies of water. *Id.* EPA then stated that it ''intend[ed] promptly to develop a revised definition and to publish it as a proposed rule for public comment,'' after which the agency would decide whether to ''amend the rule, or terminate the suspension.'' *Id.*

[115] 51 FR 41250 (November 13, 1986); 53 FR 20764 (June 6, 1988).

In 1983, EPA republished the waste treatment system exclusion in its NPDES regulations with a note explaining that the agency's July 1980 action had ''suspended until further notice'' the sentence limiting the exclusion to manmade bodies of water, and that the 1983 action ''continue[d] that suspension.'' 48 FR 14146, 14157 (April 1, 1983) (40 CFR 122.2) (1984). EPA subsequently omitted the exclusion's suspended sentence altogether in revising the definition of ''waters of the United States'' in other parts of the Code of Federal Regulations. *See, e.g.,* 53 FR 20764, 20774 (June 6, 1988) (revising EPA's section 404 program definitions at 40 CFR 232.2). Separately, the Corps published an updated definition of ''waters of the United States'' in 1986. This definition contained the waste treatment system exclusion but likewise did not include the exclusion's suspended sentence: ''Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.'' 51 FR 41250 (November 13, 1986); 33 CFR 328.3 (1987).

Later revisions to the definition of cooling ponds rendered the exclusion's cross-reference to 40 CFR 123.11(m) outdated. *See* 47 FR 52290, 52291, 52305 (November 19, 1982) (revising regulations related to cooling waste streams and deleting definition of cooling ponds). In this rule, the agencies have deleted this obsolete cross-reference, consistent with other recent rulemakings addressing the definition of ''waters of the United States.'' [116]

This rule also deletes the suspended sentence in EPA's NPDES regulations limiting application of the waste treatment system exclusion to manmade bodies of water. The suspended sentence, which since 1980 has only ever appeared in the version of the waste treatment system exclusion contained in EPA's NPDES regulations (40 CFR 122.2), provides: ''This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States.'' Because EPA suspended this sentence limiting application of the exclusion in 1980, EPA has *not* limited application of the waste treatment system exclusion to manmade bodies of water for over four decades. Removing the suspended sentence in this rule thus aligns with EPA's decades-long practice implementing the exclusion—in addition to ensuring consistency with the text of other versions of the exclusion found in the agencies' regulations (both past and present)—and maintains the 2020 NWPR's deletion of the suspended sentence as well.

Some commenters expressed support for deleting the suspended sentence, stating that doing so in this rule would be consistent with the agencies' longstanding approach to implementing the waste treatment system exclusion. Other commenters asserted that the agencies should limit application of the exclusion to human-made features, with some expressing concern that the agencies have not provided a meaningful opportunity to comment on this aspect of the rulemaking. The agencies agree that removing the suspended sentence—which has not been in effect for over 40 years—ensures that this rule will continue the agencies' longstanding approach to excluding waste treatment systems, while providing additional clarity. Indeed, for decades, both agencies have *not* limited application of the exclusion to manmade bodies of water. The agencies disagree that they did not satisfy notice-and-comment requirements with respect to this aspect of the rulemaking. The preamble to the proposed rule explained that the agencies were considering deleting the suspended sentence and explicitly solicited comment on that approach. *See* 86 FR 69427.

Multiple commenters expressed concern over the agencies' proposed addition of a comma after the word ''lagoons'' in the text of the exclusion, which provides: ''Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act are not waters of the United States.'' In particular, many of these commenters asserted that the new comma would narrow the exclusion such that a system constructed prior to the enactment of the Clean Water Act could not qualify for the exclusion because it was not ''designed'' to meet the requirements of the Act. As explained in the preamble to the proposed rule, the purpose of adding a comma after ''lagoons'' is to clarify that the exclusion is available only to systems meeting the requirements of the Clean Water Act, thereby continuing the agencies' longstanding approach to implementing the exclusion. Under this approach, a waste treatment system constructed *prior* to the 1972 Clean Water Act amendments is eligible for the exclusion so long as the system is in compliance with currently applicable Clean Water Act requirements, such as treating water such that discharges, if any, from the system meet the Act's requirements. A waste treatment system constructed *after* passage of the 1972 Clean Water Act amendments is similarly eligible for the exclusion if it was constructed and is operating in a manner that is consistent with the Act, such as by treating water so that discharges, if any, from the system meet the Act's requirements, and it was constructed in compliance with the Act's requirements (*e.g.,* where the system was lawfully created pursuant to a section 404 permit). A waste treatment system that was created after the 1972 amendments but was constructed in violation of the Clean Water Act—for example, a system constructed without a section 404 permit when one was necessary—is not eligible for the exclusion, regardless of whether the system is currently treating discharges to meet the Act's requirements.

Finally, several commenters asserted that the waste treatment system exclusion violates the Clean Water Act. The agencies disagree that the waste treatment system exclusion is contrary to the Clean Water Act. Waste treatment systems have been excluded from the definition of ''waters of the United States'' since 1979, and the waste treatment system exclusion is a reasonable and lawful exercise of the agencies' authority to determine the scope of ''waters of the United States.'' *See Ohio Valley Envtl. Coal.* v. *Aracoma Coal Co.,* 556 F.3d 177, 212 (4th Cir. 2009) (upholding the waste treatment system exclusion as a lawful exercise of the agencies' ''authority to determine which waters are covered by the CWA'').

iii. Implementation

Consistent with the 1986 regulations, this rule provides that a waste treatment system must be ''designed to meet the requirements of the Clean Water Act.'' A waste treatment system may be ''designed to meet the requirements of the Clean Water Act'' where, for example, it is constructed pursuant to a Clean Water Act section 404 permit, *Ohio Valley Envtl. Coalition* v. *Aracoma Coal Co.,* 556 F.3d 177, 214–15 (4th Cir. 2009), or where it is ''incorporated in an NPDES permit as part of a treatment system,'' *N. Cal. River Watch* v. *City of*

[116] 85 FR 22250, 22325 (April 21, 2020) (''One ministerial change [to the waste treatment system exclusion] is the deletion of a cross-reference to a definition of 'cooling ponds' that no longer exists in the Code of Federal Regulations.''); 80 FR 37054, 37097 (June 29, 2015) (''One ministerial change [to the waste treatment system exclusion] is the deletion of a cross-reference in the current language to an EPA regulation that no longer exists.'').

Healdsburg, 496 F.3d 993, 1001 (9th Cir. 2007).

To be clear, the exclusion does not free a discharger from the need to comply with the Clean Water Act, including any effluent limitations guidelines and new source performance standards requirements applicable to the waste treatment system, and requirements applicable to the pollutants discharged *from* a waste treatment system to ''waters of the United States''; only discharges *into* the waste treatment system are excluded from the Act's requirements. As such, any entity would need to comply with the Clean Water Act by obtaining a section 404 permit for a new waste treatment system that will be constructed in ''waters of the United States,'' and a section 402 permit if there are discharges of pollutants from a waste treatment system into ''waters of the United States.'' Under the section 402 permit, discharges from the waste treatment system would need to meet the requirements of applicable effluent limitations guidelines and new source performance standards, as well as any required water quality-based effluent limitations. Further, consistent with the agencies' general practice implementing the exclusion, under this rule, a waste treatment system that ceases to serve the treatment function for which it was designed would not continue to qualify for the exclusion and could be deemed jurisdictional if it otherwise meets this rule's definition of ''waters of the United States.''

Moreover, as explained in section IV.C.7 of this preamble, the exclusions in this rule—including the waste treatment system exclusion—do not apply to features that, at the time they are assessed, are jurisdictional under paragraph (a)(1). Note, however, that an excluded waste treatment system—such as a cooling pond—may over time take on the characteristics of a jurisdictional water, such as a paragraph (a)(1) traditional navigable water.[117] In this scenario, the exclusion continues to apply and the waste treatment system does not become a jurisdictional water under paragraph (a)(1) or any other provision of the rule, unless or until the system ceases to serve the treatment function for which it was designed (as discussed in the immediately preceding paragraph).

With respect to the scope of the waste treatment system exclusion in this rule, the agencies do not interpret the exclusion to allow any party to dispose of waste or discharge pollutants into the excluded feature without authorization. Rather, for waters that would otherwise meet this rule's definition of ''waters of the United States,'' the agencies' intent, consistent with prior application of the NPDES program, is that the waste treatment system exclusion is generally available only for discharges associated with the treatment function for which the system was designed. Relatedly, consistent with the agencies' longstanding practice, a waste treatment system does not itself sever upstream waters from Clean Water Act jurisdiction.[118] In other words, if those upstream waters were ''waters of the United States,'' they remain ''waters of the United States'' and discharges to them thus may require a section 402 or 404 permit.

c. Other Exclusions

In this rule, the agencies are codifying exclusions for several features that they generally considered non-jurisdictional under the pre-2015 regulatory regime and the 2019 Repeal Rule and expressly excluded by regulation in the 2015 Clean Water Rule and 2020 NWPR. These features are: ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water; artificially irrigated areas that would revert to dry land if the irrigation ceased; artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons; waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Under the pre-2015 regulatory regime, the features listed above were generally not considered ''waters of the United States'' even though they were not explicitly excluded by regulation. The preamble to the 1986 regulations explained that the agencies ''generally do not consider [these] waters to be 'Waters of the United States.' '' 51 FR 41217 (November 13, 1986). The preamble further stated that ''the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories of waters is a water of the United States. EPA also has the right to determine on a case-by-case basis if any of these waters are 'waters of the United States.''' *Id.* The *Rapanos* Guidance expanded on the list of features that were generally considered non-jurisdictional. *Rapanos* Guidance at 11–12. In practice, the agencies did not generally assert jurisdiction over such waters. To provide clarity on which waters are jurisdictional and which are not, and to enhance certainty for the public, the agencies are codifying exclusions for these features in the regulatory text and removing the possibility that these waters could be found jurisdictional on a case-by-case basis. Because the agencies did not generally assert jurisdiction over these features in practice, codifying exclusions for these features is not a substantial change from the pre-2015 regulatory regime or the 2019 Repeal Rule. Many commenters supported codifying exclusions for these features. This approach is generally consistent with the 2015 Clean Water Rule and 2020 NWPR and will be familiar to the public.

In the final regulatory text for these exclusions, the agencies are consistently using the term ''dry land,'' rather than ''upland.'' The proposed rule and the pre-2015 regulatory regime used the phrases ''dry land'' and ''upland'' interchangeably in their description of features that the agencies considered to be generally non-jurisdictional. To provide additional clarity, the agencies are consistently using the term ''dry land'' throughout the regulatory text.[119] The term ''dry land'' refers to areas of the geographic landscape that do not include waters such as streams, rivers, wetlands, lakes, ponds, tidal waters, ditches, and the like. It is important to note that jurisdictional and non-jurisdictional waters are not considered ''dry land'' just because they lack water

[117] This situation may arise where, for example, a manmade cooling pond constructed in uplands takes on the characteristics of a traditional navigable water.

[118] *See, e.g.,* Memorandum of Non-Concurrence with Jurisdictional Determinations POA–1992–574 & POA–1992–574–Z (October 25, 2007), *available at https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll5/id/1454* (''EPA and the Corps agree that the agencies' designation of a portion of waters of the U.S. as part of a waste treatment system does not itself alter CWA jurisdiction over any waters remaining upstream of such system.'').

[119] While the agencies consistently use the phrase ''dry land'' in the regulatory text to provide clarity to the public, this preamble and documents supporting this rule use the phrases ''dry land'' and ''upland'' interchangeably.

at a given time. Similarly, an area may remain ''dry land'' even if it is wet after a precipitation event.

The agencies recognize that for certain longstanding exclusions, the 2020 NWPR replaced the word ''upland'' in the regulatory text with the word ''upland'' *and* a reference to non-jurisdictional features. For example, the 2020 NWPR regulatory text excluded ''[w]ater-filled depressions constructed or excavated in upland *or in non-jurisdictional waters.*'' 85 FR 22338 (April 21, 2020) (emphasis added). This approach was a deviation from longstanding practice as both the pre-2015 regulatory regime and the 2015 Clean Water Rule limited the exclusions to features constructed in upland. The distinction between ''upland'' or ''dry land'' and ''non-jurisdictional features'' is important because ''non-jurisdictional features'' can include features like certain ephemeral streams and wetlands that are not jurisdictional but are not ''dry.'' This change in the 2020 NWPR resulted in an expansion of the exclusion as compared to the pre-2015 regulatory regime. The agencies disagree with the approach in the 2020 NWPR. It deviated from the longstanding concept of limiting certain exclusions to instances where features are constructed in dry land. Limiting the exclusions in this rule to features constructed in dry land more appropriately captures the agencies' intent to exclude features associated with areas that are commonly understood as ''dry.'' Limiting the exclusions in this way also puts reasonable bounds on these categorical exclusions and ensures that features constructed in land that is *not* dry are examined more closely to determine whether they are jurisdictional.

i. Ditches

(1) This Rule

In this rule, the agencies are codifying an exclusion for ditches (including roadside ditches) excavated wholly in and draining only dry lands and that do not carry a relatively permanent flow of water. Excluding these ditches from jurisdiction is consistent with the scope of ditches that were generally non-jurisdictional under the pre-2015 regulatory regime and the 2019 Repeal Rule. The preamble to the 1986 regulations explains that ''[n]on-tidal drainage and irrigation ditches excavated on dry land'' are generally not considered ''waters of the United States.'' 51 FR 41217 (November 13, 1986). The agencies shifted this approach slightly in the *Rapanos* Guidance and explained that ''ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not waters of the United States.'' *Rapanos* Guidance at 11–12. Excluding certain ditches from jurisdiction is also consistent with the 2015 Clean Water Rule and the 2020 NWPR. While these rules took different approaches to determining which ditches should be excluded, due in part to different overall constructs for the definition of ''waters of the United States'' under those rules, both rules excluded some ditches. The agencies, in this rule, are continuing the approach described in the *Rapanos* Guidance and are codifying that approach in the regulatory text to provide clarity and certainty. As discussed above, the agencies are also maintaining their longstanding position that paragraph (a)(1) waters are not subject to the exclusions and, most relevant to the exclusion for ditches and consistent with the 1986 preamble, tidal ditches will continue to be jurisdictional under paragraph (a)(1). Continuing the approach described in the *Rapanos* Guidance is consistent with the agencies' intent with this rule to interpret ''waters of the United States'' to mean the waters defined by the longstanding 1986 regulations, with amendments to reflect the agencies' interpretation of the statutory limits on the scope of the ''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 case law, public comment, 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.''

(2) Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

Consistent with the *Rapanos* Guidance, this rule excludes ''ditches (including roadside ditches) that are excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water.'' *Rapanos* Guidance at 8. The scope of the ditch exclusion is consistent with the agencies' longstanding practice and technical judgment that certain waters and features are not subject to regulation under the Clean Water Act. The exclusion is also informed by *Rapanos.* The agencies have concluded that the relatively permanent standard in *Rapanos* on its own is insufficient to achieve the objective of the Act. *See* section IV.A of this preamble. However, the relatively permanent standard is generally consistent with the agencies' longstanding practice of finding certain ditches that lack important hydrogeomorphic features to be non-jurisdictional. The ditches excluded under this rule and longstanding practice are often part of Tribal, State, and local land use planning and can also be subject to Tribal or State jurisdiction, as the Clean Water Act recognizes that Tribes and States can regulate more broadly than the Federal Government. Excluding certain ditches from jurisdiction under this rule also improves administrative efficiency and provides certainty and clarity to the public. This exclusion simplifies the approved jurisdictional determination process and makes it more straightforward for agency staff to implement the rule and for the public to determine whether certain features are subject to Federal jurisdiction.

Several commenters requested that the agencies exclude a broader set of ditches from the definition of ''waters of the United States.'' The agencies find that it would not be appropriate to exclude a broader set of ditches from the definition of ''waters of the United States'' in this rule. Congress clearly intended that some ditches are jurisdictional under the Clean Water Act. The Clean Water Act states that, with some exceptions, the discharge of dredge or fill material ''for the purpose of construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches'' is not prohibited by or otherwise subject to regulation under the Clean Water Act. 33 U.S.C. 1344(f)(1)(C). Because this exemption only applies to discharges of dredged or fill material into ''waters of the United States,'' there would be no need for such a permitting exemption if all ditches were considered non-jurisdictional under the Clean Water Act. The agencies in the 2020 NWPR similarly interpreted section 404(f) as an indication that Congress intended that ditches could in some instances be jurisdictional under the Clean Water Act. 85 FR 22297 (April 21, 2020). The agencies' approach in this rule—which finds that some ditches are jurisdictional while others are not—reflects full and appropriate consideration of section 404(f), the water quality objective in Clean Water Act section 101(a), and the policies relating to responsibilities and rights of Tribes and States under section 101(b). The approach of finding certain ditches jurisdictional while excluding others from jurisdiction is also consistent with the 2015 Clean Water Rule and the 2020 NWPR, as well as the pre-2015

regulatory regime and the 2019 Repeal Rule. Human-made tributaries like ditches can provide functions that restore and maintain the chemical, physical, and biological integrity of downstream paragraph (a)(1) waters. The scientific literature indicates that structures like ditches that convey water continue to connect to and effect downstream waters, though the connectivity and effects can be different than that of natural streams. Indeed, ditches can enhance the extent of connectivity by more effectively conveying the water downstream. *See* section III.A of the Technical Support Document for additional information; *see also* section IV.A.2.b.i of this preamble for further discussion of these issues.

Several commenters asked for additional explanation of terms and phrases used in the exclusion for certain ditches. The phrase ''excavated wholly in and draining only dry land'' means that at the time the ditch was constructed, it was excavated in dry land as that term is described above. It further means that at the time of construction, the ditch was excavated entirely, or wholly, in dry land. Finally, it means that the ditch is not situated close enough to a water feature, including wetlands, to drain that water feature. For example, a ditch that is constructed in dry land and receives water from runoff and other ditches constructed in dry land and draining only dry land, or from groundwater intercepted as the ditch was dug, would be considered a ditch ''excavated wholly in and draining only dry land.'' In contrast, a ditch that is constructed in dry land but also drains a wetland would not be considered a ditch that drains only dry land, and a ditch constructed in both a wetland and in dry land would not be considered to be excavated wholly in dry land. The jurisdictional status of a ditch is assessed on a case-by-case basis by considering the specific characteristics of the site at issue.

The phrase ''do not carry a relatively permanent flow of water'' means that the ditch is not a relatively permanent water as that term is explained in this rule. Relatively permanent flow, as discussed in section IV.C.4.c.ii of this preamble, means the ditch contains flowing or standing water year-round or continuously during certain times of the year for more than a short duration in direct response to precipitation. The language ''do not carry a relatively permanent flow of water'' is consistent with the language in the *Rapanos* Guidance.

The use of the word ''and'' in the exclusion for ditches indicates that all three criteria (excavated wholly in dry land, draining only dry land, and not carrying a relatively permanent flow of water) must be satisfied for the ditch to be excluded. However, even where a ditch is not excluded, it is only jurisdictional if it satisfies the terms of the categories of waters that are considered jurisdictional under this rule. For example, a ditch that is not excluded, but does not satisfy either the relatively permanent or significant nexus standard would not be jurisdictional under this rule.

In addition, the agencies' longstanding interpretation of the Clean Water Act is that it is not relevant whether a water has been constructed or altered by humans for purposes of determining whether a water is jurisdictional under the Clean Water Act. In *S.D. Warren* v. *Maine Board of Envt'l Protection,* Justice Stevens, writing for a unanimous Court, stated: ''nor can we agree that one can denationalize national waters by exerting private control over them.'' 547 U.S. 370, 379 n.5 (2006). In *Rapanos,* all members of the Court generally agreed that ''highly artificial, manufactured, enclosed conveyance systems—such as 'sewage treatment plants,' . . . and the 'mains, pipes, hydrants, machinery, buildings, and other appurtenances and incidents' . . . likely do not qualify as 'waters of the United States,' despite the fact that they may contain continuous flows of water.'' 547 U.S. at 737 (Scalia, J., plurality opinion). But there was also agreement that certain waters that are human-made or man-altered, such as canals with relatively permanent flow, are ''waters of the United States.'' *Id.* at 736 n.7. Justice Kennedy and the dissent rejected the conclusion that because the word ''ditch'' was in the definition of ''point source'' a ditch could never be ''waters of the United States'': ''certain water bodies could conceivably constitute both a point source and a water.'' *Id.* at 772 (Kennedy, J., concurring in the judgment); *see also id.* at 802 (Stevens, J., dissenting) (''The first provision relied on by the plurality—the definition of 'point source' in 33 U.S.C. 1362(14)—has no conceivable bearing on whether permanent tributaries should be treated differently from intermittent ones, since 'pipe[s], ditch[es], channel[s], tunnel[s], conduit[s], [and] well[s]' can all hold water permanently as well as intermittently.''). While the plurality, Justice Kennedy, and the dissent formulated different standards for determining what are ''waters of the United States,'' none of the standards qualified jurisdiction on a distinction between ''natural'' versus ''human-made'' or ''human-altered'' waters or excluded ditches in their entirety. Further, no Federal Court of Appeals has interpreted *Rapanos* to exclude ditches from the Clean Water Act. This case law demonstrates that certain ditches have long been subject to regulation as ''waters of the United States.''

Several commenters suggested that certain types of ditches, including roadside ditches, ditches associated with railroad operations, and agricultural ditches, should be excluded in this rule. This rule does not explicitly exclude these types of ditches, but the exclusions included in this rule address many ditches of these types. Moreover, since the exclusion for ditches in this rule focuses on the physical (*e.g.,* constructed in dry land) and flow characteristics of ditches, the exclusion addresses all ditches that the agencies have concluded should not be subject to jurisdiction, including certain ditches on agricultural lands and ditches associated with modes of transportation, such as roadways, airports, and rail lines.

(3) Implementation

When assessing the jurisdictional status of a ditch, the agencies will evaluate the entire reach of the ditch to determine if it has relatively permanent flow, consistent with the reach approach for tributaries described in section IV.C.4.c of this preamble. As described for tributaries, the agencies will assess the flow characteristics of a particular ditch reach at the farthest downstream limit of the ditch reach (*i.e.,* the point the ditch enters a higher order in the network). Where data indicate the flow characteristics at the downstream limit is not representative of the entire reach of the ditch, the flow characteristics that best characterizes the entire ditch reach will be used. For example, if the majority of the ditch reach lacks relatively permanent flow but some portions of the reach contain isolated pools of standing water, that reach of the ditch likely would not be considered to have relatively permanent flow. As a result, such a ditch could be excluded from jurisdiction if it satisfies the other requirements of the ditch exclusion. Additionally, a situation could arise where there is one reach of a ditch with relatively permanent flow that is jurisdictional and is connected to downstream waters via a separate reach of the ditch that is non-jurisdictional. This approach to evaluating jurisdiction of each reach of a ditch separately is

consistent with the agencies' approach for evaluating jurisdiction over tributaries, which evaluates each reach of a tributary separately. *See* section IV.C.4.c.ii of this preamble for further discussion of applying the relatively permanent standard to tributary reaches.

Questions have sometimes arisen regarding the distinctions between ditches and human-altered natural streams and rivers. Alteration or modification of a natural stream or river for flood control, erosion control, development, agriculture, and other reasons does not convert the stream or river to an excluded ditch. A stream or river that has been channelized or straightened because its natural sinuosity has been altered, cutting off the meanders, is not a ditch. A stream that has banks stabilized through use of concrete or rip-rap (*e.g.,* rocks or stones) is not a ditch. In these instances, the altered or modified streams and rivers are not ditches and would also not satisfy the exclusion for ditches because they are not ''excavated wholly in and draining only dry land.'' *See* section IV.A.2.b.i of this preamble for further discussion of this rule's coverage of human-made or human-altered tributaries.

Questions have also arisen regarding relocated streams and rivers. A stream or river that has been relocated is not a ditch and would also not satisfy the exclusion for ditches because it is not ''excavated wholly in and draining only dry land.'' A stream or river that is relocated should be evaluated as a tributary when it contributes flow directly or indirectly to a paragraph (a)(1) water. A stream or river is considered relocated either when at least a portion of its original channel has been physically moved, or when the majority of its flow has been redirected. Even where the stream or river has been relocated (*i.e.,* the majority of its flow has been redirected), the remnant portions of the former stream may still be jurisdictional where it satisfies the terms of paragraph (a) of this rule.

The agencies note that an excluded ditch that connects downstream to a jurisdictional tributary would not be jurisdictional merely because of its downstream connection to the jurisdictional tributary. Furthermore, wetlands that develop entirely within the confines of an excluded ditch are not jurisdictional, as discussed further in section IV.C.5.b of this preamble.

Certain excluded ditches (such as roadside and agricultural ditches that satisfy the requirements of the ditch exclusion) may receive backflow from a jurisdictional water, such as a perennial river that overflows into the ditch and extends the OHWM of the contributing water into the ditch. In these circumstances, the agencies will continue the practice of extending the OHWM of the jurisdictional contributing water up to the location of its OHWM within the otherwise non-jurisdictional ditch, as required by Corps regulations. *See* 33 CFR 328.4(c). In these instances, the ditch is not necessarily jurisdictional; the feature extending into the ditch is jurisdictional. For example, an excluded ditch may connect with a relatively permanent river, and at times, high flows from the river may extend into the excluded ditch such that the OHWM of the jurisdictional river also extends into the ditch. The agencies will continue to treat the portion of the relatively permanent river that extends into the excluded ditch, up to the OHWM of the river, as part of the jurisdictional river. The ditch remains excluded, but the flow in the ditch that is from the relatively permanent river will be jurisdictional as part of the river.

The agencies will use the most accurate and reliable resources to support their decisions regarding whether a feature is an excluded ditch. This will typically involve the use of multiple sources of information and those sources may differ depending on the resource in question or the region in which the resource is located. Along with field data and other current information on the subject waters, historic tools and resources may be used to determine whether a feature is an excluded ditch. Several sources of information may be required to make such determination. Information sources may include historic and current topographic maps, historic and recent aerial photographs, Tribal, State, and local records and surface water management plans (such as county ditch or drainage maps and datasets), NHD or NWI data, agricultural records, street maintenance data, precipitation records, historic permitting and jurisdictional determination records, certain hydrogeomorphological or soil indicators, wetlands and conservation programs and plans, and functional assessments and monitoring efforts. For example, when a USGS topographic map displays a tributary located upstream and downstream of a potential ditch, this may indicate that the potential ditch was constructed in or relocated a tributary. As another example, an NRCS soil survey displaying the presence of specific soil series which are linear in nature and generally parallel to a potential ditch may be indicative of alluvial deposits formed by a tributary in which the potential ditch was constructed. Additionally, the presence of a pond in a historic aerial photograph that lies along the flowpath of the potential ditch, for example, may provide an indication that the potential ditch was not constructed wholly in and drained only dry land.

This rule does not affect the permitting exemptions for certain activities described in Clean Water Act section 404(f), including the exemption in section 404(f)(1)(C) for the construction and maintenance of irrigation ditches and the maintenance of drainage ditches. The agencies have historically taken the position that a ditch can be both ''waters of the United States'' and a point source. The 2020 NWPR, however, changed the agencies' longstanding position and stated that a ditch is either ''waters of the United States'' or a point source. 85 FR 22297 (April 21, 2020). The 2020 NWPR justified this position by noting that the Clean Water Act defines ''point sources'' to include ditches and that the plurality opinion in *Rapanos* stated that ''[t]he definitions thus conceive of 'point sources' and 'navigable waters' as separate and distinct categories. The definition of 'discharge' would make little sense if the two categories were significantly overlapping.'' *See* 547 U.S. at 735–36 (Scalia, J., plurality opinion); NWPR Response to Comments, Section 6 at 12–13.

The agencies have further evaluated this question and concluded that the better reading of the statute is the agencies' historic position that a ditch can be both a point source and ''waters of the United States.'' That position dates back to 1975 in an opinion of the General Counsel of EPA interpreting the Clean Water Act. That opinion stated: ''it should be noted that what is prohibited by section 301 is *'any addition* of *any pollutant* to navigable waters from any point source.' It is therefore my opinion that, even should the finder of fact determine that any *given* irrigation ditch is a navigable water, it would still be permittable as a point source where it discharges into another navigable water body, provided that the other point source criteria are also present.'' *In re Riverside Irrigation District,* 1975 WL 23864, at *4 (June 27, 1975) (emphasis in original). The opinion stated that ''to define the waters here at issue as navigable waters and use that as a basis for exempting them from the permit requirement appears to fly directly in the face of clear legislative intent to the contrary.'' *Id.*

In addition, in *Rapanos,* Justice Kennedy and the dissent rejected the

conclusion that because the word ''ditch'' was in the definition of ''point source'' a ditch could never be ''waters of the United States'': ''certain water bodies could conceivably constitute both a point source and a water.'' 547 U.S. at 772 (Kennedy, J., concurring in the judgment); *see also id.* at 802 (Stevens, J., dissenting) (''The first provision relied on by the plurality—the definition of ''point source'' in 33 U.S.C. [section] 1362(14)—has no conceivable bearing on whether permanent tributaries should be treated differently from intermittent ones, since 'pipe[s], ditch[es], channel[s], tunnel[s], conduit[s], [and] well[s]' can all hold water permanently as well as intermittently.'').[120] Even the plurality opinion in *Rapanos,* which was relied upon by the agencies in the 2020 NWPR for its change in position, left room for some ditches to both point sources and ''waters of the United States,'' finding that the two categories should not be ''significantly'' overlapping. 547 U.S. at 735–36 (Scalia, J., plurality opinion).

There is simply no indication in the text of the Clean Water Act that ditches that meet the definition of a point source cannot also be ''waters of the United States.'' To the contrary, the fact that Congress provided an exemption for discharges of dredged or fill material for construction or maintenance of certain types of ditches from permitting in Clean Water Act section 404(f) is further evidence that under the plain language of the statute ditches can, at least in some cases, be both point sources and ''waters of the United States.'' The agencies therefore find that their longstanding, historic view that a ditch can be both a point source and ''waters of the United States'' is the better interpretation.

ii. Other Features

(1) This Rule

In this rule, the agencies are codifying exclusions for certain other features that were not generally considered jurisdictional under the pre-2015 regulatory regime. Consistent with the features listed in the preamble to the 1986 regulations, the agencies are codifying exclusions for: artificially irrigated areas that would revert to dry land if the irrigation ceased; artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons; and waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of ''waters of the United States.'' *See* 51 FR 41217 (November 13, 1986). In addition, consistent with the *Rapanos* Guidance, the agencies are excluding swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow. *See Rapanos* Guidance at 11–12. Excluding these features from jurisdiction is consistent with the 2015 Clean Water Rule and the 2020 NWPR, as well as the pre-2015 regulatory regime and the 2019 Repeal Rule, which considered these features to be generally non-jurisdictional. The agencies are codifying exclusions for these features in the regulatory text to provide clarity and certainty.

The agencies are finalizing two minor changes to the exclusion for swales and erosional features in this rule as compared to the language in the *Rapanos* Guidance. The Guidance explained that the agencies generally found ''[s]wales or erosional features (*e.g.,* gullies, small washes characterized by low volume, infrequent, or short duration flow)'' to be non-jurisdictional. *Rapanos* Guidance at 11–12. First, this rule's regulatory text excludes ''swales and erosional features'' rather than ''swales or erosional features.'' The agencies find that the use of ''or'' in this phrase in the *Rapanos* Guidance was confusing because swales are substantively different from erosional features and thus should not be referred to in the alternative. To provide additional clarity, the agencies are using the connector ''and'' in this rule's regulatory text for this exclusion. Second, the agencies are moving the parentheses in this provision so that only the phrase ''*e.g.,* gullies, small washes'' is included in parentheses. This change clarifies that the rest of the language in this exclusion, ''characterized by low volume, infrequent, or short duration flow'' applies to both swales and erosional features. This change ensures that the exclusion more accurately describes those swales and erosional features which are discrete topographic features on the landscape, rather than low gradient depressional areas that convey only overland sheetflow and which are not included within this exclusion. The agencies are making these two ministerial changes from the *Rapanos* Guidance to provide additional clarity in this rule, but the agencies' application of the exclusion for these features as compared to the pre-2015 regulatory regime remains substantively and operationally unchanged.

(2) Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

As described at the beginning of this section, codifying exclusions for these features is consistent with the agencies' longstanding practice that certain waters and features are not subject to the Clean Water Act. The exclusions are also guided by Supreme Court cases that recognized that there are certain features that were not primarily the focus of the Clean Water Act. *See, e.g., Rapanos* 547 U.S. at 734. The exclusions are an important aspect of the agencies' policy goal of providing clarity, certainty, and predictability for the regulated public and regulators. The categorical exclusions will simplify the process of determining jurisdiction, and they reflect the agencies' determinations of the lines of jurisdiction based on the case law, policy determinations, and the agencies' experience and expertise.

Many commenters generally supported adding the exclusions in the regulatory text. Several of these commenters stated that adding the exclusions to the regulatory text would provide clarity and certainty and avoid time and cost burdens. The agencies agree with these commenters and have added these exclusions, along with the exclusion for ditches, to the regulatory text. Other commenters stated that exclusions of certain waterbodies were not based on science or the significant nexus standard. Determinations about the scope of ''waters of the United States'' are informed by science but also informed by the agencies' decades of implementation experience. This rule reflects the judgment of the agencies in balancing the science, the agencies' expertise, and the regulatory goals of providing clarity to the public while

[120] The agencies considered that a district court has reached a contrary conclusion, but the agencies decline to adopt the decision's reasoning in this rule, including because it relies on the change in interpretation articulated for the first time in the 2020 NWPR and which the agencies reject in this rule, and is inconsistent with the position of five Justices in *Rapanos. See Toxics Action Center, Inc. & Conservation Law Found.* v. *Casella Waste Systems, Inc.,* 2021 WL 3549938, *8 (D.N.H. Aug. 11, 2021) (''If a waterway can simultaneously be a navigable water (that is, a water of the United States) and a point source, the distinction the statute draws between the two categories using the prepositions 'from' and 'to' would be rendered meaningless.'').

protecting the integrity of paragraph (a)(1) waters, consistent with the law.

(3) Implementation

This section addresses implementation of the exclusions for certain other features that were not generally considered jurisdictional under the pre-2015 regulatory regime in the order in which the relevant provision appears in the regulatory text.

In this rule, the agencies clarify their longstanding view that the exclusion for certain artificially irrigated areas applies only to the specific land being directly irrigated that would reasonably revert to dry land should irrigation cease. The exclusion does not apply to all waters within watersheds where irrigation occurs.

Questions have arisen in the past regarding whether a feature that initially satisfied the terms of an exclusion but no longer satisfies those terms continues to be excluded from jurisdiction. For example, if an artificial pond created by excavating land to collect and retain water is initially used exclusively for stock watering, irrigation, settling basins, or rice growing but is subsequently used for a different purpose, the question has arisen whether that pond is still excluded from jurisdiction. Consistent with the agencies' longstanding practice, if a previously excluded feature no longer meets the terms of the exclusion, it is no longer excluded. If it no longer satisfies the terms of an exclusion, it would be jurisdictional if it otherwise meets the definition of ''waters of the United States'' under this rule.

The agencies recognize that artificial lakes and ponds are often used for more than one purpose and can have other beneficial purposes, such as animal habitat, water retention, or recreation. For example, artificial lakes and ponds that are created by excavating dry land to collect and retain water for stock watering are often extensively used by waterfowl and other wildlife. The agencies' historic practice, which the agencies intend to continue under this rule, is to consider these features as excluded even when there is another incidental beneficial use of the feature.

The artificial lakes and ponds exclusion applies only to those lakes and ponds that satisfy the terms of the exclusion. Paragraph (a)(2) impoundments are not covered under this exclusion. This exclusion only applies to features that were excavated in dry land or were diked in dry land. Paragraph (a)(2) impoundments are not excavated in dry land or diked in dry land. However, consistent with the agencies' longstanding practice, when an applicant receives a permit to impound ''waters of the United States'' to construct a waste treatment system, the resulting waste treatment system is subject to that exclusion as long as it is used for this permitted purpose. *See* the discussion above regarding waste treatment systems.

Artificial lakes and ponds that satisfy the terms of the exclusion would not be jurisdictional under this rule even if they have a hydrologic surface connection to ''waters of the United States.'' Non-jurisdictional conveyances created in dry land that are physically connected to and are a part of the excluded feature remain excluded.

Swales and erosional features are excluded when characterized by low volume, infrequent, or short duration flow. Swales are generally shallow features in the landscape that may convey water across dry land areas during and following storm events and typically have grass or other low-lying vegetation throughout the swale. While a swale is a discrete topographic feature, it does not have a defined channel, nor an OHWM. This distinguishes a swale from an ephemeral stream because ephemeral streams typically have a channel and at least one indicator of an OHWM. *See* section IV.A.ii of the Technical Support Document for additional discussion of swales. Erosional features can typically be distinguished from swales because erosional features are generally deeper than swales and have an absence of vegetation. Erosional features can be distinguished from tributaries by the absence of a channel and an OHWM. Concentrated surface runoff can occur within erosional features without creating the permanent physical characteristics associated with a channel and OHWM. Some ephemeral streams are colloquially called ''gullies'' or the like even when they exhibit a channel and an OHWM. Regardless of the name they are given locally, waters that are tributaries under this rule are not excluded erosional features. *See* Technical Support Document section IV.A.ii for additional discussion on how to distinguish between tributaries, swales, and erosional features.

Erosional features like rills and gullies also typically lack a defined channel and an OHWM. Rills are very small incisions formed by overland water flows eroding the soil surface during rainstorms. Rills are less permanent on the landscape than streams. Gullies tend to be much smaller than streams, and are often deeper than they are wide, with very steep banks. Gullies are commonly found in areas without much vegetation or with soils that are prone to erosion.

8. Other Definitions

The final rule regulatory text defines the terms ''wetlands,'' ''high tide line,'' ''ordinary high water mark,'' and ''tidal water.'' The definitions of these four terms in the final rule are identical to the definitions of these terms in the 1986 regulations, 2019 Repeal Rule, and 2020 NWPR. While the 1986 regulations included these definitions only in the Corps' regulations, not EPA's regulations, the 2015 Clean Water Rule and 2020 NWPR included these definitions in both agencies' regulations. To provide additional clarity and consistency in comparison to the 1986 regulations, the final rule includes these definitions in both agencies' regulations. The agencies are not amending the definitions of these terms from the 1986 regulations.

The regulatory text in the final rule also defines the term ''adjacent.'' The agencies amended the definition of ''adjacent'' in the 2020 NWPR but are returning to the longstanding definition of that term in the 1986 regulations. Returning to the definition of ''adjacent'' from the 1986 regulations is consistent with the agencies' intent to return to the pre-2015 regulatory regime's approach to ''waters of the United State.'' This section briefly describes these five definitions and their history and implementation. *See* section IV.G of this preamble and previous sections of IV.C of this preamble above for further discussion on implementation.

Many commenters suggested that the agencies include additional definitions in this rule, including definitions for ''navigable''; ''similarly situated''; ''tributary''; and ''physical integrity,'' ''chemical integrity,'' and ''biological integrity.'' The agencies find that the regulatory text in this rule and the preamble's explanation of the regulatory text clearly present the agencies' definition of ''waters of the United States'' and that additional definitions are not needed. Moreover, the agencies seek to avoid regulatory language that is overly detailed or prescriptive, as interpretations of some of these terms could vary depending on the region or evolve over time with scientific advances.

a. Wetlands

This rule makes no changes to the definition of ''wetlands'' contained in the 1986 regulations (and in the 2020 NWPR, which made no changes to the 1986 regulation). ''Wetlands'' are defined as ''those areas that are inundated or saturated by surface or

ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.'' Wetlands have been defined in the Corps' regulations since 1975 and in EPA's regulations since 1979, with only minor differences from the 1986 regulations. The agencies are not amending this longstanding definition in this rule.

Wetlands, including ''the classic swamplands in the Southeast, such as the great Okefenokee, the Great Swamp of New Jersey, . . . the majestic, sweeping marshes of the Everglades, the remote Alakai in Hawaii, and the tiny bogs of New England,'' Senate Debate, August 4, 1977, Comments of Mr. Chafee at 13560, are ''transitional areas between terrestrial and aquatic ecosystems.'' Science Report at 2–5. Scientific systems for classifying areas as wetlands vary but typically include three components: ''the presence of water, either at the surface or within the root zone,'' ''unique soil conditions,'' and the presence of vegetation ''adapted to the wet conditions.'' [121] The agencies' longstanding definition of wetlands, unchanged in this rule, requires these three factors of hydrology, hydric soils, and hydrophytic vegetation under normal circumstances.

Due to the many important functions that wetlands perform that impact the integrity of paragraph (a)(1) waters, wetlands have long been considered waters that can be subject to Clean Water Act jurisdiction. The Corps first added wetlands explicitly in the definition of ''waters of the United States'' in 1975 and EPA did the same in 1979. 40 FR 31320, 31324–5 (July 25, 1975); 44 FR 32854, 32901 (June 7, 1979). In contrast, as discussed in section IV.C.7 of this preamble, dry lands are areas that do not meet all three wetland factors and that are not other waterbody types (such as lakes, ponds, streams, ditches, and impoundments). For example, an area that under normal circumstances contains only hydrophytic vegetation without the presence of wetland hydrology and hydric soils and that lacks an OHWM would typically be considered dry land. Only those wetlands that meet the provisions to be a paragraph (a)(1) water, jurisdictional adjacent wetland, paragraph (a)(2) impoundment, or paragraph (a)(5) water would be considered ''waters of the United States'' under this rule.

As under prior regimes, wetlands are identified in the field in accordance with the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and applicable regional delineation manuals. Field work is often necessary to confirm the presence of a wetland and to accurately delineate its boundaries. However, in addition to field observations on hydrology, vegetation, and soils, remote tools and resources can be used to support the identification of a wetland.[122]

b. Adjacent

This rule defines the term ''adjacent'' with no changes from the 45-year-old definition. ''Adjacent'' is defined as ''bordering, contiguous, or neighboring. Wetlands 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.' '' This is a longstanding and familiar definition that is supported by the text of the statute, Supreme Court case law, and science. *See, e.g., Riverside Bayview,* 474 U.S. at 134 (''[T]he 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.''). Thus, the longstanding definition of ''adjacent'' reasonably advances the objective of the Clean Water Act. To be jurisdictional under this rule, however, wetlands must meet this definition of adjacent *and* either be adjacent to a traditional navigable water, the territorial seas, or an interstate water, *or* otherwise fall within the adjacent wetlands provision and meet either the relatively permanent standard or the significant nexus standard. The determination of whether a wetland is ''adjacent'' is distinct from whether an ''adjacent'' wetland meets the relatively permanent standard; however, wetlands that have a continuous surface connection to a relatively permanent water meet the definition of ''adjacent'' and are, therefore, a subset of adjacent wetlands. *See* section IV.C.5 of this preamble for further discussion of the adjacent wetlands provision of this rule.

The longstanding definition, by its terms, does not require flow from the wetland to the jurisdictional water or from the jurisdictional water to the wetland (although such flow in either direction can be relevant to the determination of adjacency). The Supreme Court in *Riverside Bayview,* in deferring to the Corps' ecological judgment about the relationship between waters and their adjacent wetlands as an ''adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act,'' rejected an argument that such wetlands had to be the result of flow in a particular direction to be adjacent: ''This holds true even for wetlands that are not the result of flooding or permeation by water having its source in adjacent bodies of open water. The Corps has concluded that wetlands may affect the water quality of adjacent lakes, rivers, and streams even when the waters of those bodies do not actually inundate the wetlands. For example, wetlands that are not flooded by adjacent waters may still tend to drain into those waters. In such circumstances, the Corps has concluded that wetlands may serve to filter and purify water draining into adjacent bodies of water, see 33 CFR 320.4(b)(2)(vii) (1985), and to slow the flow of surface runoff into lakes, rivers, and streams, and thus prevent flooding and erosion, see §§ 320.4(b)(2)(iv) and (v). In addition, adjacent wetlands may 'serve significant natural biological functions, including food chain production, general habitat, and nesting, spawning, rearing and resting sites for aquatic . . . species.' '' 447 U.S at 134–35.

The agencies will continue their longstanding practice under this definition and consider wetlands adjacent if one of the following three criteria is satisfied. First, there is an unbroken surface or shallow subsurface connection to jurisdictional waters. All wetlands that directly abut jurisdictional waters have an unbroken surface or shallow subsurface connection because they physically touch the jurisdictional water. Wetlands that do not directly abut a jurisdictional water may have an unbroken surface or shallow subsurface connection to jurisdictional waters. Water does not need to be continuously present in the surface or shallow subsurface connection. Second, they are physically separated from jurisdictional waters by ''man-made dikes or barriers, natural

[121] *See* William J. Mitsch & James G. Gosselink, *Wetlands* at 29 (5th ed. 2015).

[122] Examples include USGS topographic maps (*available at https://www.usgs.gov/the-national-map-data-delivery/topographic-maps*), NRCS soil maps and properties of soils including flood frequency and duration, ponding frequency and duration, hydric soils, and drainage class (*available at https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx* or via the NRCS Soil Survey Geographic Database (SSURGO) *available at https://catalog.data.gov/dataset/soil-survey-geographic-database-ssurgo*), aerial or high-resolution satellite imagery, high-resolution elevation data (*e.g., https://apps.nationalmap.gov/downloader/#/*), and NWI maps (*available at https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper*).

river berms, beach dunes, and the like.'' Or third, their proximity to a jurisdictional water is reasonably close, such that ''adjacent wetlands have significant effects on water quality and the aquatic ecosystem.'' *Riverside Bayview,* 474 U.S. at 135 n.9. *See* section IV.C.5 of this preamble.

''Adjacent'' under the well-established definition the agencies are maintaining in this rule includes wetlands separated from other ''waters of the United States'' by ''man-made dikes or barriers, natural river berms, beach dunes, and the like.'' Such adjacent wetlands continue to have a hydrologic connection to the water to which they are adjacent because constructed dikes or barriers, natural river berms, beach dunes, and the like typically do not block all water flow. This hydrologic connection can occur via seepage or over-topping, where water from the nearby traditional navigable water, interstate water, the territorial seas, impoundment, or tributary periodically overtops the berm or other similar feature. Water can also overtop a natural berm or artificial dike and flow from the wetland to the water to which it is adjacent. As noted above, the Supreme Court has concluded that adjacent wetlands under this definition are not limited to only those that exist as a result of ''flooding or permeation by water having its source in adjacent bodies of open water,'' and that wetlands may affect the water quality in adjacent waters even when those waters do not actually inundate the wetlands. *Riverside Bayview,* 474 U.S. at 134–35. In addition, river berms, natural levees, and beach dunes are all examples of landforms that are formed by natural processes and do not isolate adjacent wetlands from the streams, lakes, or tidal waters that form them. River berms, natural levees, and the wetlands and waters behind them are part of the floodplain. Natural levees are discontinuous, and the openings in these levees allow for a hydrologic connection to the stream or river and thus the periodic mixing of river water and backwater. Beach dunes are formed by tidal or wave action, and the wetlands that establish behind them experience a fluctuating water table seasonally and yearly in synchrony with sea or lake level changes. The terms ''earthen dam,'' ''dike,'' ''berm,'' and ''levee'' are used to describe similar constructed structures whose primary purpose is to help control flood waters. Such levees and similar structures also do not isolate adjacent wetlands.

In addition, adjacent wetlands separated from a jurisdictional water by a natural or man-made [123] berm serve many of the same functions as other adjacent wetlands. There are also other important considerations, such as chemical and biological functions provided by the wetland. For instance, adjacent waters behind berms can still serve important water quality functions, including filtering pollutants and sediment before they reach other jurisdictional waters and ultimately a paragraph (a)(1) water. Wetlands behind berms, where the system is extensive, can help reduce the impacts of storm surges caused by hurricanes. Adjacent wetlands separated from jurisdictional waters by berms and the like also maintain ecological connection with those waters. For example, wetlands behind natural and artificial berms can provide important habitat for aquatic and semi-aquatic species that use both the wetlands and the nearby water for basic food, shelter, and reproductive requirements. Though a berm may reduce habitat functional value and may prevent some species from moving back and forth from the wetland to the nearby jurisdictional water, many species remain able to use both habitats despite the presence of such a berm. In some cases, the natural landform or artificial barrier can provide extra refuge from predators, for rearing young, or other life cycle needs.

The agencies received a number of comments on the definition of ''adjacent.'' Many commenters supported the continued use of the well-established definition, while several commenters suggested that the agencies should use only the relatively permanent standard or continue the approach to adjacent wetlands that was included in the 2020 NWPR. Some commenters critiqued the proposed definition of ''adjacent,'' with some stating that the definition was ''overly-broad and ambiguous.'' A commenter asserted that the word ''adjacent'' should be given its plain meaning for the sake of regulatory certainty, adding that the term ''neighboring'' within the definition of ''adjacent'' goes ''beyond the ordinary understanding'' of adjacency. The agencies disagree with these commenters and are finalizing the longstanding definition of ''adjacent.'' In section IV.A.3.b.ii of this preamble, the agencies concluded that the relatively permanent standard is insufficient as the sole standard for geographic jurisdiction under the Clean Water Act. The 2020 NWPR's limits on the scope of jurisdictional adjacent wetlands were based on an interpretation of the relatively permanent standard. Therefore, the agencies have concluded that the 2020 NWPR's approach to adjacent wetlands is inconsistent with the statute for the same reasons the relatively permanent standard is when used as the sole standard. The record demonstrates the effects of wetlands on the integrity of paragraph (a)(1) waters when they have other types of surface connections, such as wetlands that overflow and flood jurisdictional waters or wetlands with less frequent surface water connections; wetlands with shallow subsurface connections to other protected waters; wetlands separated from other protected waters by artificial barriers but that lack a direct hydrologic surface connection to those waters in a typical year; or other wetlands proximate to jurisdictional waters. As discussed in section IV.B.3 of this preamble, within the first year of implementation of the 2020 NWPR, 70% of streams and wetlands evaluated were found to be non-jurisdictional, including 15,675 wetlands that did not meet the 2020 NWPR's revised adjacency criteria. The substantial increase in waters lacking Federal protection compromises the agencies' ability to fulfill the objective of the Clean Water Act to protect the integrity of a large swath of the nation's waters (*see* section IV.B.3 of this preamble). Neither Tribal nor State regulations have been passed to fill this gap.

Retaining the longstanding definition of ''adjacent'' is also consistent with *Riverside Bayview* and Justice Kennedy's opinion in *Rapanos,* as well as with scientific information indicating that wetlands meeting this definition provide important functions that contribute to the integrity of traditional navigable waters, the territorial seas, and interstate waters. *See* section IV.A of this preamble.

The agencies agree with commenters who stated that it is appropriate to include wetlands behind natural and artificial berms and the like as adjacent wetlands for the reasons discussed in section IV.A of this preamble. As noted above, adjacent wetlands behind natural and artificial berms can serve important water quality functions, such as filtering pollutants and sediment before they reach other jurisdictional waters and ultimately paragraph (a)(1) waters, and can help reduce the impacts of storm surges caused by hurricanes; *see also* section III.B of the Technical Support Document. The Supreme Court in *Riverside Bayview* deferred to the agencies' interpretation of the Clean

[123] While the agencies use the phrase ''human-made'' in place of ''man-made'' in many instances throughout this preamble, they are retaining the phrase ''man-made'' in the regulatory text's definition of ''adjacent'' to maintain consistency with the 1986 regulatory text.

Water Act to include adjacent wetlands. *Riverside Bayview,* 474 U.S. at 135 (''[T]he Corps has concluded 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. . . . [W]e therefore conclude that a definition of 'waters of the United States' encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act.''). Justice Kennedy stated: ''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.'' *Rapanos,* 547 U.S. at 775.

The agencies also disagree that regulatory certainty requires revision of the definition of adjacent, including deleting the term ''neighboring.'' Regulatory certainty is provided by the fact that the agencies are retaining the definition that has been in place for decades and will continue to interpret and implement it as they have for decades. In addition, the longstanding regulation properly defines the term ''adjacent'' for purposes of the Clean Water Act because it is based on the concept of both reasonable proximity and scientific connections.

c. High Tide Line

This rule makes no changes to the definition of ''high tide line'' contained in the 1986 regulations (and in the 2020 NWPR, which made no changes to the 1986 regulation). The term ''high tide line'' is defined as ''the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.'' The agencies are not amending this definition. This definition has been in place since 1977 (*see* 42 FR 37144 (July 19, 1977); 33 CFR 323.3(c) (1978)), and like the definitions discussed above, is a well-established definition that is familiar to regulators, environmental consultants, and the scientific community. This term defines the landward limits of jurisdiction in tidal waters when there are no adjacent non-tidal ''waters of the United States.'' 51 FR 41206, 41251 (November 13, 1986).

d. Ordinary High Water Mark

This rule makes no changes to the definition of ''ordinary high water mark'' (''OHWM'') contained in the 1986 regulations (and in the 2020 NWPR, which made no changes to the 1986 regulation). OHWM is defined as ''that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.'' 33 CFR 328.3(e) (2014). This term, unchanged since 1977, *see* 41 FR 37144 (July 19, 1977), defines the lateral limits of jurisdiction in non-tidal waters, provided the limits of jurisdiction are not extended by adjacent wetlands. When adjacent wetlands are present, Clean Water Act jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. 33 CFR 328.4; RGL 05–05 at 1 (December 7, 2005).

e. Tidal Water

This rule makes no changes to the definition of ''tidal water'' contained in the 1986 regulations (and in the 2020 NWPR, which made no changes to the 1986 regulation). The term ''tidal water'' is defined as ''those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.'' Although the term ''tidal waters'' was referenced throughout the Corps' 1977 regulations, including the preamble (*see, e.g.,* 42 FR 37123, 37128, 37132, 37144, 37161 (July 19, 1977)), it was not defined in regulations until 1986. As explained in the preamble to the 1986 regulations, this definition is consistent with the way the Corps has traditionally interpreted the term. 51 FR 41217, 41218 (November 13, 1986). The agencies are not amending this definition in this rule.

9. Significantly Affect

a. This Rule

As discussed above, waters are protected by the Clean Water Act under this rule if they meet the significant nexus standard; that is, they alone, or in combination with other similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of the waters identified in paragraph (a)(1) of this rule. This rule defines the term ''significantly affect'' for these purposes to mean ''a material influence on the chemical, physical, or biological integrity of'' a paragraph (a)(1) water. Under this rule, waters, including wetlands, are evaluated either alone or in combination with other similarly situated waters in the region based on the functions the evaluated waters perform. This rule identifies specific functions that will be assessed [124] and identifies specific factors that will be considered when determining whether the functions provided by the water, alone or in combination, have a material influence on the integrity of a traditional navigable water, the territorial seas, or an interstate water. Thus, the significant nexus standard concerns the effects of waters on paragraph (a)(1) waters; it is not an assessment of whether a particular discharge of a pollutant will have an effect on a paragraph (a)(1) water, although, of course, contribution of flow and the associated transport of pollutants are important functions of upstream waters and are identified in the rule. Essentially, this provision of the rule provides regulators and the public with a clear framework for the significant nexus analysis that will be done on a case-specific basis under the rule: (1) the functions that will be assessed are clearly identified and constitute the ''nexus'' between the waters being assessed and the paragraph (a)(1) water, and (2) the logical and practical factors that will be considered to figure out the strength, or ''significance,'' of those functions for the integrity of the paragraph (a)(1) water are explicitly established.

The functions identified in the rule are based on the well-known benefits that lakes and ponds, streams, and

[124] The agencies are not requiring the use of ''functional assessments'' for significant nexus analyses under this rule; *see* section IV.C.9.c of this preamble for further discussion.

wetlands can provide to paragraph (a)(1) waters. *See* section IV.A.2.c of this preamble. Wetlands, for example, function like natural tubs or sponges, storing water and slowly releasing it. This process slows the water's momentum and erosive potential, reduces flood heights, and allows for groundwater recharge, which contributes baseflow to surface water systems during dry periods. An acre of wetland can store 1–1.5 million gallons of floodwater. After being slowed by a wetland, water moves around plants, allowing the suspended sediment to drop out and settle to the wetland floor. Nutrients that are dissolved in the water are often absorbed by plant roots and microorganisms in the soil. Other pollutants stick to soil particles. In many cases, this filtration process removes much of the water's nutrient and pollutant load by the time it leaves a wetland. Wetlands are also some of the most biologically productive natural ecosystems in the world, comparable to tropical rain forests and coral reefs in their productivity and the diversity of species they support. Abundant vegetation and shallow water provide diverse habitats for fish and wildlife. Seventy-five percent of commercially harvested fish are wetland-dependent. Add shellfish species and that number jumps to 95 percent. Streams are the dominant source of water in most rivers, and they also convey water into local storage compartments, such as ponds, shallow aquifers, or stream banks, that are important sources of water for maintaining baseflow in rivers. Discharging pollutants or filling in some lakes and ponds, streams, and wetlands reduces the amount of rainwater, runoff, and snowmelt the stream network can absorb before flooding. The increased volume of water in small streams scours stream channels, changing them in a way that promotes further flooding. Such altered channels have bigger and more frequent floods. The altered channels are also less effective at recharging groundwater, trapping sediment, and recycling nutrients. As a result, downstream lakes and rivers have poorer water quality, less reliable water flows, and less diverse aquatic life. Algal blooms and fish kills can become more common, causing problems for commercial and sport fisheries. Recreational uses may be compromised. In addition, the excess sediment can be costly, requiring additional dredging to clear navigational channels and harbors and increasing water filtration costs for municipalities and industry. *See, e.g.,* sections I and III of the Technical Support Document. So the significant nexus standard is focused on identifying those lakes and ponds, streams, and wetlands that provide these well-understood functions such that they need baseline Federal protections under the Clean Water Act in order to protect the integrity of traditional navigable waters, the territorial seas, and interstate waters. As discussed elsewhere, a determination that a water falls within the definition of ''waters of the United States'' does not mean that discharges or activities cannot occur in that water. *See* section IV.C.10 of this preamble.

The functions assessed in this rule are well-known indicators that are tied to the chemical, physical, or biological integrity of paragraph (a)(1) waters. The functions assessed are: contribution of flow; trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants); retention and attenuation of floodwaters and runoff; modulation of temperature in paragraph (a)(1) waters; or provision of habitat and food resources for aquatic species located in paragraph (a)(1) waters.

The factors considered in this rule are readily understood criteria that influence the types and strength of chemical, physical, or biological connections and associated effects on paragraph (a)(1) waters. In other words, the factors are site-specific conditions that influence the strength of the functions that lakes and ponds, streams, and wetlands provide to paragraph (a)(1) waters. These factors include the distance from a paragraph (a)(1) water; hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow; the size, density, or number of waters that have been determined to be similarly situated; landscape position and geomorphology; and climatological variables such as temperature, rainfall, and snowpack. The first two factors identified in the regulatory definition are key to a significant nexus determination: distance and hydrology. The definition of ''significantly affect'' is derived from the objective of the Clean Water Act and is informed by and consistent with Supreme Court case law. It is also informed by the agencies' technical and scientific judgment and supported by the best available science regarding the functions provided by upstream waters to paragraph (a)(1) waters relevant to achieving the Clean Water Act's objective. The significant nexus standard in this rule is carefully constructed to fall within the bounds of the Clean Water Act. Not all waters subject to evaluation under the significant nexus standard will have the requisite connection to paragraph (a)(1) waters sufficient to be determined jurisdictional.

In conducting a significant nexus evaluation, the agencies will consider each factor in the rule to evaluate the likely strength of any effect of functions on a paragraph (a)(1) water. For example, in evaluating a stream, under the first factor, the agencies will consider the distance of the stream from the paragraph (a)(1) water. Under the second factor, the agencies will consider hydrologic factors, such as the amount of water from the stream that reaches the paragraph (a)(1) water. Under the third factor, the agencies will consider the size, density, or number of similarly situated waters, such as, for example, the length, width, and depth of the stream. Under the fourth factor, the agencies will evaluate landscape position and geomorphology, such as the soil type and slope between the stream and the paragraph (a)(1) water. Finally, under the fifth factor, the agencies will evaluate the climate in the area of the stream, such as whether high temperatures lead to high evaporation rates. After noting the relevant factors, agencies will then apply them to the list of functions to determine the strength of the functions that the stream provides to the paragraph (a)(1) water. As noted above, the first two factors, distance from the paragraph (a)(1) water and hydrology, will generally be given the greatest weight in the assessment of functions provided.

The agencies regularly determine that waters do not have the requisite significant nexus. First, the standard is limited to consideration of effects on traditional navigable waters, the territorial seas, and interstate waters. Second, the standard is limited to effects only on the three statutorily identified aspects of those fundamental waters: chemical, physical, or biological integrity. Third, the standard cannot be met by merely speculative or insubstantial effects on those aspects of those paragraph (a)(1) waters, but rather requires the demonstration of a ''material influence.'' In this rule, the agencies have specified that a ''material influence'' is required for the significant nexus standard to be met. The phrase ''material influence'' establishes that the agencies will be assessing the influence of the waters either alone or in combination on the chemical, physical, or biological integrity of a paragraph (a)(1) water and will provide qualitative and/or quantitative information and articulate a reasoned basis for determining that the waters being

assessed significantly affect a paragraph (a)(1) water.

This section of the preamble addresses public comment on the definition of ''significantly affect'' and on the agencies' interpretation and implementation of the definition. This section then provides the agencies' general approach to implementation of the definition, including elements of the definition such as ''similarly situated'' and ''in the region'' for purposes of a significant nexus analysis. Discussion of the agencies' approach to implementation of the significant nexus standard for particular categories of waters can be found in the sections of this preamble addressing tributaries, adjacent wetlands, and paragraph (a)(5) waters. *See* sections IV.C.4.c, IV.C.5.c, and IV.C.6.c of this preamble.

b. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

i. Comments on the Definition of ''Significantly Affect''

The agencies received numerous comments on the definition of ''significantly affect,'' including the standard established by the definition, and the factors and functions.

Some commenters asserted that the phrase ''more than speculative or insubstantial'' in the proposed rule is open-ended, subjective, broad, and could increase the number of jurisdictional waters as compared to the pre-2015 regulatory regime. Commenters were concerned that while waters that have speculative or insubstantial effects on paragraph (a)(1) waters do not meet the significant nexus standard, the proposed language was unclear and implied that no additional findings were required. In response to public comment, this rule replaces the phrase ''more than speculative or insubstantial'' effects in the definition of ''significantly affect.'' Commenters were concerned that while waters that have speculative or insubstantial effects on paragraph (a)(1) waters do not meet the significant nexus standard, the proposed language was unclear and implied that no additional findings were required. This rule requires that waters have a ''material influence,'' and the agencies have concluded that this term will increase the clarity and transparency of this rule.

The agencies have concluded that this term will increase the clarity of this rule. In assessing whether a water meets the significant nexus standard, the agencies will continue to examine the ''influence'' of the subject waters on the paragraph (a)(1) water. And the ''influence'' must be ''material''—the agencies must explain why the subject waters, either alone or in combination with similarly situated waters, matters to the integrity of the paragraph (a)(1) water. The word ''material'' also reflects not only that the influence is, of course, more than speculative or insubstantial, but that the agencies will provide qualitative and/or quantitative information and articulate a reasoned basis for determining that a significant nexus exists, consistent with longstanding practice. The phrase ''material influence'' thus reflects the agencies' longstanding position that significant nexus determinations should be supported by the factual record, relevant scientific data and information, and available tools. And that record, data and information, and tools must show, either quantitively or qualitatively based on the five factors, that the subject waterbody provides functions that materially influence the chemical, physical, or biological integrity of a paragraph (a)(1) water. The agencies have provided a number of examples in this section of waters that do not have a ''material influence,'' and therefore do not meet the significant nexus standard. The agencies will continue to document the required findings as part of the administrative record. *See,* for example, direction to field staff under the *Rapanos* Guidance at 11 (''Accordingly, Corps districts and EPA regions shall document in the administrative record the available information regarding whether a tributary and its adjacent wetlands have a significant nexus with a traditional navigable water, including the physical indicators of flow in a particular case and available information regarding the functions of the tributary and any adjacent wetlands.'').

Some commenters supported the proposed definition of ''significantly affect'' as ''more than speculative or insubstantial'' effects on paragraph (a)(1) waters. Other commenters asserted that ''more than speculative or insubstantial'' does not mean an effect is significant, and some of these commenters requested that the agencies use quantitative or statistical thresholds to determine significance. Commenters generally requested clarification on how to determine if effects are significant or not. One commenter recommended that waters should be considered to ''significantly affect'' downstream jurisdictional waters unless a science-based determination shows that the effects are so speculative or insubstantial as to *not* affect the integrity of downstream waters. Another commenter recommended that an effect should only be significant if it would cause the paragraph (a)(1) water to exceed applicable water quality standards.

The agencies disagree that a quantitative or statistical threshold should be required to determine significance for several reasons. First, the statute contains no text suggesting that the scope of the ''waters of the United States'' must be identified based on a quantitative or statistical threshold, nor is a quantitative or statistical assessment necessary to meet the statutory objective the definition is designed to achieve: ''to restore and maintain the chemical, physical and biological integrity of the Nation's waters.'' 33 U.S.C. 1251(a). Second, such an approach would be unworkable given the extensive regional differences in water systems and the variability of individual waterbodies across the nation. For this reason, the agencies have long established the practice of site-specific assessment. Third, the appellate courts have not held that the term ''significant'' for purposes of Clean Water Act jurisdiction requires statistical significance or quantitative measurement. *See, e.g., Precon Dev. Corp., Inc.* v. *U.S. Army Corps of Eng'rs,* 603 Fed. Appx. 149, 151–52 (4th Cir. 2015) (''*Precon II*'') (unpublished opinion); *Cundiff,* 555 F.3d at 211 (''Though no doubt a district court could find such evidence persuasive, the Cundiffs point to nothing—no expert opinion, no research report or article, and nothing in any of the various *Rapanos* opinions—to indicate that [laboratory analysis] is the sole method by which a significant nexus may be proved . . . .''). The Court of Appeals for the Fourth Circuit has noted that the standard ''is a 'flexibly ecological inquiry,' '' and that ''[q]uantitative or qualitative evidence may support [applicability of the CWA].'' *Precon II,* 603 Fed. Appx. at 151–52 (citation omitted). The same court also has clarified that the burden of establishing applicability of the Clean Water Act should not be ''unreasonable.'' *Precon Dev. Corp., Inc.* v. *U.S. Army Corps of Eng'rs,* 633 F.3d 278, 297 (4th Cir. 2011) (''*Precon I*''). While the appellate courts have accepted laboratory analysis or quantitative or empirical data, *see, e.g., United States* v. *Donovan,* 661 F.3d 174, 186 (3d Cir. 2011); *Northern California River Watch* v. *City of Healdsburg,* 496 F.3d 993, 1000–1001 (9th Cir. 2007), such quantitative evidence is not required. *Precon I,* 633 F.3d at 294 (''We agree that the significant nexus test does

not require laboratory tests or any particular quantitative measurements in order to establish significance.''). The appellate courts have accepted a variety of evidence, including but not limited to, photographs, visual observation of stream condition, flow and morphology, studies, dye tests, scientific literature, maps, aerial photographs, and remote sensing data. *United States* v. *Lucas,* 516 F.3d 316, 326–27 (5th Cir. 2008); *see also Deerfield Plantation Phase II–B Property Owners Ass'n* v. *U.S. Army Corps of Eng'rs,* 501 Fed. Appx. 268, 270 (4th Cir. 2012) (unpublished opinion) (noting that in addition to conducting two site visits, the Corps relied upon infrared aerial photography, agency records, a county soil survey, a topographic map, and a wetland inventory); *Donovan,* 661 F.3d at 185–86. As under the pre-2015 regulatory regime, the agencies will continue to reasonably determine, based on the record before them, if a water, either alone or in combination with similarly situated waters in the region, significantly affects a paragraph (a)(1) water.

Some commenters agreed with the agencies that a water may constitute ''waters of the United States'' when it significantly affects any one form of chemical, physical, or biological integrity of a paragraph (a)(1) water. However, other commenters disagreed and stated that a water should significantly affect all three forms of integrity—chemical, physical, and biological—to be considered ''waters of the United States.'' Some of these commenters asserted that the use of ''or'' has the potential to greatly expand the scope of jurisdiction. The agencies disagree that this approach would expand the scope of jurisdiction because it is consistent with the pre-2015 regulatory regime and longstanding practice. The agencies acknowledge that Justice Kennedy used the conjunction ''and'' when concluding that wetlands possess the requisite significant nexus if the wetlands ''either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' '' *Rapanos,* 547 U.S. at 780. However, the agencies disagree that the use of the word ''and'' in this context represents a holding by Justice Kennedy that only a water that alone or combination significantly affects every single aspect of integrity is jurisdictional. It is simply not reasonable to read Justice Kennedy's opinion to stand for the proposition that a wetland that provides important pollutant retention and trapping functions that protect the chemical integrity of a paragraph (a)(1) water and also provides important benefits for the salmon population of that river is not jurisdictional because it does not also significantly affect the physical structure of that water. In any case, the agencies are not implementing a Supreme Court opinion, but rather are construing the Clean Water Act, as informed by relevant Supreme Court opinions. Congress intended the Clean Water Act to ''restore and maintain'' all three forms of ''integrity,'' section 101(a), so if any one of them is compromised, then the statute's stated objective would be contravened. It would be contrary to the plain language of the statute and subvert the law's objective if the Clean Water Act only protected paragraph (a)(1) waters upon a showing that there were effects on every attribute of their integrity. This interpretation is consistent with the agencies' longstanding position. As the agencies stated in the *Rapanos* Guidance: ''Consistent with Justice Kennedy's instruction, EPA and the Corps will apply the significant nexus standard in a manner that restores and maintains any of these three attributes of traditional navigable waters.'' *Rapanos* Guidance at 10 & n.35.

Some commenters stated that the proposed definition of ''significantly affect'' was too expansive and would allow the agencies to assert jurisdiction over any body of water, no matter the size, even if connections are remote or scientifically questionable. Some commenters asserted that overall, the proposed definition of ''significantly affect'' was unclear, difficult to understand, and provides the agencies with too much discretion to make jurisdictional decisions. A couple of these commenters stated that the definition would require case-by-case assessments and as a result, the approach does not give fair notice to stakeholders of when the Clean Water Act applies. The agencies disagree for the reasons outlined below, including that this rule's definition of ''significantly affect'' is consistent with case law and the science and places appropriate limitations on the significant nexus standard.

The agencies' definition of the term ''significantly affect'' in this rule is linked directly to the objective of the Act and to the effects upstream waters have on the water quality of paragraph (a)(1) waters. The definition is also informed by and consistent with Supreme Court case law addressing the scope of ''waters of the United States.'' Beginning with *Riverside Bayview,* the Supreme Court stated that the ''objective incorporated a broad, systemic view of the goal of maintaining and improving water quality: as the House Report on the legislation put it, 'the word ''integrity'' . . . refers to a condition in which the natural structure and function of ecosystems is [are] maintained.' H.R. Rep. No. 92–911, p. 76 (1972).'' 474 U.S. at 132. The definition of ''significantly affect'' finds further support in the Court's conclusion that: ''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 138 n.9. The majority opinion in *SWANCC* introduced the phrase ''significant nexus'' as the concept that informed the Court's reading of Clean Water Act jurisdiction over waters that are not navigable in fact. 531 U.S. at 167, 172. Based on *SWANCC,* Justice Kennedy's concurrence in *Rapanos* stated that to constitute ''waters of the United States'' covered by the Clean Water Act, ''a water or wetland must possess a 'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made.'' 547 U.S. at 759 (Kennedy, J., concurring in the judgment) (citing *SWANCC,* 531 U.S. at 167, 172). And five Justices support jurisdiction under Justice Kennedy's conclusion that wetlands possess the requisite significant nexus if the wetlands ''either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' '' 547 U.S. at 780.

Justice Kennedy's assessment of the facts and the evidence in the cases before the justices further inform the scope of this rule's definition of ''significantly affect.'' In *Rapanos,* Justice Kennedy stated that in both the consolidated cases before the Court the record contained evidence suggesting the possible existence of a significant nexus according to the principles he identified. *See id.* at 783. Justice Kennedy concluded that ''the end result in these cases and many others to be considered by the Corps may be the same as that suggested by the dissent, namely, that the Corps' assertion of jurisdiction is valid.'' *Id.* Justice Kennedy remanded the cases because neither the agency nor the reviewing courts applied the proper legal standard. *See id.* Justice Kennedy was clear however, that ''[m]uch the same

evidence should permit the establishment of a significant nexus with navigable-in-fact waters, particularly if supplemented by further evidence about the significance of the tributaries to which the wetlands are connected.'' *Id.* at 784.

With respect to one of the wetlands at issue in the consolidated *Rapanos* cases, Justice Kennedy stated: ''In *Carabell,* No. 04–1384, the record also contains evidence bearing on the jurisdictional inquiry. The Corps noted in deciding the administrative appeal that '[b]esides the effects on wildlife habitat and water quality, the [district office] also noted that the project would have a major, long-term detrimental effect on wetlands, flood retention, recreation and conservation and overall ecology.' . . . The Corps' evaluation further noted that by 'eliminat[ing] the potential ability of the wetland to act as a sediment catch basin,' the proposed project 'would contribute to increased runoff and . . . accretion along the drain and further downstream in Auvase Creek.' And it observed that increased runoff from the site would likely cause downstream areas to 'see an increase in possible flooding magnitude and frequency.' '' *Id.* at 785–86 (citations omitted). Justice Kennedy also expressed concern that ''[t]he conditional language in these assessments—'potential ability,' 'possible flooding'—could suggest an undue degree of speculation.'' *Id.* at 786. Justice Kennedy's observations regarding the underlying case inform this rule's definition of ''significant nexus'': the functions and factors established by the definition are consistent with those identified as relevant by Justice Kennedy, and the requirement that waters have a ''material influence'' on paragraph (a)(1) waters ensures that the assessment under the significant nexus standard is well-documented and reasonable based on that record.

This rule's definition of ''significantly affect'' is also consistent with the best available information, as summarized in the Science Report and the Technical Support Document. *See* section III.E of the Technical Support Document. The Science Report concluded that watersheds are integrated at multiple spatial and temporal scales by flows of surface water and ground water, transport and transformation of physical and chemical materials, and movements of organisms. Further, the Science Report stated, although all parts of a watershed are connected to some degree—by the hydrologic cycle or dispersal of organisms, for example—the degree and downstream effects of those connections vary spatially and temporally, and are determined by characteristics of the chemical, physical, and biological environments and by human activities. Those spatial and temporal variations are reflected in the agencies' final rule defining ''significantly affect'' to mean ''a material influence,'' in the functions the agencies assess, and in the factors they use to consider the strength of those functions.

The agencies have more than a decade of experience implementing the significant nexus standard by making determinations of whether a water alone or in combination with similarly situated waters in the region significantly affects the chemical, physical, or biological integrity of a paragraph (a)(1) water. The agencies under the pre-2015 regulatory regime routinely conducted case-specific significant nexus analyses and in many cases concluded that there was no significant nexus. Based on the agencies' experience, many waters under this rule will not have a significant nexus to paragraph (a)(1) waters, and thus will not be jurisdictional under the Clean Water Act. The agencies also note that the vast majority of resources assessed in approved jurisdictional determinations under the *Rapanos* Guidance were not assessed under the significant nexus standard. Historically, roughly 12% of resources assessed in approved jurisdictional determinations under the *Rapanos* Guidance required a significant nexus analysis. It is the agencies' expectation that the number of significant nexus analyses will increase under this rule due to the assessment of waters under paragraph (a)(5) pursuant to the significant nexus standard, but it is correspondingly expected that the percent of resources found to be jurisdictional under significant nexus analyses will decrease because generally waters will be assessed individually under paragraph (a)(5) to determine if they meet the significant nexus standard (*see* section I.B.3.6 of the Economic Analysis for the final rule).

The agencies disagree that the definition of ''significantly affect'' and the associated case-by-case assessments do not give fair notice to stakeholders of when the Clean Water Act applies. Because of the factual nature of the jurisdictional inquiry, any standard will require some case-specific factual determinations. The 2020 NWPR acknowledged that ''[a]s to simplicity and clarity, the agencies acknowledge that field work may frequently be necessary to verify whether a feature is a water of the United States.'' 85 FR 22270 (April 21, 2020). As the Supreme Court has recently recognized in *Maui,* the scope of Clean Water Act jurisdiction does not easily lend itself to bright lines: ''In sum, we recognize that a more absolute position . . . may be easier to administer. But, as we have said, those positions have consequences that are inconsistent with major congressional objectives, as revealed by the statute's language, structure, and purposes.'' *Maui,* 140 S. Ct. at 1477. Like the Court in *Maui,* the agencies have established factors to be used in considering the strength of the effects on paragraph (a)(1) waters and have identified the functions they will assess in making significant nexus determinations under the proposed rule. This definition increases the implementability of this rule and is consistent with major congressional objectives, as revealed by the statute's language, structure, and purposes. This rule also clearly identifies the categories of waters subject to assessment under the relatively permanent standard and significant nexus standard and those features that are excluded from the definition of ''waters of the United States.'' *See* section IV.C.10 of this preamble for additional guidance to landowners on jurisdictional determinations.

Some commenters supported the specific list of factors in the proposed rule. Other commenters asserted that the list was broad and unclear, and some of these commenters stated that the factors would lead to subjective, unpredictable outcomes and lengthy project delays. Some commenters addressed specific aspects of the proposed factors. For example, some commenters stated that the proposed factor ''distance from a paragraph (a)(1) water'' and the proposed factor ''distance from a water of the United States'' were redundant. Other commenters requested that the agencies add factors on soil and watershed characteristics. Some commenters requested specific examples of how the factors would be implemented and considered together in a significant nexus determination.

The agencies disagree that the factors listed in the proposed rule were broad, subjective, and unclear. However, the agencies have modified the factors in response to public comments and to increase clarity in this rule. The agencies agree with commenters who asserted that distance from ''waters of the United States'' is not necessary to include in light of the other factors, such as distance from a paragraph (a)(1) water and landscape position and geomorphology, and have not included the factor in this rule. In response to

public comments requesting additional detail on how the factors will be applied, the agencies have modified the proposed language on ''hydrologic factors, including subsurface flow'' in this rule to provide additional specificity by referring to ''hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow.'' The agencies added a new factor on ''landscape position and geomorphology'' in response to public comments requesting that the agencies consider watershed and soil characteristics. Landscape position and geomorphology capture characteristics like topography, slope, and soil porosity which may, for example, affect the strength of the hydrologic or biological connections between the subject waters and a paragraph (a)(1) water.

Some commenters asserted that the proposed factors were only related to physical integrity, and requested that the agencies add factors that they asserted are related to chemical and biological integrity (*e.g.,* water quality parameters, pH, or biological indicators). The agencies disagree that the factors are only related to physical integrity. The factors in this rule influence the types and strength of chemical, physical, or biological connections and associated effects that streams, wetlands, and open waters have on paragraph (a)(1) waters. As described further in section IV.C.9.c of this preamble, in general, identified functions coupled with stronger factors increase the likelihood of demonstrating a significant nexus. For example, similarly situated waters that have the capacity to trap or transform pollutants are more likely to affect the chemical integrity of a paragraph (a)(1) water if the similarly situated waters are closer to the paragraph (a)(1) water, or if there is a larger number or higher density of those similarly situated waters.

Many commenters on the proposal requested that the agencies add a specific list of functions that upstream wetlands and waters can provide to paragraph (a)(1) waters to the definition of ''significantly affect.'' The commenters differed in whether they thought the list should be exhaustive or non-exhaustive, and whether all functions need to be demonstrated or just one function needs to be demonstrated to support a significant nexus determination. Some commenters supported the use of functions listed in the proposed rule from the *Rapanos* Guidance in significant nexus determinations. Some commenters requested that the agencies consider additional functions that are based on the best available science. Some commenters asserted that when functions such as flood storage and pollutant retention result from a lack of hydrologic connection, those functions should not be considered in a significant nexus analysis.

The agencies agree that including a list of functions in this rule would promote clarity and implementation consistency. The agencies selected a list of functions based on the functions identified in the *Rapanos* Guidance discussed in the preamble to the proposed rule, the agencies' experience implementing the significant nexus standard, public comments on that list of functions, and consideration of the best available science. The functions in this rule that can be provided by tributaries, wetlands, and open waters are keyed to the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters. Additionally, assessment of the functions in this rule is consistent with the agencies' implementation of the pre-2015 regulatory regime. *See Rapanos* Guidance at 8, 9. The agencies disagree with commenters who asserted that when functions such as flood storage and pollutant retention result from a lack of hydrologic connection, those functions should not be assessed in a significant nexus analysis. Such a rigid, categorical test would ignore that, even in the absence of a hydrologic connection, an upstream water could still have an important functional relationship to a downstream traditional navigable water, the territorial seas, or an interstate water, most notably where the upstream water retains floodwaters or pollutants that would otherwise flow downstream to the traditional navigable water, the territorial seas, or interstate water. *See* Technical Support Document section III.D.1; *see also* 547 U.S. at 775 (Kennedy, J., concurring in the judgment) (''[I]t 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 identification of each of the functions in this rule is supported by the best available science. The contribution of flow downstream is an important function, as upstream waters can be a cumulative source of the majority of the total mean annual flow to bigger downstream rivers and waters, including via the recharge of baseflow. Streams, wetlands, and open waters contribute surface and subsurface water downstream, and are the dominant sources of water in most rivers. Contribution of flow can significantly affect the integrity of downstream paragraph (a)(1) waters, helping to sustain the volume of water in larger waters which also influences the concentrations of chemicals within those waters.

Trapping, transformation, filtering, and transporting materials (including nutrients, sediment, and other pollutants) are important functions influencing the integrity of paragraph (a)(1) waters. Sediment storage and export via streams to downstream waters is important for maintaining the physical river network, including the formation of channel features. Nutrient recycling in upstream waters results in the uptake and transformation of large quantities of nitrogen and other nutrients that otherwise would be transported directly downstream, thereby decreasing impairments of paragraph (a)(1) waters. Streams, wetlands, and open waters also improve water quality through the assimilation and sequestration of pollutants, including chemical contaminants such as pesticides and metals that can degrade the integrity of paragraph (a)(1) waters. Streams can also transport excess nutrients, excess sediment, and other pollutants downstream, such as the case of the tributaries in the Ohio River and Missouri River Basins that transport excess nitrogen downstream that contributes to ''dead zones'' in the Gulf of Mexico, or tributaries to the Guadalupe, San Joaquin, and Sacramento Rivers contributing contaminated mercury sediments from mine operations to San Francisco Bay. Contaminants are commonly transported from streams to larger downstream rivers bound to sediments.

Wetlands and small streams are particularly effective at retaining and attenuating floodwaters. Streams, wetlands, and open waters affect the physical integrity of paragraph (a)(1) waters by retaining large volumes of stormwater that could otherwise negatively affect the condition or function of those paragraph (a)(1) waters. This retention and subsequent slowed release of floodwaters can reduce flood peaks in paragraph (a)(1) waters and can also maintain river baseflows in paragraph (a)(1) waters by recharging alluvial aquifers.

Water temperature is critical to the distribution and growth of aquatic life in downstream waters, both directly (through its effects on organisms) and indirectly (through its effects on other physiochemical properties, such as dissolved oxygen and suspended solids). For example, water temperature controls metabolism and level of

activity in cold-blooded species like fish, amphibians, and aquatic invertebrates. Temperature can also control the amount of dissolved oxygen in streams, as colder water holds more dissolved oxygen, which fish and other fauna need to breathe. Tributaries provide both cold and warm water refuge habitats that are critical for protecting aquatic life in downstream paragraph (a)(1) waters. Floodplain wetlands and open waters also exert substantial controls on water temperature in the downgradient tributary network and ultimately in the paragraph (a)(1) water.

Streams, wetlands, and open waters supply habitat and food resources for paragraph (a)(1) waters, such as dissolved and particulate organic matter (*e.g.,* leaves, wood), which support biological activity throughout the river network. In addition to organic matter, streams, wetlands, and open waters can also export other food resources downstream, such as aquatic insects that are the food source for fish in paragraph (a)(1) waters. The export of organic matter and food resources downstream is important to maintaining the food webs and thus the biological integrity of paragraph (a)(1) waters. Streams, wetlands, and open waters provide life-cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, and use as a nursery area) for species located in paragraph (a)(1) waters. Many species require different habitats for different needs (*e.g.,* food, spawning habitat, overwintering habitat), and thus move throughout a river network over their life-cycles. For example, to protect Pacific and Atlantic salmon in traditional navigable waters (and their associated commercial and recreational fishing industries), protections must be provided from the headwater streams where the fish are born and spawn to the marine waters where they spend most of their lives. Additionally, headwater streams can provide refuge habitat when adverse conditions exist in the larger waterbodies downstream, enabling fish to persist and recolonize downstream areas once conditions have improved. These upstream systems form integral components of downstream food webs, providing nursery habitat for breeding fish and amphibians, colonization opportunities for stream invertebrates, and maturation habitat for stream insects, including for species that are critical to downstream ecosystem function. The provision of life-cycle dependent aquatic habitat for species located in paragraph (a)(1) waters can significantly affect the biological integrity of those downstream waters.

It is also important to note that the agencies' significant nexus standard in this rule is carefully tailored so that only particular types of functions provided by upstream waters can be assessed. Wetlands, streams, and open waters are well-known to provide a wide variety of functions that translate into ecosystem services. A significant nexus analysis, however, is limited to an assessment of only those functions identified in this rule that have a nexus to the chemical, physical, or biological integrity of paragraph (a)(1) waters. Thus, there are some important functions provided by wetlands, tributaries, and waters evaluated under paragraph (a)(5) that will not be assessed by the agencies when making jurisdictional decisions under this rule. For example, for purposes of a jurisdictional analysis under the significant nexus standard, the agencies will not be taking into account the carbon sequestration benefits that aquatic resources like wetlands provide. Provision of habitat for non-aquatic species, such as migratory birds, and endemic aquatic species would not be considered as part of a significant nexus analysis under this rule.[125] Furthermore, the agencies would not assess soil fertility in terrestrial systems, which is enhanced by processes in stream and wetland soils and non-floodplain wetlands that accumulate sediments, prevent or reduce soil erosion, and retain water on the landscape, benefiting soil quality and productivity in dry lands. There are also a wide variety of functions that streams, wetlands, and open waters provide that translate into ecosystem services that benefit society that would not be assessed in a significant nexus analysis under this rule. These include provision of areas for personal enjoyment (*e.g.,* fishing, hunting, boating, and birdwatching areas), ceremonial or religious uses, production of fuel, forage, and fibers, extraction of materials (*e.g.,* biofuels, food, such as shellfish, vegetables, seeds, nuts, rice), plants for clothes and other materials, and medical compounds from wetland and aquatic plants or animals. While these types of ecosystem services can contribute to the economy, they are not relevant to the chemical, physical, or biological integrity of paragraph (a)(1) waters and would not be considered in a significant nexus analysis under this rule.

[125] As this preamble has stated, consideration of biological functions such as provision of habitat is relevant for purposes of significant nexus determinations under this rule only to the extent that the functions provided by tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) significantly affect the biological integrity of a paragraph (a)(1) water. For example, to protect Pacific and Atlantic salmon in traditional navigable waters (and their associated commercial and recreational fishing industries), protections must be provided from the headwater streams where the fish are born and spawn to the marine waters where they spend most of their lives.

ii. Comments on Interpretation and Implementation of ''Significantly Affect''

The agencies proposed that waters can significantly affect paragraph (a)(1) waters either alone or in combination with similarly situated waters in the region. The agencies solicited comment on approaches for implementing this rule, including regarding which waters are ''similarly situated,'' and thus should be analyzed in combination, in the scope of the ''region,'' for purposes of a significant nexus analysis. Some commenters asserted that the agencies need to consider cumulative impacts of water features and their collective influence on downstream waters. These commenters supported aggregating waters as part of a significant nexus analysis and provided various suggestions for interpreting ''similarly situated'' and ''in the region.'' Some commenters stated that the agencies should not aggregate waters as part of a significant nexus analysis, asserting that aggregation would lead to subjectivity, lack of clarity, implementation challenges, and arbitrary outcomes. Some of these commenters did not believe it would be appropriate to aggregate features far from a project site with features on the project site in assessing impacts on downstream waters. Some commenters asserted that the proposed rule would presume that virtually the entire tributary system, along with isolated waters and wetlands, perform functions in the aggregate that benefit downstream waters. Other commenters asserted that aggregation should not be expanded beyond the *Rapanos* Guidance approach, and they expressed concern that the proposed rule would aggregate waters more broadly than the guidance. Some commenters expressed concern that with an aggregation approach to significant nexus, all waters assessed within a given region could be determined to be jurisdictional, including waters outside the project area. Some of these commenters suggested that the agencies would eventually assert jurisdiction across most of the country, one watershed at a time.

The agencies disagree that aggregating waters as part of a significant nexus

analysis is inappropriate. The agencies have retained the language in this rule that waters will be assessed either alone or in combination with similarly situated waters in the region. *See* sections IV.C.9.c, IV.C.4.c, IV.C.5.c, and IV.C.6.c of this preamble for a discussion on the agencies' approach to implementing the significant nexus standard for tributaries, adjacent wetlands, and paragraph (a)(5) waters. The agencies have also added language to the definition of ''significantly affect'' to further clarify that waters will be assessed either alone or in combination with similarly situated waters in the region. Assessing the functions of identified waters in combination is consistent not only with the significant nexus standard, as described in section IV.A of this preamble, but with the science demonstrating how upstream waters affect downstream waters. Scientists routinely analyze the combined effects of groups of waters, aggregating the known effect of one water with those of ecologically similar waters in a specific geographic area, or to a certain scale. This is because the chemical, physical, and biological integrity of downstream waters is directly related to the aggregate contribution of upstream waters that flow to them, including any tributaries and connected wetlands. As a result, the scientific literature and the Science Report consistently document that the health of larger downstream waters is directly related to the aggregate health of waters located upstream, including waters such as wetlands that may not be hydrologically connected but function together to mitigate the potential impacts of flooding and pollutant contamination on downstream waters. *See* Technical Support Document section III.E.ii.

The agencies also disagree that the agencies would assert jurisdiction too broadly based on the definition of ''significantly affect.'' As discussed in section IV.A of this preamble, the agencies have carefully crafted a rule that falls within the limitations of the statute while achieving the Clean Water Act's objective. Historically, only roughly 12% of resources assessed in approved jurisdictional determinations under the *Rapanos* Guidance required a significant nexus analysis, and the agencies routinely concluded that waters do not meet the significant nexus standard. Based on the agencies' experience, many waters assessed under this rule will not have a significant nexus to paragraph (a)(1) waters, and thus will not be jurisdictional under the Clean Water Act under this rule.

The following are examples of waters that would likely not be jurisdictional under this rule, although the agencies recognize that each significant nexus determination is case-specific. Examples of waters that would not likely have a significant nexus to paragraph (a)(1) waters based on an assessment under this rule of the regulatory factors and functions include: a headwater non-relatively permanent tributary located within a catchment with no other tributaries and few adjacent wetlands in the Eastern United States, which is many miles from the paragraph (a)(1) water and contributes low duration, low magnitude, and low volume flows downstream; a group of non-relatively permanent tributaries and adjacent wetlands located within a closed basin in the arid West that does not connect to any paragraph (a)(1) water; a non-relatively permanent tributary located within a small catchment with another non-relatively permanent tributary and few adjacent wetlands in the arid West, which exhibits losing stream conditions and capacity to provide only infrequent and very low volume flows to the paragraph (a)(1) water; a ditched and straightened non-relatively permanent tributary with no adjacent wetlands in the Southeastern United States that exhibits minimal in-stream or riparian habitat value, carries only limited amounts of stormwater from a small catchment, and is located miles upstream from the paragraph (a)(1) water; a non-adjacent wetland in the Northwestern United States that would likely provide only minimal functions to a paragraph (a)(1) water given its landscape position in relation to the tributary network and the paragraph (a)(1) water; and a non-tributary pond that is hydrologically connected to the nearest jurisdictional water only during infrequent flooding events but which is miles from the paragraph (a)(1) water and would be unlikely to have a material influence on that paragraph (a)(1) water. While in most of these examples, the tributary, wetland, lake, or pond may well have had some effect on a paragraph (a)(1) water, under the hypothetical circumstances described, the water(s) would not have a material influence on the chemical, physical, or biological integrity of the identified paragraph (a)(1) water, *i.e.,* does not significantly affect that water, and therefore the water(s) would not be jurisdictional under the Clean Water Act.

Conversely, the following are examples of waters that would likely be jurisdictional under this rule, although again, each significant nexus determination is case-specific. Examples include: a second-order headwater non-relatively permanent tributary located within a catchment with several other tributaries and several adjacent wetlands in the Southwestern United States, which are a moderate distance from the paragraph (a)(1) water but contribute high magnitude and high volume flows downstream during seasonal precipitation events that lead to strong effects of the functions on the paragraph (a)(1) water, including the transport of large volumes of sediment and woody debris that help shape and structure the channel of the paragraph (a)(1) water by slowing the flow of water through channels and providing habitat and food sources for the fish that live in the paragraph (a)(1) water; a non-relatively permanent tributary with several adjacent wetlands in the Midwestern United States that provides breeding grounds for fish that live in paragraph (a)(1) waters, contributes flows of moderate magnitude and moderate volume downstream during frequent precipitation events, and is located within a short distance of a paragraph (a)(1) water; and an adjacent wetland in the Mountain West that is similarly situated with dozens of other adjacent wetlands and several tributaries, has the capacity to store high volumes of floodwaters and to store and process nutrients that would otherwise reach a downstream paragraph (a)(1) water, thereby reducing flooding and the potential for algal blooms in the paragraph (a)(1) water, and that provides strong functions to a paragraph (a)(1) water given its landscape position in relation to the tributary network and the paragraph (a)(1) water. Under the hypothetical circumstances described, the water(s) would have a material influence on the chemical, physical, or biological integrity of the identified paragraph (a)(1) water, *i.e.,* significantly affects that water, and therefore the water(s) would be jurisdictional under the Clean Water Act.

The agencies also disagree that any aggregation approach would be subjective, unclear, or difficult to implement. The proposed rule included alternative options for aggregation (*i.e.,* how to interpret ''similarly situated'' and ''in the region'') for the public to comment upon. After considering public comments, the agencies are providing additional information in this preamble to provide clarity regarding implementation of ''similarly situated'' and ''in the region'' for purposes of aggregating waters as part of a significant nexus analysis. Furthermore, the agencies have extensive experience

aggregating waters under prior regulatory regimes. This preamble discusses a variety of tools that are available for identifying waters that are similarly situated in the region as part of a significant nexus analysis (*see, e.g.,* section IV.C.4.c of this preamble).

This rule's provision for waters to be assessed either alone, or in combination with other similarly situated waters in the region, is consistent with the Science Report. An example from the Science Report is illustrative. The amount of water or biomass contributed by a specific ephemeral stream in a given year might be small, but the aggregate contribution of that stream over multiple years, or by all ephemeral streams draining that watershed in a given year or over multiple years, can have important consequences on the chemical, physical, or biological integrity of the downstream waters. Science Report at 6–10; *see also* sections III.A.v and III.E.ii of the Technical Support Document. Similarly, the downstream effect of a single event, such as pollutant discharge into a single stream or wetland, might be negligible but the cumulative effect of multiple discharges could degrade the integrity of downstream waters. The Science Report finds, ''[t]he amount of nutrients removed by any one stream over multiple years or by all headwater streams in a watershed in a given year can have substantial consequences for downstream waters.'' Science Report at 1–11. The cumulative effects of nutrient export from the many small headwater streams of the Mississippi River have resulted in large-scale ecological and economically harmful impacts hundreds of miles downstream, thereby impacting commercial and recreational fisheries in the northern Gulf of Mexico.

Many commenters asserted that the proposed rule was unclear as to how the agencies would interpret the ''region'' for purposes of a significant nexus analysis. Some of these commenters expressed concern that the region would be determined on a case-specific basis, leading to regulatory uncertainty. Some commenters asserted that the ''region'' should be interpreted narrowly, and many of these commenters opposed any expansion of the scope of analysis as compared to the *Rapanos* Guidance. Several commenters stated that a watershed or ecoregion approach to interpreting the ''region'' would be too expansive. Many commenters supported a watershed approach to interpreting the ''region,'' with some commenters supporting a large single point of entry watershed and other commenters supporting smaller watersheds (*e.g.,* hydrologic unit code (HUC) 10 or HUC 12). These commenters asserted that a watershed-based approach is consistent with the science and would ultimately protect the traditional navigable waters, the territorial seas, and interstate waters that are the focus of Clean Water Act protections. Some commenters criticized the *Rapanos* Guidance approach for determining the ''region,'' asserting that it was too narrow and not based on scientific evidence. Some commenters supported an interpretation of ''region'' based on hydrological characteristics or geomorphic characteristics, and some of these commenters stated that such approaches would allow for the consideration of site-specific field data. Other commenters supported an ecoregion-based approach, although these commenters differed in the ''level'' of ecoregion sizes that they recommended using. As discussed in the implementation section below, the agencies have determined that the catchment of the tributary is a reasonable and technically appropriate scale for identifying ''in the region'' for purposes of the significant nexus standard. The catchment is an easily identified and scientifically defensible unit for identifying the scope of waters that together may have an effect on the chemical, physical, or biological integrity of a particular traditional navigable water, the territorial seas, or an interstate water.

c. Implementation

This rule provides increased clarity and substantial guidance to assist in implementing the significant nexus standard. The agencies have more than a decade of experience implementing the significant nexus standard by making determinations of whether a water alone or in combination with similarly situated waters in the region significantly affects a paragraph (a)(1) water. This section of the preamble provides the agencies' general approach to implementing the definition of ''significantly affect'' for purposes of the significant nexus standard. *See* sections IV.C.4, IV.C.5, and IV.C.6 of this preamble for additional information on how the agencies will implement the significant nexus standard, including identifying waterbodies on the landscape and determining which waters are ''similarly situated'' and ''in the region.''

i. General Scope of the Significant Nexus Analysis

Under the significant nexus standard in this rule, the agencies must identify the waters that are ''similarly situated'' and the ''region'' for purposes of determining whether waters ''significantly affect'' paragraph (a)(1) waters. The agencies will interpret these terms for purposes of this rule in a similar, but not identical, manner to the approach to these terms in the *Rapanos* Guidance. The agencies' approach in this rule is based on longstanding practice, the scientific support for this rule, and practical implementation considerations.

The focus of the significant nexus standard is on restoring and maintaining the chemical, physical, and biological integrity of paragraph (a)(1) waters. Therefore, the agencies have interpreted the phrase ''similarly situated'' under pre-2015 practice and will continue to interpret that phrase in this rule, in terms of whether waters are providing common, or similar, functions for paragraph (a)(1) waters such that it is reasonable to consider their effects together. In implementing this rule, the agencies will continue their practice under the *Rapanos* Guidance of assessing the flow characteristics and functions of tributaries, together with the functions performed by any wetlands adjacent to those tributaries, to determine whether collectively they have a significant nexus with paragraph (a)(1) waters. *See Rapanos* Guidance at 8. The agencies continue to conclude that implementation of ''similarly situated'' to include tributaries and their adjacent wetlands in this way is reasonable because of its strong scientific foundation—that is, the integral ecological relationship between a tributary and its adjacent wetlands. *See Rapanos* Guidance at 10. In considering how to apply the significant nexus standard, the agencies have long focused on the integral relationship between the ecological characteristics of tributaries and those of their adjacent wetlands, which determines in part their contribution to restoring and maintaining the chemical, physical, or biological integrity of paragraph (a)(1) waters. The ecological relationship between tributaries and their adjacent wetlands is well documented in the scientific literature and reflects their physical proximity as well as shared hydrological and biological characteristics. *Id.* at 9.

This approach to implementing similarly situated is also consistent with the scientific support for this rule. Stream and wetland connectivity to downstream waters, and the resulting effects on the integrity of downstream paragraph (a)(1) waters, is best understood and assessed when considered cumulatively. One of the main conclusions of the Science Report is that the incremental contributions of

individual streams and wetlands are cumulative across entire watersheds, and their effects on downstream waters should be evaluated within the context of other streams and wetlands in that watershed. *See* Technical Support Document section III.E.ii and section IV.A of this preamble for additional discussion. Furthermore, this approach is clear and implementable, and this preamble discusses a variety of tools that are available for determining which waters are similarly situated as part of a significant nexus analysis. *See, e.g.,* section IV.C.4.c of this preamble. *See* section IV.C.6.c of this preamble for discussion on how the agencies intend to implement the significant nexus standard for waters assessed under paragraph (a)(5).

The agencies have identified ''in the region'' for purposes of the significant nexus standard in this rule as the catchment of the tributary. The catchment is the area of the land surface that drains to a specific location for a specific hydrologic feature, in this case the tributary. Catchments will be delineated from the downstream-most point of the tributary reach of interest and include the area uphill that drains to that point. Topography and landscape position influence the size and configuration of a catchment. For example, if the tributary of interest is East Fork Clear Creek—a second order stream that is a tributary that flows indirectly to a traditional navigable water—the catchment would be delineated from the point that East Fork Clear Creek enters Clear Creek, a third order stream, and include the area uphill that drains to that point. The catchment for East Fork Clear Creek would include not just East Fork Clear Creek, but also any first order streams that flow into East Fork Clear Creek, and these streams would be aggregated together along with any wetlands adjacent to the streams as part of a significant nexus analysis. As another example, if the tributary of interest is Willow Creek—a first order stream that is a tributary that flows indirectly to a traditional navigable water—the catchment would be delineated from the point that Willow Creek enters a second order stream and include the area uphill that drains to that point. The catchment would then only include Willow Creek, and Willow Creek would be aggregated together along with any adjacent wetlands as part of a significant nexus analysis. *See* discussion of stream order in section IV.C.4.c.i of this preamble. The catchment of the tributary of interest may contain not just the tributary of interest, but also lower order tributaries that are aggregated together along with any adjacent wetlands as part of a significant nexus analysis.

This region (*i.e.,* the catchment of the tributary) for the vast majority of tributaries is smaller, and usually substantially smaller, than the region identified by the watershed that drains to the nearest point of entry of a paragraph (a)(1) water, which was the ''region'' used to implement the 2015 Clean Water Rule. While this region is generally larger than the region assessed in the *Rapanos* Guidance under which the agencies assessed the relevant reach of a tributary in combination with its adjacent wetlands, the catchment is an easily identified and scientifically defensible unit for identifying the scope of waters that together may have an effect on the chemical, physical, or biological integrity of a particular traditional navigable water, the territorial seas, or an interstate water. Moreover, the catchment is often considered an appropriate spatial unit for water resource management. Anthropogenic actions and natural events can have widespread effects within the catchment that collectively impact the integrity and quality of the relevant paragraph (a)(1) water. The functions of the contributing waters are inextricably linked and have a cumulative effect on the integrity of the paragraph (a)(1) water. For these reasons, it is more appropriate to conduct a significant nexus analysis at the catchment scale than to focus on a specific site, such as an individual stream segment. In light of the scientific literature, the longstanding approach of the agencies' implementation of the Clean Water Act, and the statutory goals underpinning Justice Kennedy's significant nexus framework, the agencies consider the catchment of the tributary to be the appropriate ''region'' for a significant nexus analysis. Therefore, all tributaries in a catchment and their adjacent wetlands, if any, will be assessed in combination to determine whether the significant nexus standard is met.

For practical administrative purposes, this rule does not require evaluation of all similarly situated waters when concluding that those waters have a significant nexus to a paragraph (a)(1) water. When an identified subset of similarly situated waters provides a sufficient science-based justification to conclude presence of a significant nexus, for efficiency purposes a significant nexus analysis need not require time and resources to locate and analyze all similarly situated waters in the entire catchment. For example, if a single waterbody or a group of similarly situated waterbodies in a portion of the catchment is determined to significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water, the analysis does not have to document all of the similarly situated waterbodies in the catchment in order to complete the significant nexus analysis for the water(s) subject to the jurisdictional determination. A conclusion that a significant nexus is lacking may not, however, be based on consideration of some subset of similarly situated waters because under the significant nexus standard, the inquiry is how the similarly situated waters in combination affect the integrity of the paragraph (a)(1) water. 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; RGL 16–01 (2016).

ii. Assessing the Functions and Considering the Factors

In determining whether a water alone or in combination with similarly situated waters in the region has a material influence on the chemical, physical, or biological integrity of a paragraph (a)(1) water, the agencies will assess the functions in paragraph (c)(6)(i) of this rule and consider the factors in paragraph (c)(6)(ii) this rule in order to reasonably determine jurisdiction based on the record before them.[126] The agencies will consider the factors in this rule to analyze the strength of the influence of the functions on paragraph (a)(1) waters. In general, functions associated with stronger factors increase the likelihood of demonstrating a material influence on paragraph (a)(1) waters. For example, when assessing the functions provided by the subject waters (and any similarly situated waters) to paragraph (a)(1) waters, the agencies would consider whether the factors are likely to increase the strength of the influence on the paragraph (a)(1) water. Distance from a paragraph (a)(1) water; high frequency, magnitude, or duration of hydrologic connections; high density of similarly situated waters; landscape position and geomorphology translating to a high likelihood of effects on paragraph (a)(1) waters; and/or certain climatological variables like rainfall patterns leading to more frequent hydrologic connections

[126] The agencies are not requiring the use of ''functional assessment'' methods for significant nexus analyses under this rule. ''Functional assessment'' methods are used in other regulatory contexts, such as for mitigation planning, to explicitly measure the strength of functions at the impact site and potential mitigation site(s).

all translate to a higher likelihood of effects on paragraph (a)(1) waters. Functions associated with weaker factors decrease the likelihood of demonstrating a material influence on paragraph (a)(1) waters. For example, when assessing the functions provided by the subject waters (and any similarly situated waters) to paragraph (a)(1) waters, the agencies would consider whether the factors are likely to decrease the strength of the influence on the paragraph (a)(1) water. These factors can include a far distance from a paragraph (a)(1) water; low frequency, magnitude, or duration of hydrologic connections; low density of similarly situated waters; landscape position and geomorphology translating to a low likelihood of effects on paragraph (a)(1) waters; and/or climatological variables like rainfall patterns translating to a low likelihood of effects on paragraph (a)(1) waters. Thus, analyses of waters that provide the listed functions to paragraph (a)(1) waters, but where only weak factors are present, may not be sufficient to demonstrate a material influence. In assessing the functions under this rule, if a water, either alone or in combination with similarly situated waters in the region, performs one function that has a material influence on the integrity of a paragraph (a)(1) water, that water would have a significant nexus. The agencies will consider all of the factors together when assessing the functions and the strength of the influence in the context of each case-specific determination of jurisdiction. Consistent with longstanding practice, the agencies will make decisions based on best professional judgment and on the best available information.

When assessing the functions and considering the factors in the final rule to analyze the influence of subject waters on the integrity of paragraph (a)(1) waters, the likelihood of a material influence is generally greater with increases in the number or size of the aquatic resource or resources being considered, decreasing distance from the identified paragraph (a)(1) water, as well as with increased density of the waters considered in combination as similarly situated waters. However, the agencies also recognize that in watersheds with fewer aquatic resources, a smaller number and/or lower density of similarly situated waters can provide functions that have disproportionate effects on paragraph (a)(1) waters. Hydrologic factors include the frequency, duration, magnitude, timing, and rate of hydrologic connections, as well as surface and shallow subsurface hydrologic connections. The presence of a surface or shallow subsurface hydrologic connection, as well as increased frequency, magnitude, or duration of such connections, can increase the strength of the functions that the subject waters provide to paragraph (a)(1) waters, and the corresponding chemical, physical (*i.e.,* hydrologic), or biological influence that a water has on paragraph (a)(1) waters. In some situations, streams with low duration but a high volume of flow can provide strong functions to paragraph (a)(1) waters by transporting large volumes of water, sediment, and woody debris that help maintain the integrity of those larger waters. A lack of hydrologic connections can also in some cases contribute to the strength of effects for certain functions such as floodwater attenuation or the retention and transformation of nutrients and other pollutants. Landscape position and geomorphology provide critical information about the relative location of the subject waters being considered within the watershed and their spatial relationship to the paragraph (a)(1) water. The slope, soil composition and transmissivity, and waterbody substrate composition and other physical characteristics (*e.g.,* channel shape) can all impact the strength of the functions identified in this rule and the associated influence on paragraph (a)(1) waters. Climatological factors like temperature, rainfall, and snowpack in a given region can influence the strength of the functions provided by the subject waters to paragraph (a)(1) waters by affecting the frequency, duration, magnitude, timing, and rate of hydrological connections.

There are ways the agencies can consider a changing climate under the significant nexus standard, but only to the extent it is relevant to the evaluation of whether the subject waters significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters. For example, a lake that dries up from warming temperatures due to climate change and no longer has a surface hydrologic connection to downstream waters at the time of assessment might become non-jurisdictional, whereas another lake that previously had limited surface hydrologic connectivity might have increased hydrologic connectivity with higher precipitation conditions under a changing climate.

In addition, under the significant nexus standard the agencies can consider the functions of streams, wetlands, and open waters that support the resilience of the chemical, physical, or biological integrity of paragraph (a)(1) waters to climate change. For example, more intense and frequent storms and other shifts in precipitation cause floods to increase in frequency and volume in some areas of the United States. A significant nexus determination can evaluate the strength of the effect of runoff storage in wetlands, open waters, and headwater tributaries in mitigating increased flood risk associated with climate change in paragraph (a)(1) waters. In other areas of the country, drought is leading to decreased baseflows in paragraph (a)(1) waters. A significant nexus analysis can assess whether the transmission of flows into alluvial or regional aquifer storage through tributaries and wetlands can mitigate for these climate change-related conditions, and assess those benefits to paragraph (a)(1) waters. Changes in flow in tributaries caused by climate change will also be relevant to the relatively permanent standard, but that standard does not allow the agencies to take into account the contribution of upstream waters to the resilience of the integrity of downstream waters. However, considering on a case-specific basis the strength and importance of the functions provided by aquatic resources that contribute to the resilience of the integrity of paragraph (a)(1) waters to climate change is consistent with the policy and goals of the Clean Water Act, case law, and the policy goals of this administration as articulated in Executive Order 13990.

The agencies recognize that there are climate benefits that streams, wetlands, and open waters provide that are not related to restoring or maintaining the integrity of paragraph (a)(1) waters, such as carbon sequestration. Those functions are not considered under this rule, because they are not directly related to the chemical, physical, or biological integrity of paragraph (a)(1) waters and therefore are not relevant to Clean Water Act jurisdiction.

The record for determinations of jurisdiction (*e.g.,* approved jurisdictional determinations for section 404 permits) for waters evaluated under the significant nexus standard will include available information supporting the determination. In addition to location and other descriptive information regarding the water at issue, the record will include an explanation of the rationale for the jurisdictional conclusion and a description of the information used. Relevant information can come from many sources and may in some cases include studies of the same type of water or similarly situated waters that apply to the water being evaluated. The determination of jurisdiction applies

only to the subject waters located in the area of interest and is a case-specific determination based on current conditions (except in the case of a potential enforcement action). Any similarly situated waters that are part of the significant nexus analysis but that are not in the area of interest are not subject to the jurisdictional decision (and so would not automatically be deemed jurisdictional or non-jurisdictional). For example, where the subject water is a portion of a tributary reach, the significant nexus analysis would encompass the entire tributary reach of the same order, any tributaries within the catchment of that reach, and any wetlands adjacent to those tributaries. However, the jurisdictional determination would only apply to the portion of the tributary reach that is subject to the determination.

iii. Tools for a Significant Nexus Analysis

The agencies have used many tools and sources of information to assess significant effects on the chemical, physical, and biological integrity of paragraph (a)(1) waters. Some tools and resources that the agencies have used to provide and evaluate evidence of a significant effect on the physical integrity of paragraph (a)(1) waters include USGS stream gage data, floodplain maps, statistical analyses, hydrologic models and modeling tools such as USGS's StreamStats or the Corps' Hydrologic Engineering Centers River System Analysis System (HEC–RAS), physical indicators of flow such as the presence and characteristics of a reliable OHWM with a channel defined by bed and banks, or other physical indicators of flow including such characteristics as shelving, wracking, water staining, sediment sorting, and scour, information from NRCS soil surveys, precipitation and rainfall data, and NRCS snow telemetry (SNOTEL) data or NOAA national snow analyses maps.

To evaluate the evidence of a significant effect on the biological integrity of paragraph (a)(1) waters, the agencies and practitioners have used tools and resources such as: population survey data and reports from Federal, Tribal, and State resource agencies, natural history museum collections databases, bioassessment program databases, fish passage inventories, U.S. Fish and Wildlife Service (FWS) Critical Habitat layers, species distribution models, and scientific literature and references from studies pertinent to the distribution and natural history of the species under consideration.

Tools and resources that can provide and evaluate evidence of a significant effect on the chemical integrity of paragraph (a)(1) waters include data from USGS water quality monitoring stations; Tribal, State, and local water quality reports; water quality monitoring and assessment databases; EPA's How's My Waterway (*available at https://www.epa.gov/waterdata/hows-my-waterway*), which identifies Clean Water Act section 303(d) listed waters, water quality impairments, and total maximum daily loads; watershed studies; stormwater runoff data or models; EPA's NEPAssist (*available at https://www.epa.gov/nepa/nepassist*), which provides locations and information on wastewater discharge facilities and hazardous-waste sites; the National Land Cover Database (NLCD); and scientific literature and references from studies pertinent to the parameters being reviewed. EPA has developed a web-based interactive water quality and quantity modeling system (Hydrologic and Water Quality System, HAWQS, *available at https://www.epa.gov/waterdata/hawqs-hydrologic-and-water-quality-system*) that is being used to assess the cumulative effects of wetlands on the larger waters to which they drain. Additional approaches to quantifying the hydrologic storage capacity of wetlands include statistical models, such as pairing LIDAR-based topography with precipitation totals. Both statistical and process-based models have been used to quantify the nutrient removal capacities of non-floodplain wetlands, and in some cases to assess the effects of non-floodplain wetland nutrient removal, retention, or transformation on downstream water quality. Evaluations of a significant effect on the chemical integrity of a paragraph (a)(1) water may include qualitative reviews of available information or incorporate quantitative analysis components including predictive transport modeling.

10. Guidance for Landowners on How To Know When Clean Water Act Permits are Required

The agencies understand that landowners would like to be able to easily discern whether their property contains any ''waters of the United States'' such that they may need to apply for a relevant Clean Water Act permit. With this rule, the agencies strive to provide additional clarity for the public. To that end, the rule clearly excludes some waters from Clean Water Act jurisdiction, thereby narrowing the category of waters that require additional jurisdictional analysis. The rule also clearly identifies some categories of waters as jurisdictional by rule without the need for further analysis. For the small percentage of waters that are not categorically excluded from, or included in, Clean Water Act jurisdiction, and which do not meet the relatively permanent standard, the agencies have established a new regulatory provision defining the meaning of ''significantly affect'' to guide implementation of the significant nexus standard. This provision provides the public with a clearer picture of the functions the agencies will assess and the factors the agencies will consider in determining whether waters being analyzed ''significantly affect'' (*i.e.,* have a material influence on) the integrity of traditional navigable waters, the territorial seas, or interstate waters and therefore meet the rule's definition of ''waters of the United States.''

Recognizing the concerns of landowners, the discussion below is designed to bring together information from the statute, the final rule's text, and this preamble—including the many useful tools identified in this preamble—to provide individual landowners with the step-by-step information needed to make informed decisions.[127] In addition, as discussed further below, the Corps has established a process for landowners to request an official determination of whether or not there are ''waters of the United States'' on their property. The Corps does not charge a fee for this service.[128] In cases where a landowner seeks to undertake an activity that involves discharges of dredged or fill material into areas that are ''waters of the United States'' that is not exempt from the permit requirements of the Clean Water Act, this section provides information about some of the general permits the Corps [129] has established that allow certain activities to proceed with little or no delay if the general conditions and any special conditions for the permit are met. Lastly, this section provides information for those rare occasions when a landowner needs an individual section 404 permit for an activity regulated under that section of the Clean Water Act.

[127] *See also https://www.epa.gov/wotus* for the latest information on implementation of the definition of ''waters of the United States.''

[128] To obtain a speedier determination, some landowners choose to incur some expense in providing site information supporting the jurisdictional determination request, such as a delineation of the lake or pond, stream, or wetland.

[129] The agencies note that New Jersey, Michigan, and Florida have assumed administration of section 404 programs for certain waters in those States under section 404(g) of the Act.

Step 1: Is the activity I want to take on my property exempt from needing a Clean Water Act permit?

Not all activities in or discharges to ''waters of the United States'' require authorization under the Clean Water Act. Generally, section 402 or section 404 permits are required if a person is discharging, or adding, a ''pollutant'' from a ''point source'' to the ''waters of the United States.'' The terms ''discharge of a pollutant,'' ''pollutant,'' and ''point source'' all have specific definitions in the Clean Water Act that must be met for the Act's requirements to apply. Even if a landowner is discharging a ''pollutant'' from a ''point source,'' those discharges still may not require a Clean Water Act permit because the statute and the agencies' regulations exempt some types of discharges from permitting under section 404 (for dredged and fill material) and section 402 (for other pollutants).

If a landowner wants to dredge or fill ''waters of the United States,'' many activities are exempt from the Clean Water Act's section 404 permitting requirements,[130] including:

- Established (ongoing) farming, ranching, and silviculture activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices;
- Maintenance (but not construction) of drainage ditches;
- Construction and maintenance of irrigation ditches;
- Construction and maintenance of farm or stock ponds;
- Construction and maintenance of farm and forest roads, in accordance with best management practices; and
- Maintenance of structures such as dams, dikes, and levees.

Additionally, many discharges of pollutants other than dredged or fill material do not require section 402 permits: [131]

- Any discharge of sewage from vessels, effluent from properly functioning marine engines, laundry, shower, and galley sink wastes, or any other discharge incidental to the normal operation of a vessel;
- Any introduction of pollutants from nonpoint-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands;
- Return flows from irrigated agriculture; and
- Discharges from a water transfer.

Step 2: Is water on my property covered by this rule?

The Clean Water Act does not cover every geographic feature with water in it; nor does it subject all activities in waters meeting the definition of ''waters of the United States'' to regulation (as discussed in Step 1). Puddles may periodically contain water, but they are not lakes, ponds, streams, or wetlands and they are not ''waters of the United States.'' The rule also has a well-established, very specific, three-factor definition of wetlands. That definition requires the presence of particular wetland hydrology, soils, and vegetation. Therefore, a homeowner's backyard that is soggy only immediately after a rainstorm is not ''waters of the United States'' under the rule.

Some waters are always jurisdictional under the rule: traditional navigable waters, the territorial seas, and interstate waters. Lakes and ponds, streams (including certain ditches), and wetlands that are not always jurisdictional under paragraph (a)(1) of the rule require additional assessment to determine whether they are ''waters of the United States'' under other categories of the rule. This additional assessment follows longstanding principles.

If a landowner's property does *not* contain the types of waters, including wetlands, covered by this rule, it is not jurisdictional.

Step 3: Is the water on my property excluded from the definition of ''waters of the United States''?

In evaluating whether a water, including a wetland, on a landowner's property is covered by the Clean Water Act, first determine whether it fits into one of this rule's categorical exclusions. The rule excludes certain features that commonly contain water but are not ''waters of the United States'' (so long as the features are not the types of waters that are always jurisdictional—traditional navigable waters, the territorial seas, and interstate waters):

- prior converted cropland;
- ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- artificially irrigated areas that would revert to dry land if the irrigation ceased;
- artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of ''waters of the United States'';
- swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow; and
- waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act.

These exclusions are discussed in more detail in section IV.C.7 of this preamble.

Where a feature located on a landowner's property satisfies the terms of an exclusion, it is not jurisdictional under the Clean Water Act. That is the case even where the feature would otherwise be jurisdictional as an impoundment; tributary; adjacent wetland; or intrastate lake or pond, stream, or wetland under this rule.

Step 4: If the activity I want to undertake on my property is not exempt from permitting requirements, and the feature on my property is likely a water for purposes of the rule (and is not covered by one of the exclusions), what do I do next?

If the feature on a landowner's property is likely a geographic feature considered to be a water, including a wetland, for purposes of the rule and is not covered by one of the exclusions, the next step is to determine if the water is a ''water of the United States'' under one of the longstanding categories in the rule: (1) traditional navigable waters, the territorial seas, and interstate waters; (2) jurisdictional impoundments of ''waters of the United States''; (3) jurisdictional tributaries; (4) jurisdictional adjacent wetlands; and (5) intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of the rule that meet either the relatively permanent standard or the significant nexus standard.

This preamble identifies publicly available tools and resources to assist landowners in understanding the jurisdictional status of waters, including tributaries and wetlands, that may be

[130] Note, however, that Clean Water Act section 404(f) establishes circumstances (based on certain effects on ''waters of the United States'') under which an activity listed as exempt is no longer exempt. For more detail, see section 404(f) and the regulations on ''discharges not requiring a permit'' at 33 CFR 323.4.

[131] See 40 CFR 122.3 for the regulatory provisions.

present on their lands. At the same time, the agencies recognize there are circumstances under which it may be difficult for an individual landowner to determine on their own whether a water on their land is jurisdictional. This section can help landowners to conclude whether a water on their land is likely to be jurisdictional; if landowners want certainty, they can ask the Corps for an approved jurisdictional determination. The Corps does not charge a fee for this service. Alternatively, as discussed below, some of these activities are readily authorized under a nationwide or regional general permit issued by the Corps. A landowner does not need an approved jurisdictional determination for an activity authorized by a general permit.

(1) Traditional Navigable Waters, the Territorial Seas, and Interstate Waters

Traditional navigable waters, the territorial seas, and interstate waters are always jurisdictional. Section IV.C.2. of this preamble explains how the agencies will identify these waters.

(2) Jurisdictional Impoundments of ''Waters of the United States''

Impoundments are distinguishable from natural lakes and ponds because they are created by discrete structures (often human-built) like dams or levees that typically have the effect of raising the water surface elevation, creating or expanding the area of open water, or both. Impoundments can be natural (like beaver ponds) or artificial (like reservoirs). Under the rule, jurisdictional impoundments include (1) impoundments created by impounding one of the ''waters of United States'' that was jurisdictional under this rule's definition at the time the impoundment was created, and (2) impoundments of waters that at the time of assessment meet the definition of ''waters of the United States'' under the rule as a traditional navigable water, the territorial seas, interstate water, jurisdictional tributary, or jurisdictional adjacent wetland, regardless of the water's jurisdictional status at the time the impoundment was created. Section IV.C.3 of this preamble explains how the agencies will identify jurisdictional impoundments.

(3) Jurisdictional Tributaries

The agencies understand that it can be confusing to determine if certain waters and features are tributaries, and whether those tributaries are ''waters of the United States.'' It can be especially confusing if waters or features on a landowner's property are periodically dry—some examples include washes, swales, and ephemeral streams. So how can a landowner determine whether features like this are jurisdictional?

The first question is whether the water or feature on a landowner's property is excluded as an erosional feature or is potentially jurisdictional as a stream. Section IV.C.7.c.ii.3 of this preamble discusses the distinctions between excluded erosional features like swales, washes, and gullies and potentially jurisdictional streams. So, for example, a water would be a stream, not an excluded erosional feature, if the water has a defined channel and an indicator of an ordinary high water mark such as a natural line impressed on the bank.[132]

If the water is determined to be a stream, the next question is whether that stream is part of the tributary system of a traditional navigable water, the territorial seas, or an interstate water. For tools that can help a landowner make this determination, see Step 5, below. If it is part of such a tributary system, the final question is whether it satisfies either the relatively permanent standard or the significant nexus standard under this rule. *See* section IV.C.4.c of this preamble for additional information on how to apply these standards. Also, the landowner can ask the Corps to determine whether the feature on their property is jurisdictional as discussed further below.

The agencies recognize that it can be confusing that streams with less than relatively permanent flow, which often look dry, can be ''waters of the United States.'' But such streams, where they meet the significant nexus standard, are important parts of the ecological system that sustains traditional navigable waters, the territorial seas, and interstate waters. For example, while almost all the streams in Arizona regularly do not have water in them, they are essential to the flow in downstream waters, like the Colorado River. Similarly, headwater ephemeral streams in the forests of the Northeastern United States are essential to flow in downstream rivers. Filling ephemeral streams could cause significant harm to the downstream rivers. The importance of ephemeral streams is evident from videos of these streams flowing after rain events in the Southwest. This video[133] also highlights the difference between dry land and ephemeral tributaries and demonstrates why landowners would not want to construct a building in an ephemeral stream.

(4) Jurisdictional Adjacent Wetlands

The rule uses the same definition of ''adjacent'' that has been used by the agencies for the past 45 years:[134] adjacent means bordering, contiguous, or neighboring. The agencies have long used three criteria to identify wetlands that are adjacent. These criteria are: (1) the wetland has an unbroken surface or shallow subsurface connection to a jurisdictional water; (2) the wetland is separated from a jurisdictional water by an artificial dike, natural berm, or the like; or (3) the wetland is reasonably close to a jurisdictional water. There is an extensive discussion of how the agencies will implement these criteria in section IV.C.5.c of this preamble. The agencies have not established a specific distance limitation in the rule beyond which wetlands are never adjacent, but nearly 45 years of implementation of this definition shows in a substantial number of cases, adjacent wetlands abut (touch) a jurisdictional water. And, on the whole, nationwide, adjacent wetlands are within a few hundred feet from jurisdictional waters (and in the instances where the distance is greater than a few hundred feet, adjacency is likely supported by a pipe, non-jurisdictional ditch, karst geology, or some other feature that connects the wetland directly to the jurisdictional water).

Examples of ''adjacent'' wetlands include wetlands that touch jurisdictional tributaries. If the wetland is only separated from the jurisdictional tributary by a levee, it is adjacent. If there is a barrier, like a river berm or a dike, between the wetland and a jurisdictional tributary, for example, the wetland still meets the definition of ''adjacent.'' If the wetland is connected to a jurisdictional tributary by a ditch that is not jurisdictional, the wetland is adjacent.

If your property contains a ''wetland'' and it is ''adjacent'' it must also meet one of the rule's jurisdictional tests. Wetlands that are themselves traditional navigable waters, interstate waters, or are ''adjacent'' to such waters are ''waters of the United States'' by rule.

[132] The Corps has useful guidance on how to identify an ordinary high water mark, including Regulatory Guidance Letter 05–05, ''Ordinary High Water Mark'' (*available at https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-05.pdf*).

[133] U.S. Department of Agriculture, Agricultural Research Service, Multiflume Runoff Event August 1, 1990, *https://www.tucson.ars.ag.gov/unit/WGWebcam/WalnutGulchWebcam.htm.*

[134] The 2020 NWPR had a different definition and was in effect from June 22, 2020 (in all jurisdictions except Colorado, where the rule did not go into effect until April 26, 2021) to August 30, 2021, when the rule was vacated by the Arizona district court. The 2015 Clean Water Rule had the same definition of ''adjacent'' but added a definition of ''neighboring.''

This includes, for example, tidal marshes along the Atlantic Coast that are subject to the ebb and flow of the tide and therefore are traditional navigable waters, wetlands that are separated from the Mississippi River from levees, and the Great Dismal Swamp, a wetland which crosses the border between Virginia and North Carolina. Other ''adjacent'' wetlands are only ''waters of the United States'' if they satisfy either the relatively permanent standard or the significant nexus standard.

(5) Jurisdictional Intrastate Lakes and Ponds, Streams, or Wetlands Not Identified in Paragraphs (a)(1) Through (4) of the Rule

The rule defines ''waters of the United States'' to include ''intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4)'' that meet either the relatively permanent standard or the significant nexus standard. The agencies intend to identify relatively permanent waters under this provision using a similar approach to the one described for relatively permanent tributaries in section IV.C.4.c.ii of this preamble. In implementing the significant nexus standard, the agencies generally intend to analyze these waters individually to determine if they significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water. One example of the kind of water that is likely to be assessed under this provision is a lake that is close to a jurisdictional tributary or traditional navigable water, the territorial seas, or an interstate water, but that is not part of the tributary system; this is because the adjacency provision in the rule (and in the longstanding regulations) applies only to wetlands, not to lakes and ponds.

Step 5: Are there resources and sources of help from the agencies to aid me in this process?

Yes, in addition to the rule and preamble, the agencies have identified several other types of resources to help landowners in the jurisdictional and permitting process. First, the agencies have identified a number of publicly available, user-friendly tools and resources for landowners seeking more information about whether their property contains ''waters of the United States.'' Next, the Corps has established a process for landowners to request an official determination of whether or not there are ''waters of the United States'' on their property. Finally, in cases where a landowner is undertaking an activity that is not exempt from the permit requirements of the Clean Water Act and their land contains waters that are likely to be or that the Corps has determined to be ''waters of the United States,'' this section provides information about some of the general permits the Corps has established that allow certain activities to proceed with little or no delay if the general and any special conditions for the permit are met. In addition, EPA and authorized states have established general permits for a wide variety of discharges subject to permitting under section 402 that have minimal impacts to waters. Finally, this section also provides information on those rare occasions when a landowner needs an individual Clean Water Act section 404 permit.

(1) Are there any publicly available tools and resources to help me get more information about waters on my land?

This preamble includes an extensive discussion of the many tools and resources the agencies can use when making jurisdictional determinations. It also discusses publicly available resources that provide jurisdictional and permit information. *See* sections IV.G and H of this preamble. Some of these publicly available tools and resources may be particularly useful for landowners seeking more information about whether their property might contain ''waters of the United States.'' For example, EPA's Clean Water Act Approved Jurisdictional Determination website (*available at https://watersgeo.epa.gov/cwa/CWA-JDs/*) includes a map viewer that shows where waters have been determined to be jurisdictional or non-jurisdictional based on approved jurisdictional determinations. Users can quickly and easily input a location (*e.g.,* a city and State, or a latitude and longitude) to view approved jurisdictional determinations that have been finalized in a specific geographic area. Additionally, publicly available map viewers integrate datasets, allowing users to consolidate and evaluate relevant data from multiple sources in one visual platform. EPA's EnviroAtlas (*available at https://www.epa.gov/enviroatlas/enviroatlas-interactive-map*) is a map viewer that provides information and interpretative tools to help facilitate surface water assessments using multiple data layers such as land cover, stream hydrography, soils, and topography. Users can quickly and easily input a location (*e.g.,* a city and State, or a latitude and longitude) and select relevant map layers from a list of individual datasets and indices. The EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS) Geoviewer (*available at https://www.epa.gov/waterdata/waters-geoviewer*) provides many map layers, including water map layers like NHDPlus, and watershed reports for analysis and interpretation. Similarly, in the USGS National Map Viewer (*available at https://apps.nationalmap.gov/viewer/*) users can view different map layers, including aerial imagery, water map layers like the NHD and NHDPlus High Resolution, wetlands map layers like NWI, and land cover, elevation data, and topographic maps. EPA's How's My Waterway mapper (*available at https://mywaterway.epa.gov/*) provides users with information about the water quality of their local waterways, including information about water quality impairments and section 402 permitted dischargers.

(2) How can I obtain a jurisdictional determination for a water on my property?

The Corps has long provided jurisdictional determinations as a public service. The Corps does not charge a fee for this service. There are two types of jurisdictional determinations provided by the Corps: approved jurisdictional determinations and preliminary jurisdictional determinations. An approved jurisdictional determination is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. A preliminary jurisdictional determination is a document indicating that there may be waters of the United States on a parcel or indications of the approximate location(s) of waters of the United States on a parcel. The Corps recognizes the value of jurisdictional determinations to the public and reaffirms the Corps' commitment to continue its practice of providing jurisdictional determinations, for which it does not charge a fee, upon request. A landowner who would like to know whether areas on their property meet the definition of ''waters of the United States'' may contact their local Corps district regulatory office at any time. The list of local district regulatory offices is available at the following link: *https://www.usace.army.mil/Missions/Locations/*. Contact information is available at the link for each local office.

When a local district regulatory office is contacted, district personnel will ensure that the landowner understands the different types of jurisdictional determinations so the landowner can make an informed decision about which type of jurisdictional determination is most appropriate for the landowner's circumstances. *See* section III.A.1.b of this preamble for a discussion of the

types of jurisdictional determinations the Corps issues. Once the landowner determines the best option for their particular circumstance, it is the Corps' policy to honor the request unless it is impracticable.

The Corps may need to conduct one or more site visits to collect information when a landowner requests an approved or preliminary jurisdictional determination. In addition to information collected during the site visit(s), the Corps will use data from other resources (such as those described in this preamble) as well as any information the landowner wishes to provide to inform the jurisdictional determination. A landowner may choose to hire an environmental consultant who can assist by providing site evaluation information and data collection, thereby supporting a more efficient process. Once the Corps has completed the jurisdictional determination, they will provide it to the landowner in a letter.

If the jurisdictional determination is an approved jurisdictional determination, the letter from the Corps will typically include one or more approved jurisdictional determination forms that explain the basis for the determination that the aquatic resources on the landowner's property are or are not ''waters of the United States.'' The landowner will also receive a form to request an appeal of the approved jurisdictional determination. Consistent with Regulatory Guidance Letter 05–02, ''Expiration of Geographic Jurisdictional Determinations of 'Waters of the United States,''' the landowner can rely upon the approved jurisdictional determination until it expires unless new information warrants revision of the approved jurisdictional determination prior to its expiration.

If the landowner disagrees with the Corps' approved jurisdictional determination, the landowner can request that it be reconsidered and submit any available new information or data to the district. If, after such reconsideration, or in the absence of any new information, the landowner disagrees with the approved jurisdictional determination, the landowner may administratively appeal the decision by sending a completed Request for Administrative Appeal form to the appropriate Corps' division office. The Corps' regulations at 33 CFR part 331 describe the administrative appeal process. The Corps' division may determine that none of the reasons for appeal have merit, in which case the approved jurisdictional determination remains in effect until it expires or it is revised by the Corps district. Alternatively, the Corps' division may determine that one or more of the reasons for appeal have merit in which case the approved jurisdictional determination is remanded to the district for reconsideration. The landowner may also challenge the approved jurisdictional determination in Federal district court.[135]

(3) Are there general permits under section 404 of the Clean Water Act for individual landowners? How do I obtain coverage under a nationwide permit?

Landowners that wish to pursue activities that are or may be subject to the permit requirements of the Clean Water Act and that will impact ''waters of the United States'' on their property may be able to obtain coverage under a general permit. General permits are issued on a nationwide, regional, or statewide basis for particular categories of activities that result in no more than minimal individual or cumulative adverse environmental effects. While some general permits require the applicant to submit a pre-construction notification to the Corps or a State, others allow the project proponent to proceed with the authorized activity with no formal notification. The general permit process allows certain activities to proceed with little or no delay if the conditions of the general permit are met. For example, minor road construction activities, utility line backfill, and minor discharges for maintenance can be authorized by a general permit, where the activity meets the acreage limits and other limits specified in the general permit.

As of the date of this rule, the Corps has issued 57 nationwide permits (NWPs), a number of which may be of particular use to individual property owners. Authorization to discharge dredged or fill material is provided under the following NWPs: NWP 3 authorizes discharges associated with maintenance of previously authorized and serviceable structures and fill; NWP 18 authorizes minor discharges of less than 25 cubic yards that result in the loss of no more than 1/10-acre of ''waters of the United States,'' which can include activities undertaken by a landowner; NWP 29 authorizes discharges that result in the loss of no more than ½-acre of non-tidal ''waters of the United States'' to support the construction or expansion of a single residence or a residential development; NWP 33 authorizes temporary discharges associated with construction activities and access to construction sites, including for the construction or expansion of a home or residential development if the area is restored to pre-construction conditions; NWP 57 authorizes discharges associated with electric utility and telecommunication line activities that result in the loss of no more than ½-acre of ''waters of the United States,'' including connecting these services to a home or residential development; NWP 58 authorizes discharges associated utility line activities for water and other substances that result in the loss of no more than ½-acre of ''waters of the United States,'' including connecting water and sewer lines to a home or residential development. These are general descriptions of the selected NWPs. The requirements and conditions that apply to the NWPs are set forth in the rules promulgating the NWPs. Corps personnel in the local district office can help explain the requirements of each NWP, including any conditions that have been added to the NWPs on a regional basis. Corps districts may add conditions to activity-specific NWP authorizations to ensure that those activities result in no more than minimal individual and cumulative adverse environmental effects. Corps districts across the country have issued approximately 450 regional general permits, and information on these permits is provided on each district's website. All general permits, including NWPs, are valid for a maximum of five years and are subject to change, so this overview is for illustrative purposes only. Property owners should always consult the most recently promulgated general permit information.

Additional information on NWPs is available at the following link: *https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Nationwide-Permits/.*

(4) If I need an individual section 404 permit, how do I obtain coverage?

The vast majority of activities subject to Clean Water Act section 404 permits are authorized under general permits; however, some activities do require authorization under an individual permit (generally because of a high level of impact on ''waters of the United States'' or because the project proponent cannot comply with all applicable conditions of a general permit). While the process of applying for and evaluating an individual permit is more involved than for a general permit, the time and complexity involved is commensurate with the level of impact and can still be efficient. The Corps

[135] In *U.S. Army Corps of Engineers* v. *Hawkes Co.*, 136 S. Ct. 1807 (2016), the Supreme Court held that approved jurisdictional determinations are subject to judicial review.

Regulatory Program personnel will work with an applicant to ensure potential adverse impacts associated with the proposed action have been to the extent practicable avoided or minimized. This effort focuses not only on lessening adverse impacts to waters, including wetlands, but also other important aspects of the human environment including endangered species and historic properties. Focused consideration of these and other environmental factors during the project planning stage could help avoid more complex and time-consuming evaluations and consultations. As a result of this process of avoidance, minimization, and with the implementation of certain compensatory mitigation, the Corps ends up denying less than 1% of individual permit requests [136] while still ensuring compliance with important Federal laws such as the Endangered Species Act and the National Historic Preservation Act. The Corps estimates that the typical cost associated with the individual permit process for a project affecting up to three acres of jurisdictional waters is between $15,500 and $37,300. The typical homeowner's project is far more likely to fall within the terms of a general permit (*e.g.,* NWP 29, which authorizes discharges that result in the loss of no more than ½-acre of non-tidal ''waters of the United States'' to support the construction or expansion of a single residence or a residential development) than to require filling multiple acres of jurisdictional waters.[137]

D. Placement of the Definition of ''Waters of the United States'' in the Code of Federal Regulations

1. This Rule

Prior to the 2020 NWPR, the definition of ''waters of the United States'' was historically placed in eleven locations in the Code of Federal Regulations (CFR). For the sake of simplicity, in this rule, as in the 2020 NWPR, the agencies are codifying the definition of ''waters of the United States'' in only two places in the CFR—in Title 33, which generally implements the Corps' statutory authority, at 33 CFR 328.3, and in Title 40, which generally implements EPA's statutory authority, at 40 CFR 120.2. Additionally, the agencies' final rule makes several ministerial changes to EPA's regulations at part 120: (1) this rule deletes the definition of ''navigable waters'' at 40 CFR 120.2 and adds the definition to the section ''purpose and scope'' at 40 CFR 120.1 and (2) this rule adds clarifying text to the section ''purpose and scope'' at 40 CFR 120.1.

2. Summary of the Agencies' Consideration of Public Comments and Rationale for This Rule

The agencies proposed to maintain the definition of ''waters of the United States'' at 33 CFR part 328 and in one location at 40 CFR 120.2. The agencies also proposed to delete the definition of ''navigable waters'' at 40 CFR 120.2 and to add the definition to the section ''purpose and scope'' of part 120 at 40 CFR 120.1. Additionally, the agencies proposed to add additional clarifying text to the section ''purpose and scope'' at 40 CFR 120.1.

The agencies solicited comment on their deletion of the definition of ''navigable waters'' at 40 CFR 120.2 and adding it instead to the section ''purpose and scope'' at 40 CFR 120.1. One commenter supported the proposed changes to placement of the definition of ''waters of the United States.'' As the agencies stated in the preamble to the 2020 NWPR, the placement of the definition in two locations, at 33 CFR 328.3 and 40 CFR 120.2, increases convenience for the reader and provides clarity to the public that there is a single definition of ''waters of the United States'' applicable to the Clean Water Act and its implementing regulations. The placement has no substantive implications for the scope of Clean Water Act jurisdiction. 85 FR 22328 (April 21, 2020). In the sections of the CFR where EPA's definition previously existed, 40 CFR 110.1, 112.2, 116.3, 117.1, 122.2, 230.3, 232.2, 300.5, 302.3, 401.11, and Appendix E to 40 CFR part 300, the 2020 NWPR cross-references the then-newly created section of the regulations containing the definition of ''waters of the United States.'' The cross-references to 40 CFR 120.2 are maintained by this rule.

As discussed in the preamble of the proposed rule, the agencies intend for the other revisions to 40 CFR 120—deleting the definition of ''navigable waters'' at 40 CFR 120.2, adding the definition into the section ''purpose and scope'' at 40 CFR 120.1, and adding clarifying text to the section ''purpose and scope'' at 40 CFR 120.1—to be editorial and clarifying changes and not substantive changes from EPA's regulations. The agencies have concluded that these minor revisions add consistency between EPA's regulations at 40 CFR 120 and the Corps' regulations defining ''waters of the United States'' at 33 CFR 328.3. As a result of this non-substantive revision, the agencies' definitions will have parallel numerical and alphabetical subsections, providing clarity for the public. The changes have no implications for Clean Water Act program implementation. They are made for the sole purpose of enhancing the clarity of EPA's regulation and providing consistency across the implementing agencies' regulations.

E. Severability

The purpose of this section is to clarify the agencies' intent with respect to the severability of provisions of this rule. Each category and subcategory of jurisdictional waters in this rule is capable of operating independently. If any provision or jurisdictional category or subcategory of this rule is determined by judicial review or operation of law to be invalid, that partial invalidation will not render the remainder of this rule invalid. Likewise, if the application of any portion of this rule to a particular circumstance is determined to be invalid, the agencies intend that the rule remain applicable to all other circumstances.

For example, in the absence of jurisdiction over a subcategory of jurisdictional tributaries, adjacent wetlands, or paragraph (a)(5) waters, references to those subcategories of waters could be removed, and the agencies would continue to exercise jurisdiction under the remainder of this rule (including unaffected subcategories). Each exclusion in paragraph (b) and each definitional provision of paragraph (c) also operates independently of the other provisions in this rule and is intended to be severable. Moreover, as noted, the agencies intend applications of this rule to be severable from other applications, such that if the application of this rule to a given circumstance is held invalid, the rule remains enforceable in all other applications. For example, if a court were to determine that a wetland cannot be treated as adjacent if it is separated from a jurisdictional water by road or other barrier, the agencies intend that other categories of wetlands within the rule's definition of ''adjacent'' would remain subject to jurisdiction.

F. Jurisdictional Determinations Issued Under Previous Rules

The agencies recognize that promulgation of this rule could lead to questions regarding AJDs issued under prior rules defining ''waters of the United States'' and the utility of such AJDs to support actions, such as

[136] Based on data from the Corps' ORM2 database.

[137] According to recent U.S. Census data, even in the State with the largest lot size, California, the average lot size is substantially smaller than three acres, *see https://www.census.gov/construction/chars/,* meaning the acreage of jurisdictional waters would be smaller still.

requests for permits, following the effective date of this rule. In this section, the agencies seek to provide clarity on the effect of this rule on previously issued AJDs and the extent to which AJDs issued under prior rules may be relied upon. To be clear, this discussion merely explains pre-existing legal principles and does not create new requirements.

An AJD is a Corps document stating the presence or absence of ''waters of the United States'' on a parcel or a written statement and map identifying the limits of ''waters of the United States'' on a parcel. *See* 33 CFR 331.2. As a matter of policy, AJDs are valid for a period of five years from the date of issuance, unless new information warrants revision of the determination before the expiration date, or a District Engineer identifies specific geographic areas with rapidly changing environmental conditions that merit reverification on a more frequent basis. *See* U.S. Army Corps of Engineers, RGL No. 05–02, section 1(a), p. 1 (June 2005). Additionally, the possessor of a valid AJD may ask the Corps to reassess a parcel and issue a new AJD before the five-year expiration date.[138]

This rule does not invalidate AJDs issued under prior definitions of ''waters of the United States.'' As such, any existing AJD—except AJDs issued under the vacated 2020 NWPR, which are discussed below—will remain valid to support regulatory actions, such as permitting, until its expiration date, unless one of the criteria for revision is met under RGL 05–02 or the recipient of such an AJD asks the Corps to issue a new AJD. Because agency actions are governed by the rule in effect at the time an AJD is issued and not when the request was made, all approved jurisdictional determinations issued on or after the effective date of this rule will be made consistent with this rule.

Because two district courts vacated the 2020 NWPR, the agencies have received many questions regarding the validity of AJDs issued under the 2020 NWPR (hereinafter, ''NWPR AJDs''). In response to such inquiries, the agencies have explained through previous public statements that NWPR AJDs, unlike AJDs issued under other rules that were changed pursuant to notice-and-comment rulemaking rather than vacatur, may not reliably state the presence, absence, or limits of ''waters of the United States'' on a parcel and will not be relied upon by the Corps in making new permit decisions following the Arizona district court's August 30, 2021 order vacating the 2020 NWPR.[139] Therefore, for any currently pending or future permit action that intends to rely on a NWPR AJD, the Corps will discuss with the applicant, as detailed in RGL 16–01,[140] whether the applicant would like to receive a new AJD completed under the regulatory regime in effect at that time (*i.e.,* the pre-2015 regulatory regime until this rule is effective or this rule after it becomes effective) to continue their permit processing or whether the applicant would like to proceed in reliance on a preliminary jurisdictional determination or ''no JD whatsoever.'' [141]

NWPR AJDs issued prior to the Arizona district court's vacatur decision and that are *not* associated with a permit action (also known as ''stand-alone'' AJDs under RGL 16–01) will remain valid stand-alone AJDs until their expiration date unless one of the criteria for revision is met under RGL 05–02 or if the recipient of such an AJD requests that a new AJD be provided. A recipient of a stand-alone NWPR AJD should nonetheless be aware of the reliability considerations noted above. Moreover, a recipient of a stand-alone NWPR AJD that intends to discharge into waters identified as non-jurisdictional under the vacated 2020 NWPR but that may be jurisdictional under the pre-2015 regulatory regime or this rule may want to discuss their options with the Corps due to the unreliability of those jurisdictional findings.

G. Implementation Tools

This rule provides implementation guidance informed by sound science, implementation tools, and other resources, drawing on more than a decade of post-*Rapanos* implementation experience. Section IV.C of this preamble addressing specific categories of waters provides guidance on implementation of each provision of this rule. This section addresses advancements in the implementation data, tools, and methods that are relevant to jurisdictional determinations under this rule. Although the agencies may also rely on site-specific information from landowners or field visits, the agencies generally use publicly available data, tools, and methods to inform determinations of jurisdiction. These same resources can also be used by the public and practitioners to assess aquatic resources to better understand whether a particular resource may be jurisdictional. Some of these resources are freely available, and others may charge a fee for use. Note that members of the public are not required to conduct or provide any of the analyses described in this section as part of a JD request. JD requesters need only provide the agencies with a minimal amount of information, including identification of the boundaries of the area of interest, to request a JD. *See* RGL 16–01, Appendix 1. The following discussion is provided to clarify how available data, tools, and methods inform the agencies' determinations and confirm that interested parties may use these same resources to inform their own siting decisions, if so desired.

Since the *Rapanos* decision, there have been dramatic advancements in the data, tools, and methods used to make jurisdictional determinations, including in the digital availability of information and data. In 2006, when the agencies began to implement the *Rapanos* and *Carabell* decisions, there were fewer implementation tools and support resources to guide staff in jurisdictional decision-making under the relatively permanent and significant nexus standards. Agency staff were forced to rely heavily on information provided in applicant submittals and available aerial imagery to make jurisdictional decisions or to schedule an in-person site visit to review the property themselves. The 2007 Corps Instructional Guidebook encouraged practitioners to utilize maps, aerial photography, soil surveys, watershed studies, scientific literature, previous jurisdictional determinations for the review area, and local development plans to complete accurate jurisdictional decisions or analysis. For more complicated situations or decisions involving significant nexus evaluations, the Guidebook encouraged practitioners to identify and evaluate the functions relevant to the significant nexus by incorporating literature citations and/or references from studies pertinent to the parameters being reviewed. For significant nexus decisions specifically, the Guidebook instructed practitioners to consider all

[138] In contrast to AJDs, preliminary jurisdictional determinations (PJDs) are advisory in nature and have no expiration date. *See* 33 CFR 331.2; *see also* U.S. Army Corps of Engineers, RGL No. 16–01 (October 2005) (RGL 16–01). This rule has no impact on existing PJDs.

[139] U.S. Army Corps of Engineers, *Navigable Waters Protection Rule Vacatur* (published January 5, 2022), *available at https://www.usace.army.mil/Media/Announcements/Article/2888988/5-january-2022-navigable-waters-protection-rule-vacatur/;* U.S. Environmental Protection Agency, *Current Implementation of Waters of the United States* (published January 5, 2022), *available at https://www.epa.gov/wotus/current-implementation-waters-united-states.*

[140] U.S. Army Corps of Engineers, RGL No. 16–01 (October 2016).

[141] *See* RGL 16–01 (explaining the ''no JD whatsoever'' option).

available hydrologic information (*e.g.,* gage data, precipitation records, flood predictions, historic records of water flow, statistical data, personal observations/records, etc.) and physical indicators of flow including the presence and characteristics of a reliable OHWM.

The Corps also issued RGL No. 07–01 [142] in 2007. RGL No. 07–01 laid out principal considerations for evaluating the significant nexus of a tributary and its adjacent wetlands which included the volume, duration, and frequency of flow of water in the tributary, proximity of the tributary to a traditional navigable water, and functions performed by the tributary and its adjacent wetlands. This RGL highlighted wetland delineation data sheets, delineation maps, and aerial photographs as important for adequate information to support all jurisdictional decision-making. Gathering the data necessary to support preliminary or approved jurisdictional decisions was often time consuming for staff and the regulated public. There were not many nationally available repositories for much of the information that the agency staff utilized in decision-making, particularly during the first years of implementing the guidance. Despite these challenges, the agencies and others in the practitioner community gained substantial collective experience implementing the relatively permanent and significant nexus standards from 2006 to 2015.

Since 2015, there have been dramatic improvements to the quantity and quality of water resource information available on the internet, including information and tools that are freely available to the public. The agencies and other practitioners can use online mapping tools to determine whether waters are connected or sufficiently close to ''waters of the United States,'' and new user interfaces have been developed that make it easier and quicker to access information from a wide variety of sources. Furthermore, some information used to only be available in hard-copy paper files, including water resource inventories and habitat assessments, and many of these resources have been made available online or updated with new information.

The following overview of several tools and data that have been developed or improved since 2015 is intended to demonstrate how case-specific evaluations can be made more quickly and consistently than ever before. Advancements in geographic information systems (GIS) technology and cloud-hosting services have led to an evolution in user interfaces for publicly available datasets frequently used in jurisdictional decision-making such as the NWI, USGS NHD, soil surveys, aerial imagery, and other geospatial analysis tools like USGS StreamStats. Not only are the individual datasets more easily accessible to users, but it has also become much easier for users to quickly integrate these various datasets using desktop or online tools like map viewers to consolidate and evaluate the relevant data in one visual platform. Such map viewers can assist, for example, with considering the factors and assessing the functions in paragraph (c)(6). The EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS) GeoViewer is an example of a web mapping application that provides accessibility to many spatial dataset layers like NHDPlus and watershed reports for analysis and interpretation. Another web mapping application is the EPA's EnviroAtlas, which provides information and interpretative tools to help facilitate surface water assessments using multiple data layers such as land cover, stream hydrography, soils, and topography. Several States also have State-specific interactive online mapping tools called Water Resource Registries (WRRs). WRRs host publicly available GIS data layers providing various information such as the presence of wetlands, land use/cover, impaired waters, and waters of special concern. Other websites like the Corps' Jurisdictional Determinations and Permits Decision site and webservices like EPA's Enforcement and Compliance History Online (ECHO) Map Services allow users to find geospatial and technical information about Clean Water Act section 404 and NPDES permitted discharges. Information on approved jurisdictional determinations finalized by the Corps is also available on the Corps' Jurisdictional Determinations and Permit Decisions site and EPA's Clean Water Act Approved Jurisdictional Determinations website.

The data that are available online have increased in quality as well as quantity. The NHD has undergone extensive improvements in data availability, reliability, and resolution since 2015, including the release of NHDPlus High Resolution datasets for the conterminous U.S. and Hawaii, with Alaska under development. One notable improvement in NHD data quality is that the flow-direction network data are much more accurate than in the past. Improvements have also been made to the NWI website and geospatial database, which has served as the primary source of wetland information in the United States for many years. In 2016, NWI developed a more comprehensive dataset (NWI Version 2) that is inclusive of all surface water features in addition to wetlands. This NWI Version 2 dataset provides more complete geospatial data on surface waters and wetlands than has been available in the past and provides a more efficient means to make determinations of flow and water movement in surface water basins and channels, as well as in wetlands. The agencies and other practitioners can use this dataset to help assess potential hydrologic connectivity between waterways and wetlands. For example, it can be used in part to help the agencies identify wetlands that do not meet the definition of adjacent (waters assessed under paragraph (a)(5)).

The availability of aerial and satellite imagery has improved dramatically since 2015. This imagery is used to observe the presence or absence of flow and identify relatively permanent flow in tributary streams and hydrologic connections to waters. The agencies often use a series of aerial and satellite images, spanning multiple years and taken under normal climatic conditions, to determine the flow characteristics of a tributary, as a first step to determine if additional field-based information is needed to determine the flow characteristics. Other practitioners may also use aerial and satellite images to identify aquatic resources and inform assessments of those aquatic resources. The growth of the satellite imagery industry has reduced the need to perform as many field investigations to verify Clean Water Act jurisdiction.[143] Some of these services charge a fee for use, but others are freely available.

Similarly, the availability of LIDAR data has increased in availability and utility for informing decisions on Clean

[142] RGL No. 07–01 was later superseded by RGL 08–02, which was superseded by RGL 16–01, neither of which addressed significant nexus evaluations.

[143] For example, satellite imagery services are available through services such as DigitalGlobe, *available at https://discover.maxar.com/,* and aerial photography and imagery are available through services such as USGS EarthExplorer, *available at https://earthexplorer.usgs.gov/,* and National Aeronautics and Space Administration (NASA) Earth Data, *available at https://earthdata.nasa.gov/.* The USGS Landsat Level-3 Dynamic Surface Water Extent (DSWE) product, *available at https://www.usgs.gov/landsat-missions/landsat-dynamic-surface-water-extent-science-products?qt-science_support_page_related_con=0#qt-science_support_page_related_con,* is a specific example of a tool that may be useful for identifying surface water inundation on the landscape in certain geographic areas.

Water Act jurisdiction. LIDAR produces high-resolution elevation data (<1–3 meter) which can be used to create maps of local topography. The high-resolution maps can highlight the potential hydrologic connections and flowpaths at a site. Where LIDAR data have been processed to create a bare earth model, detailed depictions of the land surface reveal subtle elevation changes and characteristics of the land surface, including the identification of tributaries. Hydrologists, for example, have long used digital elevation models of the earth's surface to model watershed dynamics, and the agencies have used such information where available to help inform jurisdictional decisions. LIDAR-derived digital elevation models tend to be high resolution (<1–3 meter), so they are particularly helpful for identifying fine-scale surface features. For example, LIDAR-indicated tributaries can be correlated with aerial photography or other tools to help identify channels and to help determine flow permanence (*e.g.,* relatively permanent flow) in the absence of a field visit. The agencies have been using such remote sensing and desktop tools to assist with identifying jurisdictional tributaries for many years, and such tools are particularly critical where data from the field are unavailable, or a field visit is not possible. High-resolution LIDAR data are becoming more widespread for engineering and land use planning purposes. The USGS is in the process of collecting LIDAR data for the entire United States.[144] LIDAR data are available for download via the National Map Download Client (*available at https://apps.nationalmap.gov/downloader/#/*) and LIDAR-derived digital elevation models are available via the 3DEP LidarExplorer (*available at https://apps.nationalmap.gov/lidar-explorer/#/*). However, LIDAR-derived elevation maps are not always available, so the agencies use other elevation data, including digital elevation models derived from other sources (*e.g.,* 10-meter digital elevation models) and topographic maps to help determine the elevation on a site and to assess the potential location of tributaries.

Since 2015, tools have been developed that automate some of the standard practices the agencies rely on to assist in jurisdictional determinations. One example of this automation is the Antecedent Precipitation Tool (APT), which was released to the public in 2020 and had been used internally by the agencies prior to its public release. The APT is a desktop tool developed by the Corps and is commonly used by the agencies to help determine whether field data collection and other site-specific observations occurred under normal climatic conditions. In addition to providing a standardized methodology to evaluate normal precipitation conditions (''precipitation normalcy''), the APT can also be used to assess the presence of drought conditions, as well as the approximate dates of the wet and dry seasons for a given location. As discussed in section IV.B.3 of this preamble, above, precipitation data are often not useful in providing evidence as to whether a surface water connection exists in a typical year, as required by the 2020 NWPR. However, the agencies have long used the methods employed in the APT to provide evidence that wetland delineations are made under normal circumstances or to account for abnormalities during interpretation of data. The development and public release of the APT has accelerated the speed at which these analyses are completed; has standardized methods, which reduces errors; and has enabled more people to perform these analyses themselves, including members of the public. Automated tools like the APT will continue to be important for supporting jurisdictional decision-making. The agencies will consider opportunities to develop and improve tools that should be helpful for further automating and streamlining the JD process in the future.

Site visits are still sometimes needed to perform on-site observations of surface hydrology or collect regionally-specific field-based indicators of relatively permanent flow (*e.g.,* the presence of riparian vegetation or certain aquatic macroinvertebrates). The methods and instruments used to collect field data have also improved since 2015, such as the development of rapid, field-based SDAMs that use physical and biological indicators to determine the flow duration class of a stream reach. The agencies have previously used existing SDAMs developed by Federal and State agencies to identify perennial, intermittent, or ephemeral streams. The agencies will continue to use these tools whenever they are determined to be a reliable source of information for the specific water feature of interest. The agencies are currently working to develop region-specific SDAMs for nationwide coverage, which will promote consistent implementation across the United States in a manner that accounts for differences between each ecoregion. The region-specific SDAMs will be publicly available, with user manuals that will guide not only the agencies, but also other practitioners, in applying the methods to assess aquatic resources. Additional information on the agencies' efforts to develop SDAMs is available on the Regional Streamflow Duration Assessment Methods web page, *available at https://www.epa.gov/streamflow-duration-assessment.* Consistent with longstanding practice, the agencies will make decisions based on the best available information.

EPA and the Army have also been working with other Federal agencies on improving aquatic resource mapping and modeling, including working with the Department of Interior (DOI). EPA, USGS, and FWS have a long history of working together to map the nation's aquatic resources. The agencies will continue to collaborate with DOI to enhance the NHD, NWI, and other products to better map the nation's water resources while enhancing the utility and availability of such geospatial products for implementation of Clean Water Act programs.

H. Publicly Available Jurisdictional Information and Permit Data

The agencies have provided information on jurisdictional determinations that is readily available to the public. The Corps maintains a website, *available at https://permits.ops.usace.army.mil/orm-public,* that presents information on the Corps' approved jurisdictional determinations and Clean Water Act section 404 permit decisions. The website allows users to search and view basic information on approved jurisdictional determinations and permit decisions (including latitude and longitude) and to filter the determinations using different parameters like Corps District and year. The website also contains a link to an associated approved jurisdictional determination form. Similarly, EPA maintains a website, *available at https://watersgeo.epa.gov/cwa/CWA-JDs/,* that presents information on approved jurisdictional determinations made by the Corps under the Clean Water Act since August 28, 2015. EPA's website also allows users to search, sort, map, view, filter, and download information on approved jurisdictional determinations using different search parameters (*e.g.,* by year, location, State, watershed, regulatory regime). The website includes a map viewer that shows where waters have been determined to be jurisdictional or non-

[144] *See* U.S. Geological Survey. ''What is Lidar data and where can I download it?'' *Available at https://www.usgs.gov/faqs/what-lidar-data-and-where-can-i-download-it.*

jurisdictional based on the approved jurisdictional determinations available on the site.[145] These websites will incorporate information on approved jurisdictional determinations made under the revised definition of ''waters of the United States.'' EPA also maintains on its website information on certain dischargers permitted under Clean Water Act section 402, including the Permit Compliance System and Integrated Compliance Information System database, *available at https://www.epa.gov/enviro/pcs-icis-overview,* as well as the EnviroMapper, *available at https://enviro.epa.gov/enviro/em4ef.home,* and How's My Waterway, *available at https://www.epa.gov/waterdata/hows-my-waterway.* The agencies also intend to provide links to the public to any guidance, forms, or memoranda of agreement relevant to the definition of ''waters of the United States'' on EPA's website at *https://www.epa.gov/wotus.*

V. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review; Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket for this action. The agencies prepared an economic analysis of the potential costs and benefits associated with this action. This analysis, the Economic Analysis for the Final ''Revised Definition of 'Waters of the United States''' Rule, is available in the docket for this action.

This rule establishing the definition of ''waters of the United States'' does not by itself impose costs or benefits. Potential costs and benefits would only be incurred as a result of actions taken under existing Clean Water Act programs relying on the definition of ''waters of the United States'' (*i.e.,* sections 303, 311, 401, 402, and 404) that are not otherwise modified by this rule. Entities currently are, and will continue to be, regulated under these programs that protect ''waters of the United States'' from pollution and destruction. Each of these programs may subsequently impose costs as a result of implementation of their specific regulations.

The agencies prepared the economic analysis pursuant to the requirements of Executive Orders 12866 and 13563 to provide information to the public. The economic analysis was done for informational purposes and the final decisions on the scope of ''waters of the United States'' in the rulemaking are not based on consideration of the potential benefits and costs in the economic analysis. Within the Economic Analysis for the Final Rule, the agencies have analyzed the potential benefits and costs associated with various Clean Water Act programs that could result from this rule relative to two baselines. The primary baseline analyzes costs and benefits associated with moving from the pre-2015 regulatory regime that is currently being implemented to the definition in this rule. This rule imposes *de minimis* costs and generates *de minimis* benefits under the primary baseline.

Though two courts have vacated the 2020 NWPR and the pre-2015 regulatory regime is currently being implemented, the agencies have chosen to provide additional information to the public with the 2020 NWPR as a secondary baseline in the Economic Analysis for the Final Rule. This rule will replace the 2020 NWPR in the Code of Federal Regulations as the definition of ''waters of the United States'' in the agencies' regulations. The agencies project that compared to the 2020 NWPR, this rule would define more waters as within the scope of the Clean Water Act. The analysis of estimated costs and benefits of this rule is contained in the Economic Analysis for the Final Rule and is available in the docket for this action.

B. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA because it does not contain any information collection activities. However, this action may change terms and concepts used by EPA and Army to implement certain programs. The agencies thus may need to revise some of their collections of information to be consistent with this action and will do so consistent with the PRA process.

C. Regulatory Flexibility Act (RFA)

The agencies certify that this rule will not have a significant economic impact on a substantial number of small entities under the RFA for several reasons. First, as demonstrated in Chapter I of the Economic Analysis for the Final Rule, this rule would codify a regulatory regime with *de minimis* differences from the one currently being implemented nationwide due to the vacatur of the 2020 NWPR.

This rule will also not have a significant economic impact on a substantial number of small entities under the RFA because under the RFA, the impact of concern is any significant adverse economic impact on small entities, because the primary purpose of the initial regulatory flexibility analysis is to identify and address regulatory alternatives ''which minimize any significant economic impact of the proposed rule on small entities.'' 5 U.S.C. 603(a). This rule does not directly apply to specific entities and therefore it does not ''subject'' any entities of any size to any specific regulatory burden. Rather, it is designed to clarify the statutory term ''navigable waters,'' defined as ''waters of the United States,'' which defines the scope of Clean Water Act jurisdiction. 33 U.S.C. 1362(7). The scope of Clean Water Act jurisdiction is informed by the text, structure, and history of the Clean Water Act and relevant Supreme Court case law, as well as the best available science and the agencies' experience and technical expertise. None of these factors are readily informed by an RFA analysis. *See, e.g., Cement Kiln Recycling Coal.* v. *EPA,* 255 F.3d 856, 869 (D.C. Cir. 2001) (''[T]o require an agency to assess the impact on all of the nation's small businesses possibly affected by a rule would be to convert every rulemaking process into a massive exercise in economic modeling, an approach we have already rejected.''); *Michigan* v. *EPA,* 213 F.3d 663, 688–89 (D.C. Cir. 2000) (holding that the RFA imposes ''no obligation to conduct a small entity impact analysis of effects'' on entities which it regulates only ''indirectly''); *Am. Trucking Ass'n* v. *EPA,* 175 F.3d 1027, 1045 (D.C. Cir. 1999) (''[A]n agency may justify its certification under the RFA upon the ''factual basis'' that the rule does not directly regulate any small entities.''); *Mid-Tex Elec. Co-op, Inc.* v. *FERC,* 773 F.2d 327, 343 (D.C. Cir. 1985) (''Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy.'').

[145] With respect to the waters determined to be non-jurisdictional, section IV.C.7 of this preamble describes the regulatory exclusions in this rule, which reflect the agencies' longstanding practice and technical judgment that certain waters and features are not subject to the Clean Water Act. Additionally, based on the agencies' experience, many waters assessed under this rule will not have a significant nexus to paragraph (a)(1) waters, and thus will not be jurisdictional under the Clean Water Act under this rule. *See* section IV.C.9.b of this preamble for examples of waters that would not likely have a significant nexus under this rule.

Finally, the agencies conclude that this rule will not significantly impact small entities because it narrows the scope of jurisdiction from the text of the 1986 regulations. Because fewer waters will be subject to the Clean Water Act under this rule than fall within the scope of the text of the regulations in effect, this action will not affect small entities to a greater degree than the existing regulations currently in effect. A key change is the deletion of the provision in the 1986 regulations that defines ''waters of the United States'' as all paragraph (a)(3) ''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; 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. Under this rule, a broad interstate commerce connection is not sufficient to meet the definition of ''waters of the United States.'' Instead, waters must meet either the relatively permanent standard or the significant nexus standard. Further, the final rule eliminates jurisdiction over tributaries and adjacent wetlands based on their connection to paragraph (a)(5) waters. In addition, this rule would explicitly exclude some features and waters over which the agencies have not generally asserted jurisdiction, but which are not excluded in the text of the 1986 regulations, and in so doing eliminates the authority of the agencies to determine in case-specific circumstances that some such waters are jurisdictional ''waters of the United States.'' This rule also provides new limitations on the scope of jurisdictional tributaries and most adjacent wetlands by establishing a requirement that they meet either the relatively permanent standard or the significant nexus standard. Together, these changes serve to narrow the scope of this rule in comparison to the text of the regulation in effect. Because the rule narrows the scope of jurisdiction from the text of the 1986 regulations, this action will not have a significant adverse economic impact on a substantial number of small entities, and therefore no regulatory flexibility analysis is required.

Nevertheless, the agencies recognize that the scope of the term ''waters of the United States'' is of great national interest, including within the small business community. Given this interest, the agencies sought early input from representatives of small entities while formulating a proposed definition of this term, including holding a public meeting dedicated to hearing feedback from small entities on August 25, 2021 (*see* Environmental Protection Agency, 2021 ''Waters of the United States'' Public Meeting Materials, *available at https://www.epa.gov/wotus/2021-waters-united-states-public-meeting-materials*). The agencies also met with small entities during the public comment period to hear their thoughts on the proposed rule. The Office of Advocacy of the U.S. Small Business Administration hosted EPA and Army staff in January 2022 to discuss the proposed rule with small entities at its Small Business Environmental Roundtables. The agencies met with small agricultural interests and their representatives for a roundtable on January 7, 2022, and met with other small entities on January 10, 2022. The agencies have addressed this feedback in the preamble relating to these topics and in the discussion above.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The final definition of ''waters of the United States'' applies broadly to Clean Water Act programs. The action imposes no enforceable duty on any Tribal, State, or local governments, or the private sector.

E. Executive Order 13132: Federalism

Consulting with State and local government officials, or their representative national organizations, is an important step in the process prior to proposing regulations that may have federalism implications under the terms of Executive Order 13132. The agencies engaged State and local governments over a 60-day federalism consultation period during development of this rule, beginning with the initial federalism consultation meeting on August 5, 2021, and concluding on October 4, 2021. Twenty intergovernmental organizations, including eight of the ten organizations identified in EPA's 2008 Executive Order 13132 Guidance, attended the initial Federalism consultation meeting, as well as 12 associations representing State and local governments. Organizations in attendance included the following: National Governors Association, National Conference of State Legislatures, United States Conference of Mayors, National League of Cities, National Association of Counties, National Association of Towns and Townships, County Executives of America, Environmental Council of the States, Association of State Wetland Managers, Association of State Drinking Water Administrators, National Association of State Departments of Agriculture, Western States Water Council, National Association of Clean Water Agencies, National Rural Water Association, National Association of Attorneys General, National Water Resources Association, National Municipal Stormwater Alliance, Western Governors' Association, American Water Works Association, and Association of Metropolitan Water Agencies. In addition, the agencies received letters from State and local governments, as well as government associations, as part of this initial federalism consultation process. A total of 37 letters were submitted from twelve State government agencies, five local government agencies, seventeen intergovernmental associations, and three State-level associations of local governments. All letters received by the agencies during this consultation may be found in the docket (Docket ID No. EPA–HQ–OW–2021–0602) for this rule.

A Summary Report of Federalism Consultation for the proposed rule was published in December 2021. The agencies continued to engage with State and local governments during the public comment period. The agencies hosted two roundtable sessions for State and local officials on January 24 and January 27, 2022. These State and local government roundtables provided an overview of the proposed rule and discussions of a variety of topics including significant nexus, specific waters, exclusions, and State regulatory programs. Each roundtable meeting included breakout groups for officials by region so they could discuss and provide feedback to the agencies. Organizations in attendance included a wide variety of State and local government agencies, as well as intergovernmental associations and State-level associations of local governments. These meetings and the letters provided represent a wide and diverse range of interests, positions, comments, and recommendations to the agencies. Common themes from the feedback included the importance of promoting State-Federal partnerships; the need for the agencies to take a regional approach to determinations of jurisdiction; and support for further

clarity and consistency with significant nexus and relatively permanent determinations. The agencies have prepared a report summarizing their consultation and additional outreach to State and local governments and the results of this outreach. A copy of the final report is available in the docket (Docket ID. No. EPA–HQ–OW–2021–0602) for this rule.

Under the technical requirements of Executive Order 13132, agencies must conduct a federalism consultation as outlined in the Executive Order for regulations that (1) have federalism implications, that impose substantial direct compliance costs on State and local governments, and that are not required by statute; or (2) that have federalism implications and that preempt State law. The agencies conducted a 60-day federalism consultation due to strong interest on the part of State and local governments on this issue over the years and potential effects associated with a change in the definition of ''waters of the United States.'' However, the agencies have concluded that compared to the status quo, this rule does not impose any new costs or other requirements on States, preempt State law, or limit States' policy discretion; rather, it defines the scope of ''waters of the United States'' to which Clean Water Act programs apply. Executive Order paras. (6)(b) and (6)(c). This final rule draws a boundary between waters subject to Clean Water Act protections and those that Tribes and States may manage under their independent authorities. As compared to the status quo, this action will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Documentation for this decision is contained in the Economic Analysis for the Final Rule, which can be found in the docket for this action.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action may have Tribal implications. However, it will neither impose substantial direct compliance costs on federally recognized Tribal governments, nor preempt Tribal law.

EPA and the Army consulted with Tribal officials under the *EPA Policy on Consultation and Coordination with Indian Tribes* and the *Department of the Army American Indian and Alaska Native Policy* early in the process of developing this regulation to permit them to have meaningful and timely input into its development.

The agencies initiated a Tribal consultation and coordination process before proposing this rule by sending a ''Notification of Consultation and Coordination'' letter on July 30, 2021, to all 574 Tribes federally recognized at that time. The letter invited Tribal leaders and designated consultation representatives to participate in the Tribal consultation and coordination process. The agencies engaged Tribes over a 66-day Tribal consultation period during development of the proposed rule. The consultation included two webinars on August 19 and August 24, 2021, in which the agencies answered questions directly from Tribal representatives and heard their initial feedback on the agencies' rulemaking effort. The agencies responded to all requests for one-on-one consultation and met with four Tribes at a staff-level and with four Tribes at a leader-to-leader level. All letters received by the agencies as part of Tribal consultation may be found in the docket (Docket ID No. EPA–HQ–OW–2021–0602) for this rule.

The agencies also continued to engage with Tribes post-proposal, including via regional Tribal meetings and through a virtual Tribal roundtable on January 20, 2022. The topics addressed during this roundtable included options for describing and implementing the relatively permanent and significant nexus standards, the definitions of specific waters such as interstate waters and paragraph (a)(5) waters, and the implementation of exclusions. The most common themes from the feedback were: the importance of streams and wetlands to Tribal cultural resources; the need for the agencies to consider regional differences; the need for the agencies to respect the Federal trust responsibility and Tribal treaty rights; and the importance of restoring a broad definition of ''waters of the United States.'' Some Tribes commented on the importance of protecting ephemeral streams, which were eliminated from jurisdiction under the 2020 NWPR, as well as protecting wetlands that were excluded under the 2020 NWPR. Several Tribes spoke about the need to include ''waters of the tribe'' in the definition of ''waters of the United States.'' Additionally, several Tribes stated support for furthering environmental justice with the proposed rulemaking. Some Tribes also expressed support for accounting for climate change in some manner in the definition of ''waters of the United States.'' The agencies have prepared a report summarizing the consultation and further engagement with Tribal Nations. This report (Docket ID. No. EPA–HQ–OW–2021–0602) is available in the docket for this rule.

As required by Executive Order 13175 section 7(a), the EPA's Tribal Consultation Official has certified that the requirements have been met in a meaningful and timely manner. A copy of the certification is included in the docket for this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA and the Army interpret Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the agencies have reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive Order. This action is not subject to Executive Order 13045 because the environmental health or safety risks addressed by this action do not present a disproportionate risk to children.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

This rule does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations (Indigenous peoples and/or people of color) and low-income populations.

EPA and the Army believe that this action does not have disproportionately high and adverse human health or environmental effects on Indigenous peoples, people of color, and/or low-income populations. The documentation for this decision is contained in the Economic Analysis for

the Final Rule, which can be found in the docket for this action.

The agencies recognize that the burdens of environmental pollution and climate change often fall disproportionately on communities with environmental justice concerns (*e.g.,* Indigenous peoples, people of color, and low-income populations), and have qualitatively assessed impacts to these groups in the Economic Analysis for the Final Rule. Climate change will exacerbate the existing risks faced by communities with environmental justice concerns.

For this rule, consistent with Executive Order 12898 and Executive Order 14008 on ''Tackling the Climate Crisis at Home and Abroad'' (86 FR 7619; January 27, 2021), the agencies examined whether the change in benefits due to this rule may be differentially distributed among communities with environmental justice concerns in the affected areas when compared to both baselines. Regardless of baseline, for most of the wetlands and affected waters impacted by this rule at a hydrologic unit code (HUC) 12 watershed level,[146] there was no evidence of potential environmental justice impacts warranting further analysis. It is expected that where there were environmental justice impacts at the HUC 12 scale as compared to the secondary baseline of the 2020 NWPR, those impacts would be beneficial to communities with environmental justice concerns because this rule will result in more waters being jurisdictional than would be under the 2020 NWPR. For example, communities with environmental justice concerns in the arid West may have experienced increased water pollution and associated health impacts under the 2020 NWPR due to that rule's lack of Federal protection for ephemeral streams and their adjacent wetlands.

K. Congressional Review Act

This action is subject to the Congressional Review Act, and the agencies will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a ''major rule'' as defined by 5 U.S.C. 804(2).

List of Subjects

33 CFR Part 328

Administrative practice and procedure, Environmental protection, Navigation (water), Water pollution control, Waterways.

40 CFR Part 120

Environmental protection, Water pollution control, Waterways.

Michael L. Connor,

Assistant Secretary of the Army (Civil Works), Department of the Army.

Michael S. Regan,

Administrator, Environmental Protection Agency.

Title 33—Navigation and Navigable Waters

For the reasons set out in the preamble, 33 CFR part 328 is amended as follows:

PART 328—DEFINITION OF WATERS OF THE UNITED STATES

■ 1. The authority citation for part 328 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*

■ 2. Revise § 328.3 to read as follows:

§ 328.3 Definitions.

For the purpose of this regulation these terms are defined as follows:

(a) *Waters of the United States* means:

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters, including interstate wetlands;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; or

(iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.

(b) The following are not ''waters of the United States'' even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of

[146] HUC boundaries are established by USGS and NRCS. These boundaries are numbered using nested codes to represent the scale of the watershed size. For example, HUC 12 watersheds are smaller than HUC 4 watersheds.

water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) *Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) *Adjacent* means bordering, contiguous, or neighboring. Wetlands 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.''

(3) *High tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(6) *Significantly affect* means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

(A) Contribution of flow;

(B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);

(C) Retention and attenuation of floodwaters and runoff;

(D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or

(E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

(A) The distance from a water identified in paragraph (a)(1) of this section;

(B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;

(C) The size, density, or number of waters that have been determined to be similarly situated;

(D) Landscape position and geomorphology; and

(E) Climatological variables such as temperature, rainfall, and snowpack.

Title 40—Protection of Environment

For reasons set out in the preamble, 40 CFR part 120 is amended as follows:

PART 120—DEFINITION OF WATERS OF THE UNITED STATES

■ 3. The authority citation for part 120 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*

■ 4. Revise § 120.1 to read as follows:

§ 120.1 Purpose and scope.

This part contains the definition of ''waters of the United States'' for purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations. EPA regulations implementing the Clean Water Act use the term ''navigable waters,'' which is defined at section 502(7) of the Clean Water Act as ''the waters of the United States, including the territorial seas,'' or the term ''waters of the United States.'' In light of the statutory definition, the definition in this section establishes the scope of the terms ''waters of the United States'' and ''navigable waters'' in EPA's regulations.

■ 5. Revise § 120.2 to read as follows:

§ 120.2 Definitions.

For the purpose of this regulation these terms are defined as follows:

(a) *Waters of the United States* means:

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters, including interstate wetlands;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; or

(iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.

(b) The following are not ''waters of the United States'' even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) *Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) *Adjacent* means bordering, contiguous, or neighboring. Wetlands 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.''

(3) *High tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(6) *Significantly affect* means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

(A) Contribution of flow;

(B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);

(C) Retention and attenuation of floodwaters and runoff;

(D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or

(E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

(A) The distance from a water identified in paragraph (a)(1) of this section;

(B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;

(C) The size, density, or number of waters that have been determined to be similarly situated;

(D) Landscape position and geomorphology; and

(E) Climatological variables such as temperature, rainfall, and snowpack.

[FR Doc. 2022–28595 Filed 1–17–23; 8:45 am]

BILLING CODE 6560–50–P