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–6027.4–03–OW]

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: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) and the Department of the Army (''the agencies'') are publishing for public comment a proposed rule defining the scope of waters protected under the Clean Water Act. This proposal is consistent with the Executive Order signed on January 20, 2021, on ''Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis,'' which directed the agencies to review the agencies' rule promulgated in 2020 defining ''waters of the United States.'' This proposed rule would meet the objective of the Clean Water Act and ensure 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: Comments must be received on or before February 7, 2022. Please refer to the **SUPPLEMENTARY INFORMATION** section for additional information on the public hearing.

ADDRESSES: You may send comments, identified by Docket ID No. EPA–HQ–OW–2021–0602, by any of the following methods:

- *Federal eRulemaking Portal: https://www.regulations.gov/* (our preferred method). Follow the online instructions for submitting comments.
- *Email: OW-Docket@epa.gov.* Include Docket ID No. EPA–HQ–OW–2021–0602 in the subject line of the message.

Instructions: All submissions received must include Docket ID No. EPA–HQ–OW–2021–0602. Comments received may be posted without change to *https://www.regulations.gov/,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the ''Public Participation'' heading of the **SUPPLEMENTARY INFORMATION** section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are open to the public by appointment only to reduce the risk of transmitting COVID–19. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at *https://www.epa.gov/dockets.*

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SUPPLEMENTARY INFORMATION:

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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 existing statutory framework, seeking to better protect the quality of the nation's waters. *City of Milwaukee* v. *Illinois,* 451 U.S. 304, 317 (1981). 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 in the Act as ''the waters of the United States, including the territorial seas.'' 33 U.S.C. 1362(7). This term establishes the extent of most federal programs to protect water quality under the Act—including, for example, water quality standards, impaired waters and total maximum daily loads, oil spill prevention, preparedness and response programs, state and tribal water quality certification programs, and dredged and fill programs—because such programs apply only to ''waters of the United States.''

As the Supreme Court presciently noted decades ago, defining this term requires the EPA and the U.S. Department of the Army (Army) (together, ''the agencies'') to ''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

[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 traditional 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.''

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.'' *United States* v. *Riverside Bayview Homes,* 474 U.S. 121, 132 (1985) (''*Riverside Bayview*'').[2]

In the nearly five decades since the Clean Water Act was enacted, the agencies have undertaken the challenge of developing and implementing a durable definition of the term ''waters of the United States'' that draws the line on the *Riverside Bayview* ''continuum'' consistent with the objective of the Act—to restore and maintain the chemical, physical, and biological integrity of the nation's waters—based on science, and refined over the years by extensive experience in implementing the definition in the field. In 2020, however, the agencies issued a rule, called the ''Navigable Waters Protection Rule'' (NWPR), which substantially departed from prior rules defining ''waters of the United States.'' The earlier rules had been based on scientific concepts, implementation experience, and consideration of how the water quality implications of the definitions would advance the Clean Water Act's statutory objective. While the NWPR's interpretation of the statute and case law overlaps in some respects with those prior regulations—for example, its understanding that the statute authorizes the agencies to regulate waters beyond those that are navigable-in-fact—it departed from prior regulations by diminishing the appropriate role of science and Congress's objective in the Clean Water Act. The NWPR provided less protection and could have allowed far more impacts to the nation's waters than any rule that preceded it.

In response to President Joseph R. Biden Jr.'s Executive Order 13990, 86 FR 7037 (January 25, 2021), which directed federal agencies to review certain regulations, EPA and the Army undertook a review of the NWPR. The agencies found that the NWPR did not appropriately consider the water quality impacts of its approach to defining ''waters of the United States,'' in contravention of Congress's objective in the Clean Water Act ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,'' and that the rule's reduction in the scope of protected waters could have a potentially extensive and adverse impact on the nation's waters. The agencies' ongoing analyses of waters that fall outside of the Act's protections because of the NWPR support these findings.

Following a federal district court decision vacating the NWPR on August 30, 2021, the agencies halted implementation of the NWPR and began interpreting ''waters of the United States'' consistent with the pre-2015 regulatory regime.[3] [4] Though EPA and the U.S. Army Corps of Engineers (Corps) are not currently implementing the NWPR, the agencies are aware that further developments in litigation over the rule could bring the rule back into effect. For these reasons, among others discussed more fully below, the agencies have decided that prompt replacement of the NWPR through the administrative rulemaking process is vital.

In order to ensure necessary federal protections for the nation's waters, the agencies are proposing to exercise their discretion under the statute to return generally to the familiar pre-2015 definition that has bounded the Act's protections for decades, has been codified multiple times, and has been implemented by every Administration for the last 35 years, from that of Ronald Reagan through Donald Trump, which re-promulgated the pre-2015 regulations. *See In re EPA & Dep't of Def. Final Rule,* 803 F.3d 804, 808 (6th Cir. 2015). The pre-2015 regulations were largely in place for both agencies in 1986 and are thus commonly referred to as ''the 1986 regulations.'' [5]

In this proposed rule the agencies are exercising their discretionary authority to interpret ''waters of the United States'' to mean the waters defined by the longstanding 1986 regulations, with amendments to certain parts of those rules to reflect the agencies' interpretation of the statutory limits on the scope of the ''waters of the United States'' and informed by Supreme Court case law. Thus, in the proposed rule, the agencies interpret the term ''waters of the United States'' to include: Traditional navigable waters, interstate waters, and the territorial seas, and their adjacent wetlands; most impoundments of ''waters of the United States''; tributaries to traditional navigable waters, interstate waters, the territorial seas, and impoundments that meet either the relatively permanent standard or the significant nexus standard; wetlands adjacent to impoundments and tributaries, that meet either the relatively permanent standard or the significant nexus standard; and ''other waters'' that meet either the relatively permanent standard or the significant nexus standard. The ''relatively permanent standard'' means waters that are relatively permanent, standing or continuously flowing and waters with a continuous surface connection to such 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, interstate waters, or the territorial seas (the ''foundational waters''). With these amendments to the 1986 regulations, the proposed rule is within the proper scope of the agencies' statutory authority and would restore and maintain the chemical, physical, and biological integrity of the nation's waters.

The proposed rule advances the Clean Water Act's statutory objective as it is based on the best available science concerning the functions provided by upstream tributaries, adjacent wetlands, and ''other waters'' to restore and maintain the water quality of downstream foundational waters. By contrast, the agencies conclude that the NWPR, which this proposed rule would replace, and which found jurisdiction primarily under the relatively permanent standard, established a test for jurisdiction that did not adequately address the impacts of degradation of upstream waters on downstream waters, including traditional navigable waters, and was therefore incompatible with the objective of the Clean Water Act. While

[2] The Supreme Court has twice more addressed the 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*'').

[3] *See Pascua Yaqui Tribe* v. *EPA,* No. 20–00266 (D. Ariz. Aug. 30, 2021); U.S. EPA, *Current Implementation of Waters of the United States, https://www.epa.gov/wotus/current-implementation-waters-united-states.*

[4] 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.

[5] 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). For convenience, the agencies in this preamble 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'' as inclusive of EPA's comparable regulations that were recodified in 1988 and of the exclusion for prior converted cropland both agencies added in 1993.

the ''more absolute position'' taken by the NWPR ''may be easier to administer,'' it has ''consequences that are inconsistent with major congressional objectives, as revealed by the statute's language, structure, and purposes.'' *County of Maui, Hawaii* v. *Hawaii Wildlife Fund,* 140 S. Ct. 1462, 1477 (2020).

In developing the proposed rule, the agencies also considered the statute as a whole, the scientific record, relevant Supreme Court case law, and the agencies' experience and expertise after more than 30 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 Supreme Court's decisions in *Riverside Bayview, SWANCC,* and *Rapanos.* The agencies' interpretation also reflects consideration of the statute as a whole, including section 101(b), which states 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, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.'' 33 U.S.C. 1251(b). The proposed rule's limits appropriately draw the boundary of waters subject to federal protection by ensuring that where upstream waters significantly affect the integrity of waters and the federal interest is indisputable—the traditional navigable waters, interstate waters, and territorial seas—Clean Water Act programs would apply to ensure that those downstream waters are protected. And where they do not, the agencies would leave regulation to the states and tribes. The proposed rule's relatively permanent and significant nexus limitations are thus based on the agencies' conclusion that together, those standards are consistent with the statutory text, advance the objective of the Act, are supported by the scientific record and Supreme Court case law, and appropriately consider the policies of the Act. In addition, because the proposed rule reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, it is familiar and implementable.

While there are case-specific determinations that would need to be made under this proposed rule, that was also true under the NWPR and many other regulatory regimes where agencies must balance competing factors. The agencies, moreover, believe that a return to the pre-2015 definition would provide a known and familiar framework for co-regulators and stakeholders. In addition, the clarifications proposed here and the intervening advancements in implementation resources, tools, and scientific support (*see* section V.D.3.d of this preamble) would address some of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under this regulatory regime.

Through this rulemaking process, the agencies will consider all public comments on the proposed rule including changes that improve clarity, implementability, and long-term durability of the definition. The agencies will also consider changes through a second rulemaking that they anticipate proposing in the future, which would build upon the foundation of this proposed rule.

II. Public Participation

A. Written Comments

Submit your comments, identified by Docket ID No. EPA–HQ–OW–2021–0602, at *https://www.regulations.gov* (our preferred method), or via the other methods identified in the **ADDRESSES** section. Once submitted, comments cannot be edited or removed from the docket. EPA and the Army may publish any comment received to the public docket. Do not submit to EPA's docket at *https://www.regulations.gov* any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA and the Army will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

Due to public health concerns related to COVID–19, the EPA Docket Center and Reading Room are open to the public by appointment only. Our Docket Center staff also continue to provide remote customer service via email, phone, and webform. Hand deliveries or couriers will be received by scheduled appointment only. For further information and updates on EPA Docket Center services, please visit us online at *https://www.epa.gov/dockets.*

EPA and the Army continue to carefully monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our federal partners so that we can respond rapidly as conditions change regarding COVID–19.

B. Virtual Public Hearings

Please note that because of current CDC recommendations, as well as state and local orders for social distancing to limit the spread of COVID–19, EPA and the Army cannot hold in-person public meetings at this time. The agencies are hosting virtual public hearings on Wednesday, January 12, 2022 from 10 a.m. to 1 p.m. Eastern Time; on Thursday, January 13, 2022 from 2 p.m. to 5 p.m. Eastern Time; and on Tuesday, January 18, 2022 from 5 p.m. to 8 p.m. Eastern Time.

EPA and the Army will begin pre-registering speakers for the hearing upon publication of this document in the **Federal Register**. To register to speak at a specific session of the virtual hearing, please use the online registration forms available at:

1. Wednesday, January 12, 2022—*https://www.eventbrite.com/e/us-epa-and-department-of-the-army-wotus-public-hearing-tickets-211244667487.*
2. Thursday, January 13, 2022—*https://www.eventbrite.com/e/us-epa-and-department-of-the-army-wotus-public-hearing-tickets-211258017417.*
3. Tuesday, January 18, 2022—*https://www.eventbrite.com/e/us-epa-and-department-of-the-army-wotus-public-hearing-tickets-211274536827.*

The last day to pre-register to speak at each session will be, respectively, Friday, January 7, 2022; Monday, January 10, 2022; and Thursday, January 13, 2022. A day before each scheduled session, EPA and the Army will post a general agenda for the hearing that will list pre-registered speakers in approximate order at *https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities.* People may also register to listen to the public sessions at the registration links above.

To allow more time for speakers, the agencies may prerecord a video introduction and overview of the rule, which will be available on the EPA website above for viewing before the public hearings. EPA and the Army will make every effort to follow the schedule as closely as possible on the day of the hearing, but it is possible that the hearings will run either ahead of schedule or behind schedule.

Each commenter will have three (3) minutes to provide oral testimony. EPA and the Army encourage commenters to

provide the agencies with a copy of their oral testimony electronically by emailing it to *CWAwotus@epa.gov.* EPA and the Army also recommend submitting the text of your oral comments as written comments to the rulemaking docket.

The agencies may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing.

Please note that any updates made to any aspect of the hearing will be posted online at *https://www.epa.gov/wotus/public-outreach-and-stakeholder-engagement-activities.* While the agencies expect the hearing to go forward as set forth above, please monitor our website or contact *CWAwotus@epa.gov* to determine if there are any updates. EPA and the Army do not intend to publish a document in the **Federal Register** announcing updates.

If you require the services of a translator or special accommodations such as audio description, please pre-register for the hearing with *CWAwotus@epa.gov* and describe your needs a week in advance of each session—respectively, by Wednesday, January 5, 2022; Thursday, January 6, 2022; and Tuesday, January 11, 2022. EPA and the Army may not be able to arrange accommodations without advanced notice.

III. General Information

A. What action are the agencies taking?

In this action, the agencies are publishing a proposed 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?

Because the agencies are not currently implementing the NWPR, the proposed rule would provide protections that are generally comparable to current practice; as such, the agencies find that there would be no appreciable cost or benefit difference. Potential costs and benefits would be incurred as a result of actions taken under existing Clean Water Act programs (*i.e.,* sections 303, 311, 401, 402, and 404) that implement and follow this proposed rule. Entities currently are, and would continue to be, regulated under these programs that protect ''waters of the United States'' under the Clean Water Act.

The agencies prepared the Economic Analysis for the Proposed ''Revised Definition of 'Waters of the United States' '' Rule (''Economic Analysis for the Proposed Rule''), available in the rulemaking docket, for informational purposes to analyze the potential costs and benefits associated with this proposed action. The agencies analyze the potential costs and benefits against two baselines: The current status quo and the vacated NWPR. The analysis is summarized in section VI of this preamble. The agencies' primary estimate is that the proposed rule would have zero impact.

IV. 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. 92–911, at 753 (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 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.

Prior to 1972, the Federal government's authority to control and redress pollution in the nation's waters largely fell to the 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. 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, 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).

As a result, in 1972, Congress performed ''a 'total restructuring' and 'complete rewriting' of the existing'' statutory framework. *City of Milwaukee,* 451 U.S. 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 amendments, 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.'' *United States* v. *Riverside Bayview Homes,* 474 U.S. 121, 133 (1985) (''*Riverside Bayview*''); *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'' means ''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 ''waters of the United States.'' *Id.* Indeed, in finalizing the 1972 amendments, the conferees specifically deleted the word ''navigable'' from the definition of ''waters of the United States'' that had originally appeared in the House version of the Act. S. Conf. Rep. No. 92–1236, at 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.*

The definition of ''waters of the United States'' affects most Clean Water Act programs—including water quality standards, impaired waters and total maximum daily loads, oil spill prevention, preparedness and response programs, the state and tribal water quality certification programs, National Pollutant Discharge Elimination System (NPDES) programs, and dredge and fill programs—because such programs apply only to ''waters of the United States.'' Some Clean Water Act programs are implemented by the Federal government, and others are implemented by state or tribal governments where the statute provides a direct grant of authority to the state or authorized tribe or provides an option for the state or authorized tribe to take on those programs. States and tribes may additionally implement, establish, or modify their own programs under state or tribal law to manage and regulate waters independent of the Clean Water Act.

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 (TMDLs). For waters identified on a 303(d) list, states establish TMDLs for all pollutants preventing or expected to prevent attainment of water quality standards. Section 303(d) applies to ''waters of the United States'' and ''non-jurisdictional'' waterbodies are not required to be assessed or otherwise identified as impaired; TMDL restoration plans likewise apply 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 reimburse costs of assessing and responding to oil spills to ''waters of the United States'' or adjoining shorelines. The OSLTF allows an immediate response to a spill, including containment, countermeasures, cleanup, and disposal activities. The OSLTF is not available to reimburse costs incurred by states or tribes to clean up spills and costs related to business and citizen impacts (*e.g.,* lost wages and damages) for spills affecting waters not subject to Clean Water Act jurisdiction. EPA also lacks authority to take enforcement actions based on spills solely affecting waters not subject to Clean Water Act jurisdiction.

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 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, Clean Water Act 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 a facility could reach a jurisdictional water or adjoining shoreline.

Clean Water Act section 401 provides that a Federal agency cannot issue a permit or license for an activity that may result in a discharge to ''waters of the United States'' until the state or tribe where the discharge would originate has granted or waived water quality certification. As a result, section 401 certification provides states and authorized tribes 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 are required and thus where section 401 certification applies.

Under section 402 of the Clean Water Act, a National Pollutant Discharge Elimination System (NPDES) permit is required where a point source discharges a pollutant to a ''water of the United States.''

The Clean Water Act section 404 permitting program addresses the discharge of dredged or fill material from a point source into ''waters of the United States,'' unless the activity is exempt from Clean Water Act section 404 regulation (*e.g.,* certain farming, ranching, and forestry activities). Section 404 requires a permit before dredged or fill material may be discharged to ''waters of the United States.'' Where Clean Water Act jurisdiction does not apply, no section 404 permits are required for dredged or fill activities in those waters or features.

States and tribes play a vital role in the implementation and enforcement of these and other Clean Water Act programs. Section 101(b) of the Act established 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, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.'' 33 U.S.C. 1251(b). All states and 74 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 46 tribes have established water quality standards pursuant to section 303 of the Act, which form a legal basis for limitations on discharges of pollutants to ''waters of the United States.''

Moreover, consistent with the Clean Water Act, states and tribes retain authority to implement their own programs to protect the waters in their jurisdiction more broadly and more stringently than the Federal government. Under section 510 of the Clean Water Act, unless expressly stated, nothing in the Clean Water Act precludes or denies the right of any state or tribe to establish more protective standards or limits than the Clean Water Act.[6] Many states and tribes, for example, regulate groundwater, and some others protect wetlands that are vital to their environment and economic

[6] 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 document may also include eligible tribes.

well-being but which may be outside the scope of the Clean Water Act.

In 1977, Congress considered and rejected a legislative proposal that would have redefined and limited the waters subject to the Corps' permitting authority under section 404 of the Clean Water Act to only navigable-in-fact waters and their adjacent wetlands. In 1975, the Corps had extended the scope of ''waters of the United States'' to encompass, in a phased approach, non-navigable tributaries, wetlands adjacent to primary navigable waters, intermittent rivers, streams, tributaries, and certain other categories of waters. 40 FR 31325–31326 (1975). In reaction to that broadened definition, Congress considered a proposal to limit the geographic reach of section 404, but it was defeated in the Senate and eliminated by the Conference Committee. H.R. Conf. Rep. No. 95–830, at 97–105 (1977). As the Supreme Court explained in *Riverside Bayview,* ''efforts to narrow the definition of 'waters' were abandoned; the legislation as ultimately passed, in the words of Senator Baker, 'retain[ed] the comprehensive jurisdiction over the Nation's waters exercised in the 1972 Federal Water Pollution Control Act.' '' 474 U.S. at 136–137; *see also* 123 Cong. Rec. 26718 (1977) (remarks of Senator Baker: ''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.'').

Rather than alter the geographic reach of section 404 in 1977, Congress instead 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. *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 for implementing the section 404 permitting program, but only for waters ''other than'' traditional navigable waters and their adjacent wetlands. *Id.* at 1344(g)(1). Three states have since assumed the section 404 program.

The fact that a resource is a ''water 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. 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 id.* at 1342(*l*)(2), 1362(14). As discussed above, since 1977 the Clean Water Act in section 404(f) has exempted many normal farming activities from the section 404 permitting requirement, including seeding, harvesting, cultivating, planting, and soil and water conservation practices, among other activities. *Id.* at 1344(f). The scope of ''waters of the United States'' does not affect these statutory exemptions.

In addition, permits are routinely issued under sections 402 and 404 of the Clean Water Act. The permitting authority, which is most often a state agency for the section 402 NPDES program and the Corps in the context of section 404, generally works with permit seekers to ensure that activities can occur without harming the integrity of the nation's waters.

Effluent limitations serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters, and include technology-based effluent limitations and water quality-based effluent limitations. These limits, which are typically numeric, generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria). The permittee may choose which technologies to use to achieve that level. Some permits contain certain ''best management practices'' (BMPs) which are actions or procedures to prevent or reduce the discharge of pollution to ''waters of the United States'' (for example, stormwater control measures for construction activities).

In issuing section 404 permits, the Corps or authorized state works with the applicant to avoid, minimize, or compensate for any unavoidable impacts to ''waters of the United States.'' Permit applicants show that steps have been taken to avoid impacts to wetlands, streams, and other aquatic resources; that potential impacts have been minimized; and that compensatory mitigation will be provided for all remaining unavoidable impacts. For most discharges that will have only minimal adverse effects, a general permit (*e.g.,* a ''nationwide'' permit) may be suitable. 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, others allow the applicant to proceed with no formal notification. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that 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 are activities in ''waters of the United States'' that can be considered for a general permit. States and tribes also have a role in section 404 decisions, through state program general permits, water quality certification, or program assumption.

Under any regulation defining ''waters of the United States,'' property owners may obtain from the Corps jurisdictional determinations whether waters on their property are subject to the Clean Water Act. The Corps' regulations provide that a jurisdictional determination consists of ''a written Corps determination that a wetland and/or waterbody is subject to regulatory jurisdiction under Section 404 of the Clean Water Act (33 U.S.C. 1344) or a written determination that a waterbody 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.*).'' *See* 33 CFR 331.2. These jurisdictional determinations can be obtained at no charge to the property owners. *See* 33 CFR 325.1 (omitting mention of fees for jurisdictional determinations) and 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'' broadly 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'' 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'').

Several federal courts then held that the Corps had given ''waters of the

United States'' an unduly restrictive reading in its regulations implementing Clean Water Act section 404. *See, e.g., United States* v. *Holland,* 373 F. Supp. 665, 670–676 (M.D. Fla. 1974). EPA and the House Committee on Government Operations agreed with the decision in *Holland*.[7] In *Natural Resources Defense Council, Inc.* v. *Callaway,* 392 F. Supp. 685, 686 (D.D.C. 1975) (''*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.'' *Id.*

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) and (e)(2) (1976). The interim regulations revised the definition of ''waters of the United States'' to include, *inter alia,* waters (sometimes referred to as ''isolated waters'') that are not connected by surface water or adjacent to traditional navigable waters. 33 CFR 209.120(d)(2)(i) (1976).[8] On July 19, 1977, the Corps published its final regulations, in which it revised the 1975 interim regulations to clarify many of the definitional terms. 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).[9]

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 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, have been identical and remained largely unchanged from 1977 to 2015. *See* 42 FR 37122, 37124, 37127 (July 19, 1977).[10] 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 inclusive of 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)) [11]:

The term waters of the United States means:

1. 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;

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 could affect interstate or foreign commerce including any such waters:

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

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

c. 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;

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.

Note that these categories in the 1986 regulations may be referred to by this numbering system (for example, (a)(1) through (a)(8) waters) throughout this preamble. *See* sections I.C.3 and I.C.4 of the Economic Analysis for the Proposed Rule for a comparison of regulatory categories between the NWPR and this proposed 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

[7] 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. 93–1396, at 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).

[8] 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 on 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 on 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).

[9] An explanatory footnote published in the Code of Federal Regulations stated that ''[p]aragraph (a)(5) 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).

[10] 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).

[11] 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.

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 deferred to the Corps' judgment that adjacent wetlands 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, 139. The Court observed that the broad 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 '[w]ater 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). 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 wetlands may be defined as waters under the Act.'' *Id.* at 134.

The Court went on to note that to achieve the goal of preserving and improving adjacent wetlands that have significant ecological and hydrological impacts on traditional navigable waters, it was appropriate for the Corps to regulate all adjacent wetlands, even though some might not have any impacts on traditional navigable waters. *Id.* at 135 n.9. Indeed, the Court acknowledged that some adjacent wetlands might not have significant hydrological and biological connections with navigable waters, but concluded that the Corps' regulation was valid in part because such connections exist in the majority of cases. *Id.*

The Court deferred to the Corps' definition of ''adjacent'': ''The term 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.' '' The Court expressly reserved the question of whether the 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*''). In *SWANCC,* the Court (in a 5–4 opinion) held 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. 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 in *Riverside Bayview* it 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. The Court stated: ''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.'' *Id.* at 172 (internal citations omitted).

The Court found that the exercise of Clean Water Act regulatory authority over discharges into the ponds, on the grounds that their use by migratory birds is within the power of Congress to regulate activities that in the aggregate have a substantial effect on interstate commerce, raised 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, and that 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 thus construed the Clean Water Act to avoid the constitutional questions related to the scope of federal authority authorized therein. *Id.* at 174.

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 Act had been applied to wetlands adjacent to non-navigable tributaries of traditional navigable waters. All 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 water bodies, *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 that was based

in the Court's *SWANCC* opinion. Justice Kennedy concluded 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). 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 notes 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 [standard] or Justice Kennedy's.'' *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's 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.

Neither the plurality nor the concurring opinions in *Rapanos* invalidated any of the regulatory provisions defining ''waters of the United States.''

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.'' 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 solely the plurality's relatively permanent standard may be used to establish jurisdiction. Some have held that the government may establish jurisdiction under either standard. The Eleventh Circuit has held that only Justice Kennedy's standard applies. *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. *Robison,* 505 F.3d 1208 (11th Cir. 2007); *United States* v. *Johnson,* 467 F.3d 56 (1st Cir. 2006); *United States* v. *Gerke Excavating, Inc.,* 464 F.3d 723 (7th Cir. 2006).

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 relatively permanent standard and the significant nexus standard) and by using 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'').

Under the *Rapanos* Guidance,[12] 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. *Id.* at 4–7. The guidance states that the agencies will 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. The agencies generally did not assert jurisdiction over non-wetland 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.''

[12] 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.

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'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.[13]

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 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, 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).

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'' (NWPR)—that for the first time defined ''waters of the United States'' based generally on Justice Scalia's plurality test from *Rapanos.* The NWPR was published on April 21, 2020, and went into effect on June 22, 2020. 85 FR 22250 (April 21, 2020). The 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.* at 22273.

The NWPR 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 a territorial sea 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 territorial sea 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 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 did not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through certain artificial or natural features. The NWPR also defined a lake, pond, or impoundment of a jurisdictional water inundated by flooding from a jurisdictional water in a typical year as jurisdictional. *Id.*

As for wetlands, the 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 NWPR expressly provided that waters that do not fall into one of these jurisdictional categories are not considered ''waters of the United States.'' *Id.* Moreover, waters within these categories, including traditional navigable waters and the territorial seas, were not ''waters of the United States'' if they also fit within the NWPR's broad 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.'').[14] The rule excluded groundwater, including groundwater drained through subsurface drainage systems; ephemeral features; diffuse stormwater runoff and directional sheet flow over upland; ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations; prior converted cropland; artificially irrigated areas; artificial lakes and ponds; water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to

[13] 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—a mere six months after the rule had been issued—the rule was vacated and enjoined nationwide. *See South Carolina Coastal Conservation League* v. *Pruitt,* 318 F. Supp. 3d 959 (D.S.C. Aug. 16, 2018); *see also Puget Soundkeeper All.* v. *Wheeler,* No. 15–01342 (W.D. Wash. Nov. 26, 2018) (vacating the Applicability Date Rule nationwide).

[14] The 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).

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; groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and waste treatment systems.

4. Legal Challenges to the Rules

Starting with the 2015 Clean Water Rule, the agencies' rulemakings to revise the definition of ''waters of the United States'' have been subject to multiple legal challenges.

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.[15] While the 2015 Clean Water Rule went into effect in some parts of the country in August 2015, due to multiple injunctions [16] and later rulemakings, the 2015 Clean Water Rule was never implemented nationwide.

A number of pending cases involve claims against the NWPR. On August 30, 2021, the U.S. District Court for the District of Arizona remanded the NWPR and vacated the rule. *Pascua Yaqui Tribe* v. *EPA,* No. 4:20–cv–00266, 2021 WL 3855977 (D. Ariz. Aug. 30, 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 *5. On September 27, 2021, the U.S. District Court for the District of New Mexico also issued an order vacating and remanding the NWPR. *Navajo Nation* v. *Regan,* No. 2:20–cv–00602 (D.N.M. Sept. 27, 2021). In vacating the rule, the court agreed with the reasoning of the *Pascua Yaqui* court that the NWPR suffers from ''fundamental, substantive flaws that cannot be cured without revising or replacing the NWPR's definition of 'waters of the United States.''' Slip. op. at 6. Six courts also remanded the NWPR without vacatur or without addressing vacatur.[17]

At this time, 14 cases are pending challenging the agencies' rules defining ''waters of the United States,'' including the 2015 Clean Water Rule, 2019 Repeal Rule, and the NWPR.[18] Some of these cases challenge only one of the rules, while others challenge two or even all three rules in the same lawsuit. See section I.A of the Technical Support Document for a comprehensive history of the effects of the litigation surrounding the 2015 Clean Water Rule, 2019 Repeal Rule, and the NWPR.

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,'' which 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 (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.* at section 2(a). ''For 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.* 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 NWPR.

In conformance with Executive Order 13990, the agencies reviewed the NWPR to determine if it is aligned with the principles laid out therein:

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 V.B.3 of this preamble, the 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 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 extensively impacted by climate change. Climate change can have a variety of impacts on water resources in particular. *See* Technical Support Document section III.C. 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). Climate change can also increase the intensity of

[15] *See, e.g., North Dakota* v. *EPA,* No. 15–00059 (D.N.D.); *Ohio* v. *EPA,* No. 15–02467 (S.D. Ohio); *Southeastern Legal Found.* v. *EPA,* No. 15–02488 (N.D. Ga.).

[16] *See, e.g., North Dakota* v. *EPA,* 127 F. Supp. 3d 1047 (D.N.D. 2015) (preliminary injunction barring implementation of the 2015 Clean Water Rule in 13 states); *Georgia* v. *Pruitt,* 326 F. Supp. 3d 1356 (S.D. Ga. June 6, 2018) (same as to 11 states); *Texas* v. *EPA,* No. 3:15–cv–162, 2018 WL 4518230 (S.D. Tex. Sept. 12, 2018) (same as to 3 states). See section I.A of the Technical Support Document for the Proposed ''Revised Definition of 'Waters of the United States''' Rule (''Technical Support Document''; located in the docket for this action), for a comprehensive history of the effects of the litigation against the 2015 Clean Water Rule.

[17] 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); *Waterkeeper All.* v. *Regan,* No. 3:18–cv–03521, ECF No. 125 (N.D. Cal. Sept. 16, 2021) (same); Order, *Conservation Law 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).

[18] *Pascua Yaqui Tribe* v. *EPA,* No. 20–00266 (D. Ariz.); *Colorado* v. *EPA,* No. 20–01461 (D. Colo.); *Am. Exploration & Mining Ass'n* v. *EPA,* No. 16–01279 (D.D.C.); *Envtl. Integrity Project* v. *Regan,* No. 20–01734 (D.D.C.); *Se. Stormwater Ass'n* v. *EPA,* No. 15–00579 (N.D. Fla.); *Se. Legal Found.* v. *EPA,* No. 15–02488 (N.D. Ga.); *Chesapeake Bay Found.* v. *Regan,* Nos. 20–1063 & 20–1064 (D. Md.); *Navajo Nation* v. *Regan,* No. 20–00602 (D.N.M.); *N.M. Cattle Growers' Ass'n* v. *EPA,* No. 19–00988 (D.N.M.); *North Dakota* v. *EPA,* No. 15–00059 (D.N.D.); *Ohio* v. *EPA,* No. 15–02467 (S.D. Ohio); *Or. Cattlemen's Ass'n* v. *EPA,* No. 19–00564 (D. Or.); *S.C. Coastal Conservation League* v. *Regan,* No. 19–03006 (D.S.C.); *Puget Soundkeeper All.* v. *EPA,* No. 20–00950 (W.D. Wash.); *Wash. Cattlemen's Ass'n* v. *EPA,* No. 19–00569 (W.D. Wash.).

precipitation events, including storms, and runoff from these storms can impair water quality as pollutants deposited on land wash into water bodies. 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. Climate change also affects streamflow characteristics like the magnitude and timing of flows, in part due to changes in snowpack magnitude and seasonality. As the climate continues to change, many historically dry areas are likely to experience less precipitation and increased risk of drought associated with more frequent and intense heatwaves, which can cause streams and wetlands to become drier, negatively affecting both water supplies and water quality. Lower streamflow and groundwater levels can also increase events such as wildfires, which can alter water quality and impact wetlands and their functions. A warming climate can also result in increased and more variable temperatures in streams, leading to fish kills and negatively affecting other aquatic species that can live only in colder water. Finally, rising sea levels associated with climate change are inundating low-lying wetlands and dry land and further contributing to coastal flooding and erosion.

Although water resources are vulnerable to the effects of climate change, they perform a variety of functions that can help restore ecological function of other water resources in light of climate change (*i.e.,* contribute to climate resiliency) and mitigate the negative effects of climate change on other water resources including traditional navigable waters, interstate waters, and the territorial seas. For instance, wetlands inside and outside of floodplains are well-known to store large volumes of floodwaters, thereby protecting downstream watersheds from potential flooding. Coastal wetlands can also help buffer storm surges, which are becoming more frequent due to climate change. Additionally, small streams are particularly effective at retaining and attenuating floodwaters. As natural filters, wetlands help purify and protect the quality of other waters, including drinking water sources—a function which is more important than ever as intense precipitation events spurred on by a changing climate mobilize sediment, nutrients, and other pollutants. Biological communities and geomorphic processes in small streams and wetlands break down leaves and other organic matter, burying and sequestering a portion of that carbon that could otherwise be released to the atmosphere and lead to continued negative effects on water resources.

The 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'' does not allow the agencies flexibility to account for the effects of a rapidly changing climate, including positive trends in temperature, increasing storm events, and extended droughts (*see* section V.B.3.c of this preamble). The NWPR also excluded ephemeral streams and their adjacent wetlands in the arid West from the definition of ''waters of the United States.'' These aquatic systems are increasingly critical to protecting and maintaining downstream integrity as the climate in that region continues to get hotter and drier, but with altered monsoon seasons with fewer but more intense storms that contribute to flashy hydrology (*i.e.,* higher runoff volume, leading to more rapidly rising and falling streamflow over shorter periods of time).

Section V.A.2.c.iv of this preamble contains a discussion of how the agencies believe that climate change can be appropriately considered in implementing the proposed rule.

Environmental Justice: The agencies recognize that the burdens of environmental pollution and climate change often fall disproportionately on population groups of concern (*e.g.,* minority, low-income, and indigenous populations as specified in Executive Order 12898). Numerous groups have raised concerns that the NWPR had disproportionate impacts on tribes and indigenous communities.[19] The 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 state or tribal law (*see* section V.B.3.d of this preamble). Absent regulations governing discharges of pollutants into previously jurisdictional waters, population groups of concern where these waters are located may experience increased water pollution and impacts from associated increases in health risk.

Further, the NWPR categorically excluded ephemeral streams from jurisdiction, which disproportionately impacts tribes and population groups of concern in the arid West. Tribes may lack the authority and often the resources to regulate waters within their boundaries, and they may also be affected by pollution from adjacent jurisdictions.[20] Therefore, the change in jurisdiction under the NWPR may have disproportionately exposed tribes to increased pollution and health risks.

After completing the review and reconsidering the record for the 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 are: The text of the Clean Water Act; Congressional intent and the objective of the Clean Water Act; Supreme Court precedent; the current and future harms to the chemical, physical, and biological integrity of the nation's waters due to the NWPR; concerns raised by stakeholders about the NWPR, including implementation-related issues; the principles outlined in the Executive Order; and issues raised in ongoing litigation challenging the NWPR. EPA and the Army concluded that the 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 the rule threatened the loss or degradation of waters critical to the protection of traditional navigable waters, among other concerns.

C. Summary of Stakeholder Outreach

EPA held a series of stakeholder meetings during the agencies' review of the NWPR, including specific meetings in May 2021 with industry, environmental organizations, agricultural organizations, and state associations. On July 30, 2021, the

[19] *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 WOTUS 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 (''The combination of these factors—[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 V.B.3.d of this preamble and the Technical Support Document.

[20] *See supra* at note 18.

agencies signed a **Federal Register** notice that announced a schedule for initial public meetings to hear from interested stakeholders on their perspectives on defining ''waters of the United States'' under the Clean Water Act and how to implement 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 beginning on August 4, 2021, and concluding on 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 EPA–HQ–OW–2021–0328). The agencies also announced their plans for future engagement opportunities, including geographically focused roundtables to provide for broad, transparent, regionally focused discussions among a full spectrum of stakeholders. The **Federal Register** notice articulated several specific issues that the agencies are particularly interested in receiving feedback on, including implementation of previous regulatory regimes; regional, state, and tribal interests; identification of relevant science; environmental justice interests; climate implications; the scope of jurisdictional waters such as tributaries, jurisdictional ditches, and adjacent features; and exclusions from jurisdiction.

The agencies also have engaged state and local governments over a 60-day federalism consultation period during development of this proposed rule, beginning with an initial federalism consultation meeting on August 5, 2021, and concluding on October 4, 2021. Additional information about the federalism consultation can be found in section VII.E of this preamble and in the report summarizing consultation and additional outreach to state and local governments, available in the docket (Docket ID No. EPA–HQ–OW–2021–0602) for this proposed rule. 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.

The agencies received input from a wide variety of states and local governments through virtual meetings, consultation letters, and recommendation letters submitted to the public docket. Many of these groups encouraged meaningful dialogue between the states, local governments, and the agencies, and identified implementation challenges with determining the jurisdiction of waters under the pre-2015 regulatory regime. States and local governments stressed the need for guidance, training, and tools early in the process to help with implementing any revised definition of ''waters of the United States.'' A few also requested the agencies to consider a delayed effective date for revised definitions of ''waters of the United States'' to give state and local partners time to revise and develop new policies. Many state and local governments emphasized the variability of water resources across the United States and supported regionalized criteria for determining jurisdictional waters. Some of these groups noted the importance of strong Federal standards and the regulation of interstate waters, since pollutants from upstream states can enter waters within their borders.

States and local governments held divergent views on the agencies' plans to revert to the pre-2015 regulatory regime, and on which water resources should be considered ''waters of the United States.'' Some supported the NWPR and recommended the agencies generally retain and revise that rule. These state and local entities believed that the NWPR provided a clear definition for ''waters of the United States,'' maintained a balance between federal and state jurisdiction, and appropriately excluded waters that should not be subject to the Clean Water Act. Others supported the agencies' current rulemaking efforts as they thought the NWPR was not protective enough and did not account for the complexities of the hydrologic cycle, importance of ephemeral waters, or the connections among waters on the landscape. State and local governments held differing opinions on how the criteria for jurisdiction of ephemeral streams, ditches, tributaries, and wetlands should be determined, and which resources should be included in the scope of the Clean Water Act.

Several state and local governments recommended consideration of climate change and environmental justice concerns in any new rulemaking effort. Some emphasized that isolated wetlands and ephemeral streams are important in reducing flooding during extreme weather events and that the agencies should consider this importance in the rulemaking. Others acknowledged the impacts of climate change but stated that other programs and legislation are more appropriate ways to address climate change. Some state and local governments also noted that NWPR excluded wetlands that are important to minority and low-income communities and that future rulemaking needs to consider environmental justice issues.

The agencies also initiated a tribal consultation and coordination process on July 30, 2021. The agencies engaged tribes over a 66-day tribal consultation period during development of this proposed rule that concluded on October 4, 2021, including two consultation kick-off webinars and meetings. The agencies received consultation comment letters from 24 tribes and three tribal organizations and held three leader-to-leader consultation meetings and two staff-level meetings with tribes at their request. The agencies anticipate that consultation meetings with additional tribes will be held with tribes during the rulemaking process. Many tribes and tribal organizations expressed support for the agencies' efforts to replace the NWPR. One tribe did not support the agencies' efforts to revise the definition of ''waters of the United States,'' stating tribal sovereignty concerns and concerns that the agencies might exceed the power of Congress under the Commerce Clause. Some tribes stated that the NWPR disadvantaged tribes because unlike states, many tribes lack the resources to enforce a definition of ''tribal waters'' that is broader than the definition of ''waters of the United States.'' Several tribes also stated that they rely on the Federal government to permit discharges of pollutants into waters on their lands and do not have the resources to administer their own permitting programs. Some tribes spoke of the importance of protecting ephemeral streams, which were eliminated from jurisdiction under the NWPR, as well as for wetlands that were excluded under the NWPR. Several tribes spoke about the need to include ''waters of the tribe'' into the definition of ''waters of the United States'' Several tribes stated support for furthering environmental justice with the proposed rule, noting that the agencies failed to undertake an environmental justice analysis for the NWPR. Some tribes also supported the need to account for climate change in the definition of ''waters of the United States.'' Additional information about the tribal consultation process can be found in section VII.F of this preamble and the Summary of Tribal Consultation and Coordination, which is available in the docket for this proposed rule. 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.

Consistent with the August 4, 2021 **Federal Register** notice, 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. At these pre-proposal webinars, the agencies provided a brief presentation and sought input on the agencies' intent to revise the definition of ''waters of the United States'' and the specific issues included in the outreach **Federal Register** notice described above. The agencies heard from stakeholders representing a diverse range of interests, positions, suggestions, and recommendations.

The agencies have received a variety of recommendations during this pre-proposal outreach process. The agencies received broad support for robust stakeholder outreach and the development of a rule that is consistent with Supreme Court precedent. Stakeholders disagreed about whether states and tribes could or would fill any perceived gap in permitting introduced by the NWPR's decreased scope of jurisdiction, with some stakeholders providing examples of environmental harms caused by the NWPR. Some stakeholders expressed support for a science-based rule, including stakeholders who believed the NWPR did not adequately consider the agencies' scientific record. Most stakeholders who provided input supported a clear, implementable rule that is easy for the public to understand, and the agencies received feedback that the significant nexus standard and typical year analysis were challenging to implement under prior regulatory regimes.

Many stakeholders also emphasized the importance of regional geographic variability across the United States, and some stakeholders suggested that the agencies consider regionally specific criteria for jurisdictional waters. Some stakeholders emphasized the importance of climate change considerations in any new rulemaking effort, while other stakeholders stated that climate change cannot be used as a tool to expand jurisdictional authority. Some stakeholders explicitly supported the consideration of impacts to minority and low-income communities in developing a revised definition of ''waters of the United States'' and asserted that the NWPR did not consider impacts to these communities.

Stakeholders also provided feedback on which water resources should be considered jurisdictional as ''waters of the United States.'' For instance, some stakeholders supported a jurisdictional category for interstate waters, while others opposed such a category. Stakeholders differed in whether they supported the criteria for jurisdictional tributaries, wetlands, and ditches under the pre-2015 regulatory regime, 2015 Clean Water Rule, or NWPR. Some stakeholders suggested that the agencies should enhance clarity by using physical indicators, functional characteristics, or surface water flow as jurisdictional criteria. Some stakeholders asserted that the agencies should exclude most ditches from the definition of ''waters of the United States,'' while others stated that the agencies should instead include ditches as jurisdictional if they function as tributaries or have other connections to other hydrologic features in the watershed. Some stakeholders indicated that impoundments and ''other waters'' are not appropriate categories of jurisdictional waters, while others suggested regulating a broad spectrum of open waters.

Stakeholders expressed different views about which exclusions are important and should be included in a revised definition of ''waters of the United States.'' Many stakeholders noted that the waste treatment system exclusion and prior converted cropland exclusion should be retained, and some stakeholders expressed support for other exclusions such as stormwater control features and artificial lakes and ponds. As described in section V.C.8 of this preamble, the agencies are proposing to retain the waste treatment system exclusion and prior converted cropland exclusion from the 1986 regulations and have specified in the preamble that certain other waters are generally not considered ''waters of the United States.'' Stakeholders also had divergent views on whether ephemeral streams should be categorically excluded from the definition of ''waters of the United States'' or evaluated as tributaries. As described in section V.C.5 of this preamble, the agencies are not proposing to exclude ephemeral streams but are instead proposing that ephemeral streams that meet the significant nexus standard be jurisdictional as tributaries.

The agencies have considered the input that they received as part of the consultation processes and other opportunities for pre-proposal recommendations. The proposed rule, discussed in section V of this preamble, seeks to balance the considerations and concerns of co-regulators and stakeholders. The agencies welcome feedback on this proposed rule through a public hearing and the 60-day public comment period initiated through publication of this action. The agencies will consider all comments received during the comment period on this proposal, and this consideration will be reflected in the final rule and supporting documents.

V. Proposed Revised Definition

A. Basis for Proposed Rule

In this proposed rule, the agencies are exercising their discretionary 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 Supreme Court precedent. The agencies propose to interpret the term ''waters of the United States'' to include: Traditional navigable waters, interstate waters, and the territorial seas, and their adjacent wetlands; most impoundments of ''waters of the United States''; tributaries to traditional navigable waters, interstate waters, the territorial seas, and impoundments, that meet either the relatively permanent standard or the significant nexus standard; wetlands adjacent to impoundments and tributaries, that meet either the relatively permanent standard or the significant nexus standard; and ''other waters'' that meet either the relatively permanent standard or the significant nexus standard.

The proposed 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 based on the best available science concerning the functions provided by upstream tributaries, adjacent wetlands, and ''other waters'' to restore and maintain the water quality of downstream foundational waters. In developing the proposed rule, the agencies also considered the statute as a whole, relevant Supreme Court case law, and the agencies' experience and expertise after more than 30 years of implementing the longstanding 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 proposed interpretation also reflects consideration of provisions of the Act including section 101(b) which states 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'' because the limitations

reflect consideration of both the comprehensive nature and objective of the Clean Water Act and avoid assertions of jurisdiction that raise federalism concerns. Determining where to draw the boundaries of federal jurisdiction to ensure that the agencies achieve 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 proposed 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, interstate waters, and territorial seas, Clean Water Act programs will apply to ensure that those downstream waters are protected, and where they do not, the agencies will leave regulation to the states and tribes. These limitations are thus based on the agencies' conclusion that together those standards are consistent with the statutory text, advance the objective of the Act, are supported by the scientific record, and appropriately consider the objective in section 101(a) of the Act and the policy in section 101(b). In addition, because the proposed rule reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, it is familiar and implementable.

For all these reasons, the proposed rule would achieve the agencies' goals of quickly and durably protecting the quality of the nation's waters. Quickly, because the regulatory framework is familiar to the agencies and stakeholders and supporting science is available along with confirmatory updates; and durably, because the foundation of the rule is the longstanding regulations amended to reflect the agencies' interpretation of appropriate limitations on the geographic scope of the Clean Water Act that is consistent with case law, the Act, and the best available science. The proposal would protect 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 state and tribal water quality certification programs.

The proposed rule is based on the agencies' interpretation of the Clean Water Act, and the proposed rule's protection of water resources advances both the goals of the Act and the goals identified in the Executive Order, including: Listening to the science; improving public health and protecting our environment; ensuring access to clean water; limiting exposure to dangerous chemicals and pesticides; holding polluters accountable, including those who disproportionately harm communities of color and low-income communities; and bolstering resilience to the impacts of climate change.

1. The Proposed Rule Is Within the Agencies' Discretion Under the Act

The Clean Water Act delegates authority to the agencies to interpret the term ''navigable waters'' and its statutory definition ''waters of the United States,'' and 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. Given the regulatory and litigation history described above, there can be little disagreement that both terms under the Clean Water Act are ambiguous and that therefore the agencies have generous leeway to provide the considered and reasonable interpretation of the terms provided in this proposal. Indeed, the Supreme Court has twice held that the Act's terms ''navigable waters'' and ''waters of the United States'' are ambiguous and, therefore, that the agencies have delegated authority to reasonably interpret this phrase in the statute.

First, in *Riverside Bayview,* the Supreme Court deferred to and upheld the agencies' interpretation of the Act to protect wetlands adjacent to navigable-in-fact bodies of water, relying on the familiar *Chevron* standard that ''[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 (citing *Chevron U.S.A. Inc.* v. *Natural Resources Defense Council, Inc.,* 467 U.S. 837, 842–45 (1984)). Second, in *Rapanos,* all Justices found ambiguity in the terms—albeit to varying degrees. In his concurring opinion, Justice Kennedy referenced ''ambiguity in the phrase 'navigable waters.' '' 547 U.S. at 780. So did the dissenting Justices. *See id.* at 796 (''[G]iven the ambiguity inherent in the phrase 'waters of the United States,' the Corps has reasonably interpreted its jurisdiction[.]'') (Stevens, J., dissenting); *id.* at 811–12 (''Congress intended the Army Corps of Engineers to make the complex technical judgments that lie at the heart of the present cases (subject to deferential judicial review).'') (Breyer, J., dissenting). The plurality also agreed that the term ''is in *some* respects ambiguous.'' *Id.* at 752.

Ambiguity in a statute represents ''delegations of authority to the agency to fill the statutory gap in reasonable fashion.'' *Nat'l Cable & Telecomm. Ass'n* v. *Brand X internet Servs.,* 545 U.S. 967, 980 (2005). As the Supreme 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. And, in concurring with the *Rapanos* plurality opinion, Chief Justice Roberts emphasized the breadth of the agencies' discretion in defining ''waters of the United States'' through rulemaking, noting that ''[g]iven the broad, somewhat ambiguous, but nonetheless clearly limiting terms Congress employed in the Clean Water Act, the [agencies] would have enjoyed plenty of room to operate in developing *some* notion of an outer bound to the reach of their authority'' under the Clean Water Act. 547 U.S. at 758 (Roberts, C.J., concurring). Indeed, the agencies' interpretations under the Act, Chief Justice Roberts emphasized, are ''afforded generous leeway by the courts.'' *Id.*

In addition, 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 V.B.3 of this preamble, the agencies have reviewed the NWPR and determined that the rule should be replaced. The proposed rule properly considers the objective of the Act, is consistent with the text and structure of the Act and

Supreme Court precedent, and is supported by the best available science.

2. The Proposed Rule Advances the Objective of the Clean Water Act

The proposed rule is grounded in the Act's objective ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters,'' 33 U.S.C. 1251(a). The proposed rule advances the 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, interstate waters, and the territorial seas and waters that are relatively permanent or that have a continuous surface connection to such waters. Those limitations also ensure that the agencies will not assert jurisdiction where the effect is not significant. The proposed rule is supported by the best available science on the functions provided by upstream waters, including wetlands, to restore and maintain the integrity of foundational waters because it recognizes that upstream waters can have significant effects and enables the agencies to make science-informed decisions about such effects. The proposed rule thus retains the familiar categories of waters in the 1986 regulations—traditional navigable waters, interstate waters, ''other waters,'' impoundments, tributaries, the territorial seas, and adjacent wetlands—while proposing to add, 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., Dickerson* v. *New Banner Institute, Inc.,* 460 U.S. 103, 118 (1983). 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.'' 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 thus adequately consider the 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 Act, supported by legislative history and Supreme Court decisions, make clear—chemical, physical, and biological integrity refers to water quality.

The 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.

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 apply to ''navigable waters'' and are designed to meet the statutory objective include the section 402 NPDES 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 state and tribal water quality certification process, as discussed above. Each of these programs is designed to protect water quality and, therefore, further the objective of the Act. The question of federal jurisdiction is foundational to most programs administered under the Clean Water Act. *See* section IV.A.1 of this preamble.[21]

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 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.[22] Thus, in accordance with *Maui,* in interpreting the ''specific definitional language'' of the Clean Water Act, the agencies must consider whether they are advancing the statutory purposes Congress sought to achieve.

In *National Association of Manufacturers,* the Court confirmed the importance of considering the objective of the Clean Water Act when interpreting the 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 Act's principal tools for achieving the objective and then identified ''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 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 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 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

[21] Additional provisions are also designed to achieve the 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).

[22] 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.

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 (1992) (reviewing the scope of EPA's authority to issue a permit affecting a downstream state and finding that the 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.,* the quality of those waters. The Supreme Court in *Riverside Bayview* explained the inherent link between the 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).

Indeed, the Clean Water Act is replete with 90 references to water quality—from the goals set forth in furtherance of meeting 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 (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 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, in light of the precise definitional language of the definitions in the Act, the importance of water quality to the statute as a whole, and *Maui* and other Supreme Court decisions affirming that consideration of the objective of the Act is important in defining the scope of the Act, the agencies conclude 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. As discussed further below, the proposed rule properly considers and advances the objective of the Act because it focuses on the effects of upstream waters including wetlands on traditional navigable waters, interstate waters, and the territorial seas, and is supported by the best available science on those water quality effects.

b. The Proposed Rule Builds Upon the 1986 Regulations, Which Were Designed To Advance the Objective of the 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. The 1986 regulations were designed to advance the objective of the Act and are thus a reasonable foundation upon which to build the proposed rule. In this proposed rule, the agencies are exercising their discretionary authority to interpret ''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'' informed by Supreme Court decisions and the scientific record.

The best available science as discussed below 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 describes the agencies' historic rationale for the 1986 regulations and its regulatory categories

and describes the latest science that supports the conclusion that the categories of waters identified in the 1986 regulations, such as tributaries, adjacent wetlands, and ''other waters,'' provide functions that restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, and the territorial seas.

The agencies' historic regulations, which became the 1986 regulations, were based on the agencies' 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, interstate waters, and the territorial seas. For more than 40 years, EPA and the Corps 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. The agencies further 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 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.

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. Thus, the proposed rule includes the categories long identified by the agencies as affecting the water quality of traditional navigable waters, interstate waters, and the territorial seas, including tributaries, adjacent wetlands, impoundments, and ''other waters.''

For example, the agencies have long construed the Act to include tributaries as ''waters of the United States.'' 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.'' *Id.* at 37123.

Construing ''waters of the United States'' to include tributaries of traditional navigable waters, interstate waters, the territorial seas, and impoundments of ''waters of the United States'' is consistent with the discussion of tributaries in the 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. 92414, at 77 (1971), *as reprinted in* 1972 U.S.C.C.A.N. 3668, 3742 (emphasis added). Furthermore, Congress recognized that Clean Water Act jurisdiction must extend broadly because ''[w]ater moves in hydrologic cycles and it is essential that [the] discharge of pollutants be controlled at the source.'' *Id.* 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).

As discussed below and further in the Technical Support Document, the best available science supports the 1986 regulations' conclusions about the importance of tributaries to the water quality of downstream foundational waters: Tributaries provide natural flood control, recharge groundwater, trap sediment, store and transform pollutants from fertilizers, decrease high levels of chemical contaminants, recycle nutrients, create and maintain biological diversity, and sustain the biological productivity of downstream rivers, lakes, and estuaries.

With the 1986 regulations, the agencies determined that wetlands adjacent to navigable waters generally play a key role in protecting and enhancing water quality: ''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; *see also* 38 FR 10834.

In *Riverside Bayview,* the Supreme Court deferred to the agencies' judgment that adjacent wetlands provide valuable functions for downstream waters:

> [T]he 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.'' . . . [W]e cannot say that the Corps' judgment on these matters is unreasonable . . . .

474 U.S. at 134–35 (citations omitted). The Supreme Court then unanimously held 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.'' *Id.* at 135.

As discussed below and further in the Technical Support Document, the best available science supports the 1986 regulations' conclusions about the functions provided by adjacent wetlands to downstream traditional navigable waters, interstate waters, and the territorial seas, namely that adjacent wetlands provide valuable flood control and water quality functions including 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.

The 1986 regulations also included ''other waters'' based on their effects on water quality and their effects on interstate commerce. 42 FR 37128. As discussed below and further in section IV.D of the Technical Support Document, the best available science also shows that ''other waters''—such as depressional wetlands, open waters, and peatlands—can provide important hydrologic (*e.g.,* flood control), water quality, and habitat functions which vary as a result of the diverse settings in which they exist across the country and which can have downstream effects on larger rivers, lakes, and estuaries, particularly when considered collectively with other non-floodplain wetlands on the landscape. The

functions that ''other waters'' provide include storage of floodwater, recharge of ground water that sustains river baseflow, retention and transformation of nutrients, metals, and pesticides, export of organisms to downstream waters, and habitats needed for aquatic and semi-aquatic species that also utilize streams.

While the 1986 regulations are a reasonable foundation upon which to build the proposed rule, the agencies are exercising their discretionary authority to interpret ''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'' informed by Supreme Court decisions as discussed in section V.A.3 of this preamble.

c. The Proposed Rule Properly Considers the Objective by the Act Because It Is Informed by the Best Available Science on Water Quality

As noted above, the agencies propose to interpret the term ''waters of the United States'' to include: Traditional navigable waters, interstate waters, and the territorial seas, and their adjacent wetlands; most impoundments of ''waters of the United States''; tributaries to traditional navigable waters, interstate waters, the territorial seas, and impoundments, that meet either the relatively permanent standard or the significant nexus standard; wetlands adjacent to impoundments and tributaries, that meet either the relatively permanent standard or the significant nexus standard; and ''other waters'' that meet either the relatively permanent standard or the significant nexus standard. The proposal is supported by the best available science on the functions provided by upstream waters, including wetlands, that are important for the chemical, physical, and biological integrity of foundational waters. The agencies' proposal is supported by a wealth of scientific knowledge. The scientific literature extensively illustrates the effects tributaries, wetlands adjacent to impoundments and tributaries, and ''other waters'' can and do have on the integrity of downstream traditional navigable waters, interstate waters, and the territorial seas. The relevant science on the relationship and downstream effects of streams, wetlands, and open waters has advanced considerably in recent years, and confirms the agencies' longstanding view that these waters can be subject to jurisdiction. 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'' [23] (hereafter the 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 agencies have summarized and provided an update on more recent literature and scientific support for this section in the Technical Support Document section II.

Again, in the proposed rule, the agencies are not including all tributaries, adjacent wetlands, and ''other waters'' as jurisdictional waters. Rather, the agencies are concluding that proposing these longstanding, familiar categories of waters as subject to the relatively permanent or significant nexus jurisdictional standards is consistent with the best available science because waters in these categories can have significant effects on downstream foundational waters, and are therefore proposing to restore them from the 1986 regulations. The agencies are also proposing to add the relatively permanent and significant nexus standards based on their conclusion that together those standards are consistent with the statutory text, advance the objective and policies of the Act, and are supported by the scientific record. Indeed, the agencies are not reaching any conclusions, categorical or otherwise, about which tributaries, adjacent wetlands (other than those adjacent to traditional navigable waters, interstate waters, or the territorial seas), or ''other waters'' meet either the relatively permanent or the significant nexus standard. Instead, the proposal enables the agencies to make science-informed determinations of whether or not a water that falls within these categories meets either jurisdictional standard and is therefore a ''water of the United States,'' on a case-specific basis.

The agencies also reiterate their previous conclusion that significant nexus is not a purely scientific determination. 80 FR 37054, 37060 (June 29, 2015). As the agencies charged with interpreting the statute, EPA and the Corps must develop the outer bounds of the scope of the Clean Water Act and science does not provide bright line boundaries with respect to where ''water ends'' for purposes of the Clean Water Act. *Riverside Bayview,* 474 U.S. at 132–33. This section summarizes the best available science in support of the longstanding categories of the 1986 regulation, and in support of the proposed rule and the agencies' conclusion that the proposal advances the objective of the Clean Water Act. This section reflects the scientific consensus on the strength of the effects that upstream tributaries, adjacent wetlands, and ''other waters'' can and do have on downstream foundational waters. However, a significant nexus determination requires legal, technical, and policy judgment, as well as scientific considerations, for example, to assess the significance of any effects. Section V.D of this preamble discusses the agencies' approaches to making case-specific relatively permanent and significant nexus determinations under the proposed rule.

Thus, while the agencies are not proposing to establish that any tributaries, adjacent wetlands (other than those wetlands adjacent to traditional navigable waters, interstate waters, and the territorial seas), or ''other waters'' are jurisdictional without the need for further assessment, they are proposing a rule that, based on the scientific record, identifies those categories of waters as subject to jurisdiction under the Clean Water Act under either the relatively permanent or significant nexus standard.

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

Tributaries play an important role in the transport of water, sediments, organic matter, nutrients, and organisms to downstream foundational waters. *See* Technical Support Document section IV.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 mainstem waters. Tributaries can provide these functions whether they are natural, modified, or constructed and whether they are perennial, intermittent, or ephemeral.

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. Streams, even where seasonally dry, are

[23] 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.*

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.[24] 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 flow ephemerally or intermittently. 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 flow less frequently, such as intermittent or ephemeral streams. 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.[25] 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 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 downstream water bodies to contain higher concentrations and loads of nitrogen and phosphorus. In freshwater ecosystems, eutrophication, the enriching of waters by excess nitrogen and phosphorus, reduces water quality in streams, lakes, estuaries, and other downstream water bodies. One obvious result of eutrophication is the excessive growth of algae. 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, 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. In addition, increased nitrogen and phosphorus and associated algal blooms can injure people and animals. Algal blooms can also lead to beach closures. In addition to causing algal blooms, eutrophication changes the natural community composition of aquatic ecosystems by altering environmental conditions.

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, including salmon. 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 material such as leaf litter and other decomposing material for food and, in turn, become food for other organisms. For example, fungi that grow on leaf litter become nutritious food for invertebrates that make their homes on the bottom of a stream, including mayflies, stoneflies, and caddis flies. 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, interstate waters, or the territorial seas 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 ''isolated'' non-navigable intrastate ponds 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 would consider biological functions for purposes of significant nexus determinations under the proposed rule only to the extent that the functions provided by tributaries, adjacent wetlands, and ''other waters'' significantly affect the biological integrity of the downstream traditional navigable waters, interstate waters, or the territorial seas. For example, 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

[24] 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.

[25] 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.*

Atlantic salmon require both freshwater and marine habitats over their life cycles and therefore migrate along river networks, providing one of the clearest illustrations of biological connectivity. 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 and functionally help to maintain the biological integrity of the downstream traditional navigable water. Many other species of anadromous fish—that is fish that are born in freshwater, spend most of their lives in saltwater, and return to freshwater to lay eggs—as well as species of freshwater fish like rainbow trout and brook trout also require small headwater streams to carry out life cycle functions.

Based on the importance of the functions that can be provided by tributaries to foundational waters, the agencies' proposal to interpret the Clean Water Act to protect tributaries where those tributaries 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.

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

Adjacent wetlands provide valuable flood control and water quality functions that affect the chemical, physical, and biological integrity of downstream foundational 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 IV.B.

Because adjacent wetlands retain sediment and augment streamflow via the gradual release of groundwater or water flowing just beneath the solid surface, wetland loss correlates with increased need for dredging and unpredictability of adequate streamflow for navigation. 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). 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, interstate waters, or the territorial seas. 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 downstream waters by retaining stormwater and slowly releasing floodwaters that could otherwise negatively affect the condition or function of downstream 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 quickly drains 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. 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, the filling or draining of adjacent wetlands, including headwater wetlands, can interfere with the ability to maintain navigability on the nation's rivers and harbors and can lead to flooding in larger downstream waters.

The loss of wetlands adjacent to tributaries of navigable waters, interstate waters, and the territorial seas can also result in notable reductions in drinking water supply and quality. Over 225 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. 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, as the quality of the drinking water source is dependent on the protection of its upstream waters. 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. 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. Conserving wetlands in source water protection areas can help protect water quality, recharge aquifers, and maintain surface water flow during dry periods.

Adjacent wetlands have an important role in improving source water quality, due to their strategic location as buffers for other water bodies and their filtration of surface water. Detention of water and its associated constituents by wetlands allows the biochemical uptake and/or breakdown of contaminants, and the destruction of pathogens. A wide and dense distribution of adjacent wetlands protects and mitigates against contaminant discharges. The water detention 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 detention substantially improves both the supply and quality of drinking water. 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.

Based on the importance of the functions that are provided by adjacent wetlands to foundational waters, the agencies' proposal to interpret 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. ''Other waters'' Can Provide Functions That Restore and Maintain the Chemical, Physical, and Biological Integrity of Downstream Traditional Navigable Waters, Interstate Waters, and the Territorial Seas

''Other waters''—examples of which include, but are not limited to, intrastate lakes, wetlands, prairie potholes, playa lakes, streams that are not tributaries, and natural ponds—can provide important functions which affect the chemical, physical, and biological integrity of downstream foundational waters. *See* Technical Support Document section IV.D. These functions are particularly valuable when considered cumulatively across the landscape or across different watershed/sub-watershed scales and 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 downstream foundational waters. For non-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, and thus case-specific analysis of their effects on downstream waters is appropriate from both a scientific and policy perspective.

''Other waters'' individually 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, interstate waters, and the territorial seas (*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 be connected to downstream foundational waters via confined surface or subsurface connections (including channels, pipes, and culverts), unconfined surface connections, shallow subsurface connections, deeper groundwater connections, biological connections, or spillage. They 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 downstream waters. The strength of functions provided by ''other waters'' on downstream waters will vary depending on the type and degree of connection (*i.e..,* from highly connected to highly isolated) to downstream waters and landscape features such as proximity to stream networks and to ''other waters'' with similar characteristics that function as a group to influence jurisdictional downstream waters.

Since the publication of the Science Report in 2015, the published literature has expanded scientific understanding and quantification of functions that ''other waters'' perform that affect the integrity of traditional navigable waters, interstate waters, and the territorial seas, particularly in the aggregate. The 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.

Oxbow lakes and other lakes and ponds that are in close proximity to the stream network, 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'' also perform critical chemical, physical, and biological functions that affect downstream foundational waters. Like adjacent wetlands, these waters individually and collectively affect the integrity of downstream waters by acting as sinks that retain floodwaters, sediments, nutrients, and contaminants that could otherwise negatively impact the condition or function of downstream waters. They also provide important habitat for aquatic species to forage, breed, and rest.

Some ''other waters'' are wetlands that are located too far from other jurisdictional waters to be considered ''adjacent.'' The specific distance may vary based on the characteristics of the aquatic resources being evaluated, but they are often 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 and the waters in the broader tributary network. Some ''other waters'' may be too removed from the stream network or from jurisdictional waters to have significant effects on downstream traditional navigable waters, interstate waters, or the territorial seas. However, particularly when considered in the aggregate, some ''other waters'' can, in certain circumstances, have strong chemical, physical, and biological connections to and effects on foundational waters. Sometimes it is their relative isolation from the stream network (*e.g.,* lack of a hydrologic surface connection) that contributes to the important effect that they have downstream; 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, permeability of the soils).

Based on the functions that can be provided by ''other waters'' to traditional navigable waters, interstate waters, and the territorial seas, the agencies' proposal to assess ''other waters'' to determine whether they 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.

The agencies' use of the best available science to interpret the scope of ''waters of the United States'' is a change from the NWPR. In the NWPR's preamble, the agencies stated: ''While science informs the agencies' interpretation'' of the phrase ''waters of the United States,'' ''science cannot dictate where to draw the line between Federal and State or tribal waters, as those are legal distinctions.'' 85 FR 22271, April 21, 2020; *see also id.* at 22314 (''the line between Federal and State waters is a legal distinction, not a scientific one''). In this proposal, the agencies agree that science alone cannot dictate where to draw the line defining ''waters of the United States.'' But science is critical to attaining 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. Drawing the line without regard to science risks nullifying Congress's objective altogether. And because the agencies believe that the definition of ''waters of the United States'' should advance the objective of the Act and that objective is focused on restoring and maintaining water quality, *see* section V.A.2 of this preamble, the best available science is of far more importance to the agencies' proposed

rule than it was in the NWPR. Moreover, the agencies have concluded that the NWPR was not informed by the science, but rather was inconsistent with the best available science in substantially important ways. *See* section V.B.3 of this preamble.

iv. The Significant Nexus Standard Allows for Consideration of the Effects of Climate Change on Water Resources Consistent With the Best Available Science

The significant nexus standard allows for the agencies to consider a changing climate when evaluating if upstream waters significantly affect foundational waters. This is because the significant nexus standard is based on the science of the strength of the effects that upstream tributaries, adjacent wetlands, and ''other waters'' can and do have on downstream foundational waters, and so implementation of the standard can adapt to changing climatic conditions. 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 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, the significant nexus standard allows the agencies to consider the functions of streams, wetlands, and open waters that support the resilience of the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas to climate change. For example, as 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 downstream foundational waters. In addition, as drought leads to decreased baseflows in foundational waters in other areas of the country, the transmission of flows into alluvial or regional aquifer storage through tributaries and wetlands can mitigate for these climate change-related conditions, and those benefits to downstream traditional navigable waters or interstate waters can be assessed as part of a significant nexus analysis. Changes in flow in tributaries caused by climate change will also be relevant to the relatively permanent standard, but that standard may not allow the agencies to take into account the contribution of upstream waters to the resilience of the integrity of downstream waters.

As discussed in section V.C.10 of this preamble, the agencies believe that there are climate benefits that streams, wetlands, and open waters provide that are not related to restoring or maintaining the integrity of downstream traditional navigable waters, interstate waters, or the territorial seas, such as carbon sequestration. Those functions would not be considered under this rule because they are not directly related to the chemical, physical, and biological integrity of downstream waters. However, considering a changing climate when conducting jurisdictional decisions by considering on a case-by-case basis the functions of aquatic resources that contribute to the resilience of the integrity of downstream foundational 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.

3. The Proposed Rule Establishes Limitations That Together Are Consistent With the Statutory Text, Supported by the Scientific Record, and Informed by Relevant Supreme Court Decisions

In this proposed rule, the agencies are exercising their discretionary authority to interpret ''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'' informed by Supreme Court decisions. The proposed rule's relatively permanent and significant nexus limitations are based on the agencies' conclusion that together those standards are consistent with the statutory text, are supported by the scientific record, and appropriately consider the objective in section 101(a) of the Act and the policy in section 101(b). Moreover, these fact-dependent, science-informed approaches to jurisdiction are not unique under the Clean Water Act.

At the outset, the agencies think it is useful to lay out the areas where the agencies agree with the statutory interpretation and case law laid out in the NWPR. The agencies agree that ''[b]y the time the 1972 amendments were enacted, the Supreme Court had held that Congress' authority over the channels of interstate commerce was not limited to regulation of the channels themselves but could extend to activities necessary to protect the channels,'' 85 FR 22263, April 21, 2020 (citing *Oklahoma ex rel. Phillips* v. *Guy F. Atkinson Co.,* 313 U.S. 508, 523 (1941)), and that ''Congress had in mind a broader scope of waters subject to CWA jurisdiction than waters traditionally understood as navigable,'' *id.; see also id.* at 22267 (recognizing that ''[t]he plurality and Justice Kennedy both recognized the jurisdictional scope of the CWA is not restricted to traditional navigable waters'' in *Rapanos*). In fact, it would be impossible to achieve Congress's objective if the scope of authority were constrained to waters traditionally understood as navigable because those channels cannot be protected without protecting the tributaries that flow into them and wetlands adjacent to them. *Cf. United States* v. *Ashland Oil & Transp. Co.,* 504 F.2d 1317, 1326 (6th Cir. 1974) (''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.''). The Supreme Court has explained both that the term ''navigable'' in the defined term ''navigable waters'' has ''limited import,'' *Riverside Bayview,* 474 U.S. at 133, and also that by using the term ''navigable,'' ''Congress had in mind as its authority for enacting the CWA[ ] [i]ts traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made,'' *SWANCC,* 531 U.S. at 172. As the agencies did in the NWPR, the agencies interpret this to mean that the *object* of federal protection is foundational waters, and that jurisdiction encompasses (and is limited to) those tributaries, wetlands, and open waters that are necessary to protect the foundational waters.[26]

The agencies also agree that ''there must be a limit to that authority and to what water is subject to federal jurisdiction,'' 85 FR 22263, April 21, 2020, that where to draw that limit is ambiguous, and that ''Congress, when it left ambiguity in a statute meant for implementation by an agency, understood that the ambiguity would be resolved, first and foremost, by the agency, and desired the agency (rather than the courts) to possess whatever degree of discretion the ambiguity allows,'' *id.* at 22264 (quoting *Nat'l Cable & Telecomm. Ass'n* v. *Brand X*

[26] Unlike the NWPR, the agencies now interpret the foundational waters to include ''interstate waters.'' See section V.C.2 of this preamble.

internet Servs., 545 U.S. 967, 982 (2005)). In determining that limit, the agencies generally continue to believe that the determination of jurisdiction with regard to wetlands adjacent to tributaries ''must be made using a basic two-step approach that considers (1) the connection of the wetland to the tributary; and (2) the status of the tributary with respect to downstream traditional navigable waters'' and that the concept of a ''connectivity gradient'' is useful. *Id.* at 22267, 22271. Similarly, for tributaries, the agencies agree that ''contribution of flow to and connection'' matters. *Id.* at 22267. At bottom, the agencies agree that the Supreme Court has indicated that the limit should relate to the ''significant effects'' of or ''significant nexus'' between that water and traditional navigable waters, interstate waters, and the territorial seas, *id* at 22263–64 (discussing Supreme Court case law, although as explained in section V.A.3.a of this preamble, the NWPR in fact removed the significant nexus test without considering an alternative approach to protecting waters that significantly affect downstream traditional navigable waters). Finally, the agencies agree that the Supreme Court has ''call[ed] into question the agencies' authority to regulate nonnavigable, isolated, intrastate waters that lack a sufficient connection to traditional navigable waters,'' *id.* at 22269, and this proposal would not assert jurisdiction over such waters.[27]

a. The Relatively Permanent Standard and the Significant Nexus Standard Together Advance the Objective of the Act

The proposed rule's utilization of both the relatively permanent standard and the significant nexus standard gives effect to the Act's broad terms and environmentally protective aim as well as its limitations. *See Rapanos,* 547 U.S. at 767–69 (observing ''the evident breadth of congressional concern for protection of water quality and aquatic ecosystems'' and referring to the Act as ''a statute concerned with downstream water quality'') (Kennedy, J., concurring) (citations omitted); *Riverside Bayview,* 474 U.S. at 133 (''Congress chose to define the waters covered by the Act broadly.''). The agencies, however, are proposing that it is the significant nexus standard that advances the objective of the Act because it is linked to effects on downstream water quality while establishing a reasonable limitation on the scope of jurisdiction by requiring those links to be significant. The relatively permanent standard is administratively useful as an example of a subset of waters that will virtually always have the requisite nexus, but, on its own, is insufficiently protective to meet the objective of the Clean Water Act.

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 NWPR, however, interpreted the statute to *primarily* find waters jurisdictional only if they met the relatively permanent standard, as specifically interpreted in the NWPR. The 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 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 downstream 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 NWPR. *See* 85 FR 22338–39; 33 CFR 328.3(a), (c)(1), (c)(6), and (c)(12). The NWPR disregards the significant nexus standard, *see generally* 85 FR 22338–39; 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.

The agencies propose to reject the NWPR's interpretation as inconsistent with the objective of the Clean Water Act, the science, and the case law, and instead to propose an interpretation whereby if a water meets either standard, it falls within the protections of the Clean Water Act. This section first discusses why the significant nexus test is consistent with the Act and the best available science; then explains why the relatively permanent standard is administratively useful, but limiting the scope of jurisdiction to waters meeting the relatively permanent standard is insufficient to meet the objective of the Clean Water Act; and finally, explains that fact-based standards for determining Clean Water Act jurisdiction are reasonable and not unique to the definition of ''waters of the United States.''

i. The Significant Nexus Test Is Consistent With the Act and the Best Available Science

The significant nexus standard advances the objective of the Act because it is linked to effects on downstream water quality while establishing a reasonable limitation on the scope of jurisdiction. The significant nexus standard reasonably effectuates the text of 33 U.S.C. 1362(7), which defines ''navigable waters.'' The requirement that a significant nexus exist between upstream waters, including wetlands and ''navigable waters in the traditional sense'' fulfills ''the need to give the term 'navigable' some meaning.'' *Rapanos,* 547 U.S. at 779 (Kennedy, J., concurring). With the significant nexus standard, the proposed rule is properly focused on protecting the foundational waters clearly protected by the Clean Water Act. The significant nexus is thus consistent with the text of the Act, with scientific principles and supported by the best available science, with the Act's legislative history, and with case law.

Congress was focused on water quality when it enacted the Clean Water Act and established its objective, as discussed in section V.A.2 of this preamble. The significant nexus standard is derived from the objective of the Act and thus also focused on water quality and specifically focused on the water quality of the foundational waters. As described more fully in section V.A.2.c of this preamble, *supra,* the

[27] The NWPR criticized the agencies' prior practice as insufficiently attentive to the concerns raised by the Supreme Court in *SWANCC* regarding jurisdiction over the ''other waters'' category defined in (a)(3) of the regulatory definition that was at issue in *SWANCC. Id.* at 22264. This criticism is inaccurate. Cognizant of the Supreme Court's direction in *SWANCC* and to ensure that any assertion of authorities over (a)(3) waters is consistent with the Court's precedents, since *SWANCC,* the agencies have required that before exercising jurisdiction over an (a)(3) water field staff get approval from headquarters. 68 FR 1991 (January 15, 2003). As a practical matter, and as discussed in more detail below, section V.C.3 of this preamble, field staff have rarely, if ever, sought such approval and therefore the agencies have not asserted jurisdiction over (a)(3) waters. But (a)(3) waters can have significant effects on foundational waters and, when they do, jurisdiction is proper and would not implicate the constitutional concerns expressed by the Court in *SWANCC* for the reasons explained herein.

significant nexus standard is consistent with scientific principles about the aquatic ecosystem: Upstream waters can significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters, interstate waters, and the territorial seas. Therefore, assessing the effects that waters have on downstream foundational waters when considered, alone or in combination with other similar waters in a region, is a reasonable means of identifying those waters necessary to protect in order to advance the objective of the Act.

A significant nexus analysis is consistent with the framework through which scientists assess a river system—examining how the components of the system (*e.g.,* wetlands, tributaries), in the aggregate (in combination), in the region, contribute and connect to the river (significantly affect the chemical, physical, or biological integrity of foundational waters). Indeed, the significant nexus standard in the proposed rule reflects the type of analysis in the Science Report by describing the components of a river system and watershed; the types of physical, chemical, and biological connections that link those components; the factors that influence connectivity at various temporal and spatial scales; and methods for quantifying connectivity. 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 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 ecology. *See also* Technical Support Document.

Connectivity is the degree to which components of a system are joined, or connected, 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 water bodies and the downstream traditional navigable water, interstate water, or the territorial sea and, 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 the effects on the chemical, physical, and biological functioning of the downstream water bodies that permits the agencies to judge when an effect is significant such that a water, alone or in combination, 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 mercury; functions that jurisdictional adjacent 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 downstream, 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 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. See 3 Van Nostrand's Scientific Encyclopedia, at 5801 (defining 'Water Pollution'). 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.'' 140 S. Ct. at 1471. The Court further observed that ''[v]irtually all water, polluted or not, eventually makes its way to navigable water. This is just as true for groundwater. See generally 2 Van Nostrand's Scientific Encyclopedia 2600 (10th ed. 2008) (defining 'Hydrology').'' *Id.* at 1470. The Court then enumerated a series of factors relevant to determining whether a discharge is jurisdictional under the Act, many of which are scientifically based, 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 objective of the Act and the best available science, the proposed rule's incorporation of the significant nexus standard is 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 County, Georgia,* 140 S. Ct. 1731, 1749 (2020). 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 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. In *Rapanos,* Justice Kennedy stated of the Court in *Riverside Bayview* ''the Court indicated that 'the term ''navigable'' as used in the Act is of limited import,' 474 U.S., at 133, [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,' *id.,* at 135.'' 547 U.S. at 779 (Kennedy, J., concurring). ''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.'' *Id.* (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 functions of wetlands identified in 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. Brief for Association of State Wetland Managers et al. 21–23; Brief for Environmental Law Institute 23. Scientific evidence indicates that wetlands play a critical role in controlling and filtering runoff. See, *e.g.,* 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).

Id. at 777–78.

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. The Court noted that the statement in the Conference Report for the 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 and no more. In light of the ambiguous nature of the phrase ''waters of the United States,'' the agencies have found the legislative history concerning the intent of Congress regarding the scope of the Act's protections under its power over navigation confirms the reasonableness of the proposed rule. The rule would ensure that all waters that either alone or in combination significantly affect the integrity of traditional navigable waters, interstate waters, or the territorial seas are protected under the Clean Water Act. 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.''). Again, to quote the Sixth Circuit 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 the proposed rule remains well within the bounds of *SWANCC.*

ii. The Relatively Permanent Standard Is Administratively Useful, but Insufficient To Meet the Objective of the Clean Water Act

The agencies also conclude that federal protection is appropriate where a water meets the relatively permanent standard. Waters that meet this standard are an example of a subset of waters that will virtually always have the requisite connection to downstream traditional navigable waters, interstate waters, or the territorial seas, and therefore properly fall within the Clean Water Act's scope. However, the relatively permanent standard is insufficient as the sole standard for geographic jurisdiction under the Clean Water Act as it is inconsistent with the Act's text and objective and runs counter to the science.

Science supports that tributaries of traditional navigable waters with relatively permanent, standing, or continuously flowing water and wetlands and relatively permanent open waters with continuous surface connections to such relatively permanent waters perform important functions that either individually or cumulatively with similarly situated waters in the region have substantial effects on the chemical, physical, or biological integrity of downstream foundational waters. *See* Technical Support Document section IV.A. For example, perennial and seasonally intermittent tributaries contribute consistent flow to downstream foundational waters, and with that flow export nutrients, sediment, and food resources, contaminants, and other

materials that can both positively (*e.g.,* by contributing to downstream baseflow, providing food for aquatic species, contributing to downstream aquatic habitat) and negatively (*e.g.,* if exporting too much sediment, runoff, or nutrients or if exporting pollutants) affect the integrity, including the water quality, of those larger downstream waters. In addition, wetlands with a continuous surface connection to such relatively permanent waters can attenuate floodwaters, trap sediment, and process and transform nutrients that might otherwise reach downstream traditional navigable waters, interstate waters, or the territorial seas. The relatively permanent standard is useful because it generally requires less information gathering and assessment and because it focuses on flow and includes wetlands with a continuous surface connection. As such, while both the significant nexus and relatively permanent standards require fact-specific inquiries before determining whether a water is a ''water of the United States,'' the relatively permanent standard will generally require less assessment.

Standing alone as the sole test for Clean Water Act jurisdiction, the relatively permanent standard is insufficient. 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 (such as ephemeral streams) and adjacent wetlands that do not have a continuous surface water connection to other jurisdictional waters, is inconsistent with the Act's text and objective and runs counter to the science demonstrating how such waters can affect the integrity of downstream waters, including traditional navigable waters, interstate waters, and territorial seas. The NWPR, for example, excluded federal jurisdiction over the many ephemeral tributaries that regularly and directly provide sources of freshwater to the sparse traditional navigable waters in the arid Southwest, such as portions of the Gila River.

As discussed in section V.A.2.c of this preamble, 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. EPA's Science Advisory Board (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. Letter from SAB to Gina McCarthy, Administrator, EPA (Oct. 17, 2014) (''SAB Review'') at 22–23, 54 fig. 3. The agencies also find no exclusion of waters that are not relatively permanent in the text of the statute. *Rapanos,* 547 U.S. at 770 (''To be sure, Congress could draw a line to exclude irregular waterways, but nothing in the statute suggests it has done so.'') (Kennedy, J., concurring).

The science is also clear that wetlands may significantly affect 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 due to long-term drought; wetlands with shallow subsurface connections to other protected waters; 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 downstream rivers, improving water quality 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 larger downstream waters. *See, e.g.,* Science Report at 4–20 to 4–38. For example, adjacent, interdunal wetlands separated from the Atlantic Ocean only by beach dunes would not meet the relatively permanent standard, but provide numerous functions, including floodwater storage and attenuation, storage and transformation of sediments and pollutants, and important habitat for species that utilize both the wetlands and the ocean, that significantly affect the Atlantic Ocean (both a traditional navigable water and territorial sea).

In addition, the agencies see no basis in the text or the science to exclude waters from Clean Water Act jurisdiction based solely on the continuous surface connection requirement. As discussed in section V.A.2.a of this preamble, the objective of the Act is to restore and maintain the water quality of the nation's waters. Nowhere does the Act refer to a continuous surface connection, and the imposition of such a limitation would not account for the science regarding how upstream waters and wetlands affect downstream foundational waters. As discussed above in this section and in the Technical Support Document, the science supports that wetlands and open waters that lack a continuous surface connection to relatively permanent waters can individually and cumulatively have more than a speculative or insubstantial effect on the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, or the territorial seas. As a scientific matter, 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. *Rapanos,* 547 U.S. at 773–74 (''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.'') (Kennedy, J., concurring); *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.'').

While the relatively permanent standard is administratively useful and includes waters that have important effects on downstream water quality, the standard excludes many waters that properly fall within the Act's protections. As a result, the proposed rule's incorporation of both *Rapanos* standards represents a reasonable interpretation of broad and ambiguous statutory text and a permissible way for the agencies to fulfill their congressionally delegated responsibility to interpret ''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 Reasonable

Finally, while a fact-dependent jurisdictional analysis of whether a water meets either the relatively permanent standard or the significant nexus standard does not necessarily provide categorical certainty, case-specific determinations of the scope of Clean Water Act jurisdiction are not unique. 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, like the significant nexus standard, does not establish bright lines marking the bounds of federal jurisdiction and instead requires an inquiry focused on the specific facts at issue and guided by the purposes Congress sought to achieve under the Act. In *Maui,* the Supreme Court considered whether discharges to groundwater that reach navigable waters are jurisdictional under the 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 the proposed rule. Both standards require an analysis focused on the specific facts at issue in a particular instance. The ''functional equivalent'' standard requires consideration of facts related to the discharge at issue, the geologic substrate through which the discharges travels, the location and nature of the receiving water, and other factors. Likewise, the significant nexus standard requires consideration of scientific principles of upstream functions and effects on the integrity of downstream waters and facts related to the specific waters at issue. Indeed, the agencies have proposed a list of factors that would be considered when assessing whether waters ''significantly affect'' foundational waters that is similar in nature to the factors identified by the Court for making a ''functional equivalent'' assessment. *See* section V.C.10 of this preamble. The relatively permanent standard also requires inquiry into specific facts about particular tributaries and wetlands, 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. Likewise, the significant nexus standard also does not necessarily establish bright lines with respect to determining which waters have a sufficient impact on downstream traditional navigable waters, interstate waters, or the territorial seas, in contrast to the NWPR which categorically excluded all ephemeral waters in spite of their impact on the chemical, physical, and biological integrity of downstream foundational waters.

Finally, both the functional equivalent standard and the significant nexus standard should be applied while keeping in mind the purposes of the 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. The agencies' goal with this proposed rule is to return to the familiar and longstanding framework that will ensure Clean Water Act regulatory protections, informed by relevant Supreme Court decisions. The agencies also anticipate developing another rule that builds upon the regulatory foundation of this rule with the benefit of additional stakeholder engagement and which could, among many issues, consider more categorical approaches to jurisdiction.

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

The proposed rule reflects consideration of the statute as a whole, including the objective of the Act and the policies of the Act with respect to the role of states and tribes. As discussed in section V.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 proposed 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 with respect to 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 both ensure that the agencies achieve 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 the proposed rule both advances the objective of the Act in section 101(a) and respects the role of states and tribes in 101(b).[28] The proposed rule appropriately draws the boundary of waters subject to federal protection by extending, and limiting, it to the protection of upstream waters that significantly affect the integrity of waters where the federal interest is indisputable—the traditional navigable waters, interstate waters, and territorial seas. Waters that do not implicate federal interest in these foundational

[28] 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.

waters are left entirely to state and tribal protection and management.

The scope and boundaries of the proposed definition therefore reflect the agencies' considered judgment of both the Act's objective in section 101(a) and the Congressional policy relating to states' rights and responsibilities under section 101(b). In several key respects, the agencies' consideration and weighing of these provisions in this rulemaking differs from the agencies' approach in the NWPR. Those differences and the bases for them follow.

i. Consideration of Sections 101(a) and 101(b) in the NWPR

In promulgating the NWPR, the agencies gave predominant weight to consideration of the policy in section 101(b), citing it frequently in its rationale for the rule generally. For example, the agencies stated: ''The agencies interpret the policy of Congress, set forth in section 101(b), as relevant to all aspects of the implementation of the CWA, both implementing federally-established standards as well as the scope of waters subject to such standards and regulatory programs.'' 85 FR 22269, April 21, 2020. The agencies also opined on the relationship between its consideration of section 101(a) and 101(b): ''In developing an appropriate regulatory framework for the final rule, the agencies recognize and respect the primary responsibilities and rights of States to regulate their land and water resources as reflected in CWA section 101(b). The oft-quoted objective of the CWA to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' . . . must be implemented in a manner consistent with Congress' policy directives to the agencies.'' *Id.* The NWPR ultimately concluded that the rule ''appropriately balances . . . the objective of the Act and the policy of Congress set forth in CWA sections 101(a) and 101(b), respectively.'' *Id.* at 22277.

Beyond relying on section 101(b) for the agencies' overall approach to the rulemaking, the NWPR relied specifically on section 101(b) as a basis for the rule's line-drawing between jurisdictional and non-jurisdictional waters. For example, with regard to tributaries, the agencies stated that limiting jurisdiction to waters that contribute surface flow to traditional navigable waters in a typical year ''better balances the CWA's objective in section 101(a) with the need to respect State and tribal authority over land and water resources as mandated by Congress in section 101(b).'' *Id.* at 22287. The agencies contended, moreover, that excluding ephemeral waters from jurisdiction ''respect[s] State and Tribal land use authority over features that are only episodically wet during and/or following precipitation events.'' *Id.* at 22319. With regard to wetlands, the agencies similarly relied upon ''limitations on federal authority embodied in CWA section 101(b)'' as a justification for excluding subsurface hydrologic connectivity as a basis for determining what constitutes an adjacent wetland. *Id.* at 22313.

ii. Consideration of Sections 101(a) and 101(b) in Developing the Proposed Rule

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 NWPR. As discussed below, based on the text of section 101(b), the structure of section 101 and the Act as a whole, Supreme Court precedent, and the history of federal water pollution laws enacted by Congress up through the 1972 Amendments, the agencies believe that the proposed rule reflects fuller and more appropriate consideration of sections 101(a) and 101(b) than the agencies undertook in promulgating the NWPR.

As a threshold matter, the agencies agree that 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 foundational waters that prompted Congress to enact the various incarnations of the Act—*i.e.,* traditional navigable waters, interstate waters, and the territorial seas. And consistent with the section 101(b) policy, where protection (or degradation) of waters do not implicate this federal interest, such waters fall exclusively within state or tribal regulatory authority, should they choose to exercise it.

The agencies' considered view at this time differs, however, in certain important respects from how the NWPR considered section 101(b). As the above statements make clear, section 101(b) was not simply a relevant consideration for the NWPR, but a key lynchpin of both the overall regulatory approach and the rule's specific definitions of jurisdictional waters. In the agencies' view, the better reading of section 101(b) does not support the heavy weight accorded to it by the NWPR for either its overall approach nor its specific definitions.

(1) The Text of Section 101(b)

First, the agencies believe that the NWPR's reading of section 101(b) fails to align with the better reading of the text of section 101(b). For example, the agencies stated in support of the NWPR that ''[i]n developing an appropriate regulatory framework for the final rule, the agencies recognize and respect the primary responsibilities and rights of States to *regulate* their land and water resources as reflected in CWA section 101(b).'' 85 FR 22269, April 21, 2020 (emphasis added). However, this appears to be a restatement of the first sentence of section 101(b), which actually states:

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

The NWPR read this provision as essentially agnostic (or even in opposition) to preventing pollution and meeting the objective of Act. *See, e.g.,* 85 FR 22270, April 21, 2020 (''States are free to evaluate the most effective means of addressing their waters and may weigh the costs and benefits of doing so.''). The agencies believe the better reading of this provision is found in the text of section 101(b), as a recognition of states' authority to ''*prevent, reduce, and eliminate* pollution'' and provide support for the Administrator's exercise of his authority to advance the objective of the Act. Indeed, section 101(b)'s text is plainly focused on environmental protection (''prevent, reduce, and eliminate pollution,'' ''including restoration, preservation and enhancement[] of land and water resources'').

Section 101(b) further recognizes the very important role that the states play in achieving the Act's objective. ''Pollution'' is a defined term in the Act that means ''man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water'' (section 502(19)) and has a broader scope than the ''discharge of a pollutant'' subject to regulatory jurisdiction under the Clean Water Act (*e.g.,* nonpoint sources of pollution). The agencies believe that Congress's use of the broad term ''pollution'' in section

101(b) indicates that the policy in this section is intended to recognize and preserve, among other things, states' authority to prevent, reduce, and eliminate all kinds of pollution, including pollution falling outside the scope of federal regulatory authority. Importantly, this includes all non-point sources, which indisputably may (and do) significantly affect the integrity of foundational waters. The agencies' proposed definition of ''waters of the United States'' does not implicate, let alone impinge, on such state authorities.

The first sentence of section 101(b) also refers to states' ''*primary*'' role in preventing, reducing, and eliminating pollution—a word that is not incompatible with overlapping federal and state authority over waters which, under the proposed rule, implicate core federal interests. Thus, the text of section 101(b) need not be read, and in the agencies' view is best not read, as a general policy in favor of preserving for states a zone of exclusive regulatory authority based on federalism principles ''to choose whether or not to regulate'' regardless of the impact of those decisions on achievement of the Act's objective. *See* 85 FR 22270, April 21, 2020.

In developing the proposed rule, the agencies also considered the language in section 101(b) referring to states' rights and responsibilities ''to plan the development and use (including restoration, preservation, and enhancement) of land and water resources.'' Planning the development, use, and protection of land and water resources is indisputably a traditional state function (*e.g.,* zoning, allocation and administration of water rights, exercise of eminent domain, preservation of lands and waters). Congress's recognition of the states' primary role in this domain does not state or even suggest a policy to limit Clean Water Act jurisdiction over waters, as would be covered under the proposed rule, implicating the core federal interest in protecting traditional navigable waters, interstate waters and the territorial seas.

Indeed, any implication to the contrary is dispelled by the remainder of section 101(b), which, among other things, expressly recognizes states' role in administering the federal permitting programs under section 402 of the Act:

> It is the policy of Congress that the States manage the construction grant program under this Act and implement the permit programs under sections 402 and 404 of this Act. 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, in the agencies' view, the text of section 101(b) as a whole reflects not a general policy of deference to state regulation to the exclusion of Federal regulation, but instead a policy focused on preserving the responsibilities and rights of states to work to achieve the objective of the Act by preventing, reducing and eliminating 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 Clean Water Act authority, and implementing the Act's regulatory permitting programs, in partnership and with technical and financial support from the Federal government.

In the preamble to the NWPR, the agencies criticized prior statements they had made as taking an unduly narrow view of section 101(b) ''as limited to implementation of the Act's regulatory programs by States and State authority to impose conditions on 'waters of the United States.''' 85 FR 22269, April 21, 2020. As indicated above, the agencies now view the policy in section 101(b) as encompassing a broad understanding of states' roles in preventing, reducing, and eliminating pollution, and as explained above, the proposed rule reflects due consideration of this provision.

The agencies' interpretation and consideration of section 101(b) in this rulemaking 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 Arkansas* v. *Oklahoma,* 503 U.S. at 144 (describing ''partnership between the States and the Federal government'' to meet 101(a) objective of Federal government setting pollutant discharge limitations and States implementing water quality standards for water bodies themselves); *Int'l Paper Co.* v. *Ouellette,* 479 U.S. at 489–90 (explaining 101(b) as allowing Federal government to delegate administration of point source pollution permits to states and allowing states to establish more stringent discharge limitations than federal requirements); *City of Milwaukee,* 451 U.S. at 341 (describing 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); *Colorado Public Interest Group,* 426 U.S. at 16, n.13 (describing 101(b) as providing states authority to develop permit programs and establishing standards more stringent than the Clean Water Act).

(2) Relationship Between Sections 101(a) and 101(b)

The agencies have also carefully considered the policy in section 101(b) as it relates to the Act's objective in section 101(a) and have reconsidered how the agencies considered these two provisions in promulgating the NWPR.

In the preamble to the final NWPR, the agencies stated: ''The oft-quoted objective of the CWA to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters,' . . . must be implemented in a manner consistent with Congress' policy directives to the agencies.'' 85 FR 22269, April 21, 2020. As discussed above, the agencies gave section 101(b) predominant weight, and relied upon it as the basis for the rule's line-drawing between jurisdictional and non-jurisdictional waters. Upon further review and reconsideration, while the agencies agree with the view in the NWPR that section 101(b) is relevant to a rulemaking defining ''waters of the United States'' (and have given the provision due consideration, as discussed above), the agencies are giving greater weight to section 101(a) than did the NWPR, and conclude that section 101(b) is better read as supporting Congress's objective in the Clean Water Act than in tension with it.

The Clean Water Act's structure makes clear that section 101(a) is 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 Act. The agencies interpret its placement and its simple, declarative, and overarching statement as a powerful expression by Congress that merits significant 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) and (g). The agencies believe that the prominently placed and single expression of the Act's overarching objective in section 101(a) merits greater weight in the agencies' decision-making than one of the four Congressional

policies expressed in section 101 which, while important, appear subordinate to the objective—particularly given the statutory text and structure.

The remainder of the Act's text also demonstrates how important this objective was to Congress. As the NWPR accurately stated, the objective in section 101(a) is ''oft-quoted'' 85 FR 22269, April 21, 2020. In the Clean Water Act itself, Congress refers to the objective of the Act approximately a dozen times, including in sections 122, 217, 301, 302, 304, 305, 308, 318, 402, 405, 505, 516, 518, 601, and 603. The repeated reference to section 101(a) highlights the importance of the Act's objective to the statute as a whole, supporting the agencies' giving significant weight to this provision. Section 101(b), in contrast, is not referred to elsewhere in the Act.

Indeed, while the NWPR read section 101(b) in isolation from the rest of the Clean Water Act, reviewing the statute as a whole reveals that Congress itself gave direction to the agencies on how it expected them to achieve section 101(a)'s objective and implement section 101(b)'s policy. Following section 101, the remainder of the Act provides extensive and detailed instruction on how Congress expected its objective, goals, and policies to be met through the Act. Specifically, with regard to its objective and goals in section 101(a), Congress laid out a series of detailed programs (*e.g.,* the section 303 water quality standards program, the section 402 discharge elimination program, and the section 404 dredge and fill program) designed to meet that objective. So too, Congress gave detailed instructions on how it intended to apply its policy of preserving the primary role of the states. Specifically, as referenced explicitly in section 101(b), it authorized states to implement the key permitting programs under sections 402 and 404 of the Act—*i.e.,* their authority to assume administration of the federal regulatory program for discharges of pollutants under sections 402(b) and 404(g). The Clean Water Act likewise delineates a role for states in implementing numerous other Clean Water Act programs central to achieving the Act's objective, including the water quality standards program and impaired waters and total maximum daily load program in section 303. Section 401 grants primary authority to states and authorized tribes to grant, deny, or waive certification of proposed federal licenses or permits that may discharge into ''waters of the United States'' within their borders. And under section 510, unless expressly stated, nothing in the Clean Water Act precludes or denies the right of any state or tribe to establish more protective standards or limits than the Act. As described above, the Clean Water Act further assigns exclusive authority to the states to regulate non-point sources.

Thus, the agencies choose not to read the policy of section 101(b) as essentially a free-floating instruction or license for the agencies to interpret or implement other sections of the Act in a manner that impedes achievement of its overall objective, in particular definitional provisions like ''waters of the United States'' which are central to administration of the entire statute and therefore achieving that objective. To the contrary, Congress itself defined the contours of how it expected the agencies to both achieve its object in section 101(a) and implement its policy in section 101(b) through the rest of the provisions of the Act. Notably, a narrow definition of ''waters of the United States'' would not uniformly boost state authority, as the NWPR suggested, as that definition is foundational to the scope of all of these programs in which the states are assigned authority. Indeed, with regard to section 401, a narrow definition would actually *limit* states' ability to protect waters within their borders.

Finally, section 101(a) has also been ''oft-quoted'' by the courts, including the U.S. Supreme Court. *See, e.g., National Association of Manufacturers,* 138 S. Ct. at 624 (''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).''); *see supra* section V.A.2 of this preamble (summarizing Supreme Court case law surrounding the Act's statutory objective).

The agencies' careful balancing of 101(a) and 101(b) in the proposed rule is also informed by and consistent with the Court in *SWANCC,* which noted that ''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. . . .' 33 U.S.C. [section] 1251(b). We thus read the statute as written to avoid the significant constitutional and federalism questions.'' U.S. 531 at 174. 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, the proposed rule—by limiting jurisdiction only to those waters that significantly affect the integrity of waters where the federal interest is indisputable (traditional navigable waters, interstate waters, and the territorial seas)—would avoid constitutional and federalism concerns.

In sum, taking into account the prominence, text, repeated statutory references to section 101(a), the Supreme Court's highlighting of the central importance of this provision, and the fact that the vast majority of the rest of the Clean Water Act is primarily aimed towards meeting this objective, the agencies accord this section significant weight, and greater weight than the due consideration it has given section 101(b) in developing the proposed rule.

(3) Statutory History

Finally, in considering sections 101(a) and 101(b) for purposes of interpreting the scope of ''waters of the United States,'' the agencies believe 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, S. Rep. 92–414 (1971) at 3671, 72. 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 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 3675. Congress further indicated that the Clean Water Act was intended to ''restore Federal-State balance to the permit system. Talents and capacities of those States whose own programs are superior are to be called upon to administer the permit system within their boundaries. The Administrator is to suspend his activity, insofar as the permit system is concerned, in these States.'' *Id.* . 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. States and tribes play a vital role in the implementation and enforcement of the Clean Water Act and the proposed rule proposes limitations after carefully considering how best to identify those waters for which protections were better left to the states.

Thus, in passing the 1972 Amendments, Congress itself acted to rebalance its approach to protecting water quality—shifting from a statutory scheme dependent on state action to one rooted in a federal foundation, providing a uniform floor of water quality protection and leaving space for states to choose whether to regulate more stringently. *See Dubois* v. *U.S. Dep't of Agriculture,* 102 F.3d 1273, 1300 (1st Cir. 1996) (''Simply put, the CWA provides a federal floor, not a ceiling, on environmental protection.''). Yet, in interpreting section 101(b) as serving to limit the scope of the Federal government's authority in favor of state authority, the NWPR turned Congress's scheme in the 1972 Amendments—in which it purposefully sought to give the Federal government a greater role in water quality protection—on its head. Unlike the NWPR, which did not consider the Act's statutory history in its read of section 101(b), the agencies here interpret section 101(b) in the context of this history and Congress's deliberate choice to restructure the statute to move away from its previous reliance on state-led water pollution control.

The Supreme Court has also long recognized that Congress, in enacting the Clean Water Act, ''intended the 1972 Act amendments to 'establish an all-encompassing program of water pollution regulation.''' *Int'l Paper Co.* v. *Ouellette,* 479 U.S. 481, 492–93 (1987); *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 ''to 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.''). 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. 121, 133. More recently, the Supreme Court in *Maui* noted that:

> Congress' purpose as reflected in the language of the Clean Water Act is to '''restore and maintain the integrity of the Nation's waters,' '' [section] 101(a), 86 Stat. 816. Prior to the Act, Federal and State Governments regulated water pollution in large part by setting water quality standards. *See EPA* v. *California ex rel. State Water Resources Control Bd.,* 426 U.S. 200, 202–203, 96 S.Ct. 2022, 48 L.Ed.2d 578 (1976). 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. *See id.,* at 203–205, 96 S.Ct. 2022; *Milwaukee* v. *Illinois,* 451 U.S. 304, 310–311, 101 S.Ct. 1784, 68 L.Ed.2d 114 (1981).

140 S. Ct. at 1468.

With respect to states' responsibilities and rights under section 101(b), Justice Kennedy in *Rapanos* cited state *amici* briefs which ''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 Supreme 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.*

Yet, an overly narrow definition of jurisdictional waters—such as that under the NWPR (including the NWPR's removal from jurisdiction the longstanding category of interstate waters) —threatens a return to pre-1972 days excluding from federal protection waters that significantly affect foundational waters and risks removing from the statutory scheme instances of interstate pollution the 1972 amendments were designed to address. In response to concerns expressed by commenters regarding protection of downstream states from out-of-state pollution, the agencies in the NWPR simply stated: ''The CWA provides a number of opportunities for the EPA to mediate disputes among states, though the remedies available for cross-boundary water pollution disputes over non-jurisdictional waters depends upon the parties and the issues of the case. As they do today, under the final rule 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.'' NWPR, Response to Comments, Topic 1 Legal Arguments at 26. But directing states and other parties to utilize state or federal common law to resolve such disputes overlooks ''Congress' intent in enacting the [1972] Amendments . . . to establish an all-encompassing program of water pollution regulation,'' *City of Milwaukee,* 451 U.S. at 318, and that ''the need for such an unusual exercise of lawmaking by federal courts disappears'' when Congress passes legislation that ''speak[s] directly'' to the question at issue, as Congress did in

passing the Clean Water Act. *Id.* at 317–18.

By proposing regulations interpreting the Act to cover waters that meet the relatively permanent standard or the significant nexus standard, the agencies have reasonably interpreted the Act to protect those waters necessary to protect the integrity of downstream traditional navigable waters, interstate waters, and the territorial seas while leaving regulatory authority over all other waters exclusively to the states. This interpretation respects the statutory history that gave rise to the Act and gives effect to the comprehensive nature of the Clean Water Act, its objective, and the many programs affected by the scope of ''waters of the United States'' designed to meet that objective, along with other important policies of the Act, while ensuring that states have sole authority over waters with no or insignificant connection to the foundational waters clearly protected by the Clean Water Act.

(4) The Definitions of Jurisdictional Waters in the Proposed Rule Reflect Appropriate Consideration of Sections 101(a) and 101(b) of the Act

As discussed elsewhere, the proposed rule includes definitions of tributaries, adjacent wetlands, and ''other waters'' that meet the relatively permanent or significant nexus standards (*see* section V.C of this preamble). The proposed rule advances the Act's objective by helping restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, and territorial seas—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), the proposed rule recognizes, preserves, and protects states' rights and responsibilities subject to the policy in section 101(b) of the Act by leaving within their purview all waters that do not significantly affect the foundational waters of paramount federal interest. The specific jurisdictional lines in the proposed rule demarcating jurisdictional from non-jurisdictional waters therefore bear a relationship to the nature and extent of federal and state interests at play; this line-drawing highlights the agencies' deliberate and due consideration of sections 101(a) and 101(b) in developing the proposed rule.

The agencies believe that the jurisdictional line-drawing reflected in the proposed rule better aligns with these statutory provisions than the NWPR. As noted previously, the preamble to the final NWPR cited section 101(b) as a justification, in part, for its specific definitions of jurisdictional tributaries and adjacent wetlands. One of the most environmentally significant decisions in the NWPR was its categorical exclusion of all ephemeral streams from Clean Water Act jurisdiction. The agencies cited section 101(b) as a basis for this exclusion as ''respecting State and Tribal land use authority over features that are only episodically wet during and/or following precipitation events.'' 85 FR 22319. The agencies' explanation, however, does not link 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 waters and the nature or extent of state authorities referenced in section 101(b). Indeed, as discussed elsewhere, available science unequivocally demonstrates that ephemeral tributaries can implicate the important federal interest in the protection of the integrity of traditional navigable waters, interstate waters, and territorial seas. Likewise, in categorically excluding ephemeral waters, the agencies in the NWPR cite section 101(a), but again do not explain how their decision relates to or advances the Act's objective. 85 FR 22277, April 21, 2020. In contrast, informed by the policy in section 101(b) and the Act's objective in section 101(a), the proposed role appropriately distinguishes between jurisdictional and non-jurisdictional tributaries based on whether a tributary implicates core federal interests, in which case it is covered by the rule, or fails to do so, in which case its protection and management is left to states and tribes.

The NWPR similarly relied upon section 101(b) as a basis for its definition of adjacent wetlands, in particular the decision to exclude from consideration subsurface hydrologic connection between a wetland and an adjacent water when determining jurisdiction, stating: ''[B]alancing 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 NWPR does not explain how excluding consideration of subsurface hydrologic connections relates to or derives from section 101(b), and the agencies do not now discern such a linkage. And as with the definition of tributaries, the NWPR does not explain how this choice relates to or advances the objective of the Act. In contrast, the proposed rule's approach to adjacent wetlands, like its approach to jurisdictional tributaries, gives due consideration to the policy in section 101(b) and the objective in section 101(a) by tethering jurisdiction to whether the wetland implicates foundational waters with a demonstrated federal interest.

4. The Proposed Rule Is Both Familiar and Implementable

The agencies have extensive experience implementing the 1986 regulations. In addition, the scientific and technical information available to inform the significant nexus analysis and identify waters that meet the relatively permanent standard has markedly improved over time and become more easily available since the agencies first started implementing both standards. The agencies are taking comment on a range of implementation options discussed in section V.D of this preamble that would further inform the public as to the agencies' intended practice for asserting jurisdiction under the proposed rule.

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. Even after the agencies promulgated the 2015 Clean Water Rule, they continued to implement the 1986 regulations consistent with the *Rapanos* Guidance in certain states in response to court decisions enjoining the 2015 Clean Water Rule in various parts of the country.

The agencies repromulgated the 1986 regulations in the 2019 Repeal Rule and implemented those rules nationwide until June 22, 2020, when the 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 ''[the] final rule will provide greater regulatory certainty and national consistency while the agencies consider public comments on the proposed [2020 Rule].'' *Id.* at 56660. To further justify a return to the 1986 framework, the agencies noted that ''[t]he agencies, their

coregulators, 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, 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.[29]

Further, in responding to comments asserting that the agencies should not return to the pre-2015 regulatory regime because that regime would reduce regulatory certainty compared to the 2015 Clean Water Rule 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.'' [30] *Id.* at 56660. Even after the 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 NWPR in that state.

In addition to the past three presidential Administrations, courts have also found that the 1986 regulations, implemented consistent with the *Rapanos* standards, provide an appropriate regulatory framework by which to implement the Act. Indeed, in staying the 2015 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 Rule. *In re EPA & Dep't of Def. Final Rule,* 803 F.3d 804, 808 (6th Cir. 2015). In doing so, the court recognized that it needed to reinstate the pre-2015 regulatory *regime*—not the 1986 regulations alone—to properly preserve the status quo. *See id.* at 806 (finding that ''the status quo at issue is the pre-[2015 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 NWPR, the Arizona district court reinstated the pre-2015 regulatory regime, noting that the regime ''is familiar to the Agencies and industry alike.'' *See Pascua Yaqui Tribe,* 2021 WL 3855977, at *5.

The agencies acknowledge that a return to the pre-2015 regime would result in the need for case-specific analyses 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. However, the NWPR both fails to advance the Act's statutory objective and introduces new implementation uncertainties, including its own case-specific typical year analysis for most categories of jurisdictional waters. In contrast, the proposed rule is both consistent with the Act's statutory text and purposes and is longstanding and familiar to regulated parties and regulators alike. Moreover, all definitions of ''waters of the United States'' require some level of case-specific analysis, and implementation of the proposed 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 V.D of this preamble). Accordingly, the agencies have concluded the proposed rule is consistent with the Clean Water Act and the best available science as well as familiar and implementable.

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. 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 2008 *Rapanos* Guidance. Of those, approximately 36,000 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 1986 regulations consistent with the relatively permanent standard and the significant nexus standard as interpreted by the *Rapanos* Guidance. These individual 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 directly touching a perennial tributary, to an intermittent 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. This includes individual determinations for a small non-relatively permanent stream without any adjacent wetlands miles from the nearest downstream traditional navigable water, for a small wetland adjacent to a non-relatively permanent water that together did not have a case specific significant nexus under the guidance, and for a roadside ditch constructed in and draining uplands that lacked relatively permanent flow.

Through this experience, the agencies developed wide-ranging technical expertise in assessing the hydrologic flowpaths along which water and materials are transported and transformed that determine the degree of chemical, physical, or biological connectivity and effects to downstream

[29] *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.'').

[30] 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.

waters. The agencies have also become deeply familiar with the variations in climate, geology, and terrain within and among watersheds and over time that affect the functions (such as the removal or transformation of pollutants) performed by streams, open waters, and wetlands for downstream traditional navigable waters, interstate waters, or the territorial seas. The Corps can complete jurisdictional determinations at no charge to the landowner or project proponent upon their request.

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, soil surveys, National Wetland Inventory maps, floodplain maps, watershed studies, scientific literature and references, and field work. As discussed further in section V.D.3.d of this preamble, these tools have undergone significant technological advances, and become increasingly available, since the *Rapanos* decision. For example, USGS and 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 contributions of flow of tributaries, including intermittent and ephemeral streams, to downstream traditional navigable waters, interstate waters, or the territorial seas. 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 downstream 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 V.C.9.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 through case-specific determinations across the country for more than a decade, 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 significant experience with the 1986 regulations and the two *Rapanos* standards. While the agencies have been developing their expertise in implementing this regime, so have state and tribal co-regulators and regulated entities that may be subject to the Act's reach, including technical consultants that advise regulated entities on whether they may be subject to Clean Water Act requirements, and interested citizens who may play an important role in the Act's permitting process.

Due in part to the familiarity of this regime, the proposed rule would not undermine significant reliance interests in an alternative regime, including the NWPR. 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 (U.S. 2009). The Court acknowledges that if an agency's ''prior policy has engendered serious reliance interests,'' the agencies must not ignore them, but must provide a reasoned explanation for disregarding facts and circumstances that underlay or were engendered by the prior policy. *Id.* at 515. However, the Court emphasizes that even in the case of serious reliance interests, further justification is not required ''by the mere fact of policy change.'' *Id.* at 516.

The proposal does not implicate serious reliance interests because, first, the agencies are proposing to codify a rule similar to the definition currently being implemented nationwide. Therefore, no stakeholders are currently relying on the implementation of an alternative definition, including the NWPR. As discussed in section VI of this preamble, the proposed rule would restore a regime that is generally comparable to current practice, and there would be no appreciable cost or benefit difference between the proposed rule and the regulatory regime that the agencies are currently implementing. Second, members of the public, states, and tribes have been aware that the agencies might reconsider the NWPR for nearly a year 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 NWPR and deciding whether to revise or replace the rule. See section IV.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 state and tribal consultation. See section IV.C of this preamble. The agencies received over 32,000 recommendation letters from the public during its pre-proposal outreach. Third, the NWPR was only in effect for 14 months and was subject to multiple legal challenges during that entire time. Finally, as discussed in this section, members of the public are familiar with the proposed rule's regulatory framework thereby minimizing the potential disruption of a change. Regardless, even if serious reliance interests were at issue, which they are not, this proposed rule provides a thorough and reasoned explanation for the changed definition of ''waters of the United States.''

For all of these reasons, the agencies are now once again proposing to return the definition of ''waters of the United States'' to its longstanding and familiar definition reflected in the 1986 regulations, amended to reflect the agencies' current view of the limitations on their jurisdiction informed by relevant Supreme Court decisions.

B. Concerns With Alternatives

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). As discussed below, the agencies have thoroughly considered alternatives to the proposed rule and have concluded that the proposed rule is the best path forward to meet the agencies' goals to promulgate a rule that advances the objective of the Clean Water Act, is consistent with Supreme Court decisions, is supported 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 NWPR and for the reasons articulated in this preamble are changing their approach. *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 515 (2009).

1. 2015 Clean Water Rule

The agencies are not proposing to repromulgate the 2015 Clean Water Rule. While the proposed rule utilizes the best available science in support of the conclusion that the proposed rule would advance the objectives of the Act, the proposed rule is not, as aspects of the 2015 Rule were, based on categorical significant nexus determinations. Rather, the proposed rule restores the

longstanding and familiar categories of the 1986 regulations and proposes jurisdictional limitations based on both the relatively permanent standard and the significant nexus standard.

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 promptly restore the protections of the longstanding regulations and avoid current and future harms to important aquatic resources, consistent with the best available science and the agencies' determination of the statutory limits on the scope of the ''waters of the United States.'' In particular, the procedural status of the 2015 Rule in light of the complex litigation surrounding it means that re-adoption of the rule would not meet the agencies' policy goal of promptly ensuring necessary protections for the nation's waters.

Indeed, litigation over the 2015 Rule previously led to different definitions of ''waters of the United States'' being in effect in different parts of the country. At this time, the 2015 Clean Water Rule remains subject to preliminary injunctions barring implementation of the rule in roughly half the states in the country. See section I.A of the Technical Support Document for more information on the status of the definition of ''waters of the United States'' in effect at different times across the country based on the litigation over the 2015 Rule.

2. 2019 Repeal Rule

As discussed in section V.A of this preamble, 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. Indeed, like the 2019 Repeal Rule, the proposed rule seeks to return generally to the longstanding regulations that existed prior to the 2015 Clean Water Rule.[31] Unlike the 2019 Repeal Rule, however, the proposed rule would restore 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 of relevant Supreme Court decisions.

[31] 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.'').

Additionally, the agencies have significant 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 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 the proposed rule.

3. NWPR

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

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

The agencies do not consider the 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. 1462, 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''). Consistent with the Supreme Court's opinion in *Maui,* 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 Act, supported by legislative history and Supreme Court decisions, make clear—chemical, physical, and biological integrity refers to water quality.

The agencies do not view the objective of the Clean Water Act as the only factor relevant to determining the scope of the Act. Rather, the agencies have concluded that consistent with the text, structure, and legislative history of the Act, as well as *Maui* and the other Supreme Court decisions addressing ''waters of the United States,'' and with general principles of administrative law, the agencies must give substantial consideration of the effects of a revised definition of ''waters of the United States'' on the integrity of the nation's waters.

The agencies view the failure of the NWPR to advance the Act's objective as an important factor in their choice not to propose a rule based on the NWPR. One critical example of the NWPR's failure to advance the objective of the Act is its removal of the significant nexus test without considering an alternative approach to protecting waters that significantly affect downstream traditional navigable waters. 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 features on downstream waters. For that reason, evolving forms of this inquiry have been present in *Riverside Bayview, SWANCC,* and Justice Kennedy's concurring opinion in *Rapanos.* The NWPR ''eliminate[d]'' the significant nexus test, 85 FR 22325, April 21, 2020, and failed to replace it with an alternative approach that furthered the objective of the Act.

To be clear, the Supreme Court's interpretations of the scope of ''waters of the United States'' do not require adoption of a significant nexus test. The Supreme Court has held that its interpretation of a statutory term only binds the agency in future rulemakings if it has stated that ''its construction follows from the unambiguous terms of the statute and thus leaves no room for agency discretion.'' *Brand X internet Services,* 545 U.S. at 982. The term ''waters of the United States'' is no such ''unambiguous term.'' ''Waters of the United States'' can be subject to many interpretations and the agencies have ''generous leeway'' in interpreting it. *Rapanos,* 547 U.S. at 758 (Roberts, C.J., concurring in the judgment.)

While the agencies were not bound to adopt the significant nexus standard, the failure of the NWPR to adopt any standard for jurisdiction that adequately addresses the effects of degradation of upstream waters on downstream waters, including traditional navigable waters, fails to advance the Act's objective. For example, the NWPR categorically excluded ephemeral features without appropriately considering scientific information about their important effects on the integrity of downstream traditional navigable waters. In addition, in limiting the scope of protected wetlands to those that touch or demonstrate evidence of a regular surface water connection to other jurisdictional waters, the NWPR failed

to appropriately consider the many effects of other categories of wetlands on downstream waters. For example, an ephemeral stream that flows directly into the Rio Grande (a traditional navigable water) and an adjacent wetland separated from the Mississippi River (a traditional navigable water) by an artificial levee and that lacks a direct hydrologic surface connection to the river in a typical year are non-jurisdictional under the NWPR but have significant effects on traditional navigable waters.

The NWPR's assertion that it considered the objective of the Act because Clean Water Act and non-Clean Water Act state, tribal, and local efforts ''collectively pursue the objective'' does not reflect consideration of the objective as intended by Congress. The agencies contended in adopting the NWPR that the drastic reduction in the scope of Clean Water Act jurisdiction pursues the objective of the Act because it would be combined with the Clean Water Act's non-regulatory programs as well as state, tribal, and local efforts. The 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 agree with the 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 Act. The non-regulatory Clean Water Act programs that the NWPR cites complement and support the permitting programs at the core of the Act, as opposed to limiting its scope. For example, the NWPR cited the 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 Act, but do not limit the regulatory programs' scope.

The agencies disagree, however, with NWPR's assertion that the rule's reduction in regulatory scope achieved the objective of the Act based in part on the impacts of non-Clean Water Act programs. As discussed in section V.A.3.B 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 believe it is appropriate to consider whether the definition of the scope of waters to which the Act's water pollution regulations apply helps to achieve that objective. Thus, the NWPR's statement that the 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 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 Act by assessing the water quality effects of revising the definition of ''waters of the United States.''

In sum, based on the text, structure, and history of the statute, the relevant and available science, Supreme Court case law, and the agencies' technical expertise and experience, the agencies have determined that the NWPR is not a suitable alternative to the proposed rule because it fails to achieve the objective of the Act. The NWPR does not establish either the significant nexus test or an alternative standard that advances the objective of the Clean Water Act by protecting waters, including upstream ephemeral tributaries and wetlands, where they have a significant effect on the integrity of downstream traditional navigable waters, interstate waters, and the territorial seas and does not appropriately value the importance of federal programs in achieving the objective of the Act.

b. The NWPR is Inconsistent With the Best Available Scientific Information

The NWPR's exclusion of major categories of waters from the protections of the 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, its categorical exclusion of ephemeral features and large categories of wetlands is inconsistent with the scientific record before the agencies. In addition, the 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 were counter to the ample scientific information demonstrating the effects of wetlands on downstream waters when they have other types of connections.

First, the definition of the term ''tributary'' in the NWPR categorically excluded ephemeral streams from the regulatory protections of the Act, contrary to scientific information emphasizing the vital role these streams can play in protecting the integrity of downstream 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. SAB Review at 22–23, 54 fig. 3. While in the arid Southwest, features 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 6–10. 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 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. SAB Review at 22.

Similarly, the 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 traditional navigable waters. In defining ''adjacent wetlands,'' the 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, April 21, 2020. 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 surface hydrological 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 NWPR stated that the definition of ''adjacent wetlands'' is ''informed by science.'' *Id.* at 22314. Yet the 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 were counter to the ample scientific information before the agencies 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 due to long-term drought; 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) (''[g]iven 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.'') *Id.* at 786.

Indeed, the overwhelming scientific information before the agencies weighs decisively against proposing the definition of ''adjacent wetlands'' in the NWPR. Available scientific information demonstrates the significant effects of categories of newly excluded wetlands on the chemical, physical, and biological integrity of downstream traditional navigable waters. For example, whereas the NWPR provided that wetlands flooded by jurisdictional waters are only protected if the flooding occurs in a ''typical year,'' the Science Report stated 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 noted 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 NWPR stated that the narrow definition of ''adjacent wetlands'' in the 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, the agencies believe that the NWPR's exclusion of wetlands that lack the limited, specific types of surface water connections to other jurisdictional waters in a typical year lacked scientific support.

The SAB's assessment of the NWPR proposal recognized that the proposed rule 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). The 2020 SAB Commentary emphasized 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 NWPR stated that the ''agencies' decisions in support of this final rule have been informed by science.'' 85 FR 22288, April 21, 2020. For example, the scientific information that the NWPR cited as a basis for excluding ephemeral tributaries is the concept of a ''connectivity gradient.'' *Id.,* citing the SAB Review. The NWPR referred to the SAB Review'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 Review at 3. The 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. *Id.*

Upon careful review, however, the agencies have concluded that the NWPR's conclusion takes the SAB's recommendation out of context and is inconsistent with the information in the SAB Review as a whole. The agencies recognize that the SAB explained that the connectivity gradient the NWPR cited was just a hypothetical example [32] meant to illustrate just one 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 only scientific information the agencies provided in support of categorically excluding ephemeral features does not fully represent the discussion in the cited SAB Review and runs counter to key elements of the scientific record before the agencies. *Id.*

The NWPR also stated that the line it draws between regulated and non-regulated wetlands, which excludes large categories of wetlands previously covered by the Act, is ''informed by science.'' 85 FR 22314, April 21, 2020. The NWPR cited statements from the 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 SAB Review at 55; *see also id.* at 22314, citing the SAB Review at 60 (''[s]patial proximity is one important determinant [influencing the connections] between wetlands and downstream waters''). In addition, the 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.[33]

Despite these citations, the NWPR's definition of adjacent is not based on proximity, but instead on factors that are distinct from proximity—*e.g.,* a ''direct hydrologic connection,'' or a ''continuous surface [water] connection.'' *See id.* at 22340. Thus, the NWPR's definition of ''adjacent wetlands'' may exclude wetlands a dozen feet away from jurisdictional waters (therefore proximate under any reasonable interpretation of the term) 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.

c. The NWPR Is Difficult To Implement and Yields Inconsistent Results

In addition to the above concerns, the agencies' experience implementing the NWPR for over a year made clear that foundational concepts underlying much of the NWPR are confusing and difficult to implement in the way the NWPR required. While any rule that draws lines between jurisdictional waters and

[32] The figure cited is captioned in part as ''*Hypothetical illustration* of connectivity gradient and potential consequences to downstream waters.'' SAB Review at 54 (emphasis added). Nowhere in its review does the SAB review indicate that this is the actual or only connectivity gradient.

non-jurisdictional waters will involve some implementation challenges, the agencies have found the challenges imposed by the NWPR to be impracticable in important respects. Based on the agencies' experience, the NWPR does not ''provide[] clarity and predictability for Federal agencies, States, Tribes, the regulated community, and the public.'' *See* 85 FR 22252, April 21, 2020. More importantly, the challenges that the NWPR imposes to establish jurisdiction for features that it appears to define as jurisdictional and that significantly affect the integrity of downstream waters further undermine the NWPR's viability as an alternative to the proposed rule.

i. ''Typical Year'' Metric

The ''typical year'' is a concept fundamental to many of the NWPR's definitions. *Id.* at 22273. Under the rule, tributaries and lakes, ponds, and impoundments of jurisdictional waters are only jurisdictional if they have certain surface water connections with a traditional navigable water or territorial sea at least once in a typical year. 33 CFR 328.3(c)(6), (12). Two categories of wetlands only meet the adjacency test for jurisdiction if they have a surface water connection with other jurisdictional waters once in a typical year. *Id.* at (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 NWPR recommends, 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 NWPR. However, ''typical year conditions'' are often irrelevant to the extent of flow in many human-altered streams, including effluent-dependent streams, and the NWPR did not explain why human-altered hydrology should be subject to the same typical year requirement as natural streams. These challenges undermine the NWPR's claim that it enhances the ''predictability and consistency of Clean Water Act programs . . .'' *See* 85 FR 22250, April 21, 2020.

Identifying the presence of a surface water connection in a typical year can be difficult and sometimes impossible, as 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 a surface water connection to a downstream jurisdictional water. Similarly, though many ponds or wetlands may be frequently inundated, those in arid areas 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 NWPR's jurisdictional test, agency staff would probably not be able to determine that they do, given how unlikely they would be to observe it. The difficulty of finding in a field visit the direct hydrologic connections under any interpretation of typical year permissible under the NWPR is exacerbated by the fact that the NWPR discourages 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 NWPR, agency staff must often 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 an analysis 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.

For the same reasons that agency staff are unlikely to witness the specific surface water connections required under the NWPR during a site visit in dry regions or during the dry season, available aerial photographs, which are often taken just once per year or once every other year, are also very unlikely to capture evidence of this surface water connection between a stream and a downstream traditional navigable water or territorial sea. High-resolution satellite imagery can potentially provide additional coverage, but availability and usability vary 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). Moreover, as the NWPR acknowledges, ''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. 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 jurisdictional decisions under the NWPR. Although any definition of ''waters of the United States'' requires the use of remote tools like interpretation of aerial or satellite imagery, the NWPR made it more challenging to use these resources because of that rule's typical year criteria and the burden of proof to demonstrate that the requirement is met.

The same difficulties create challenges in detecting surface hydrologic connections that meet the NWPR's definition of ''adjacent wetlands'' or ''lakes and ponds, and impoundments of jurisdictional waters.'' 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 hydrologic connection (flooding) occurs from a tributary to a wetland, lake, pond, or impoundment. The NWPR's standard of inundation by flooding in a typical year is not tied to any more commonly calculated flood interval, such as flood recurrence intervals, and the agencies are not aware of any tool capable of collecting the type of inundation data the NWPR requires. Determining that inundation by flooding occurs in a typical year is 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 poses similar obstacles, requiring either auspiciously timed field visits, aerial photography, or 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 NWPR suggests 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 NWPR preamble for determining precipitation in a typical year makes 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 rainfall was wetter than normal, drier than normal, or normal (''typical''). Using the methodology in the preamble of the 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 surface water flow was observed during normal or dry conditions, the agencies can have higher confidence that the surface water observations represent flow in a ''typical year.'' However, if flow was observed during the 30% of conditions that are ''wetter than normal,'' the surface water observations do not reveal whether flow would occur during a typical year. And if flow was *not* observed, precipitation data from the previous three months do 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 is conducted when surface water flow is not present, the agencies' suggested approach for evaluating whether a feature meets the typical year test often does not provide meaningful and relevant information upon which the agencies could reasonably rely to make accurate determinations of jurisdiction. Under any regulatory regime, the agencies use a weight of evidence approach to determine jurisdiction, but the NWPR typical year requirement places onerous and in many instances arbitrary constraints on the data that can be used as evidence.

Use of NOAA precipitation data to assess whether surface water flow occurs in a typical year for purposes of the NWPR presents other implementation challenges. The data rely on reports from weather stations that are sometimes at a different elevation from the site in question, or far away from the site, so that their indications as to whether precipitation at a given site is normal, wetter than normal, or drier than normal can be inaccurate. More importantly, the typical year concept as applied to the NWPR does not account for the increasing number of recurrent heatwaves, droughts, storms, and other extreme weather events in many parts of the country, which can have profound impacts on local and regional streamflow. Although the concept of ''typical year'' in the NWPR factors 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), the NWPR does 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 rolling thirty-year approach to determining typical year in the NWPR does not allow the agencies to use these updated methods.

The NWPR notes 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 identifies 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, but all of these only look at climate-related conditions generally and have well documented limitations. These methods, which provide information useful in many other contexts, often do not specifically answer the jurisdictional questions established by the NWPR. For example, they do not address whether surface water flow might connect a particular stream to a downstream traditional navigable water or territorial sea, whether a particular wetland is inundated by or connected to a jurisdictional water as required under the NWPR, or how uncertainties associated with their application at different locations and in different months affect the accuracy of condition estimates. Precipitation is an important factor but other information is also relevant to streamflow and surface water connections in particular waters, including the abundance of and 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 that in many cases may not be feasible given available agency staff and resources. While the agencies have substantial experience using a weight of evidence approach to determine jurisdiction, the ''typical year'' requirement makes it significantly 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 territorial sea. Even streams that flow perennially or intermittently often travel many miles prior to reaching the closest traditional navigable water or territorial sea, meaning many downstream reaches may need to be assessed. Under the NWPR, any ephemeral reaches along that pathway that do not carry surface water flow once in a typical year would render all upstream waters non-jurisdictional. *Id.* at 22277. The need to assess lengthy tributary systems pursuant to this provision of the rule imposes an extraordinarily high burden of proof on the agencies to assess surface water flow in a typical year along the flow path, and the longer the pathway, the less feasible the analysis.

ii. Determining Adjacency

The NWPR provides that wetlands are ''adjacent'' when they: (1) Abut a traditional navigable water or territorial sea; 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. *Id.* at 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.

First, agency staff have found it difficult to distinguish between natural and artificial barriers for purposes of determining adjacency. The NWPR for the first time establishes separate tests for adjacency depending on whether the barrier between the wetland and jurisdictional water is ''natural'' or ''artificial''; if a barrier is artificial, it must allow for a direct hydrological surface connection in a typical year in order for a wetland to be adjacent, whereas no such showing is necessary for natural barriers. 33 CFR 328.3(c)(1)(iv). However, many barriers between wetlands and jurisdictional

waters were built decades or even a century earlier, and determining whether they were originally natural or artificial can be extremely challenging, even if inspected in person, as artificial features that are left alone often naturalize over time. It sometimes requires extensive research into historical records, and those records may not be available at all. Furthermore, some barriers may be both artificial and natural. Artificial levees and other barriers are frequently built on top of natural berms. Given the distinct regulatory consequences that flow from whether a barrier is ''artificial'' or ''natural,'' the NWPR requires the agencies to make determinations that are difficult or in some cases not possible.

The artificial barrier provision also leads to absurd 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 NWPR therefore establishes 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 makes no scientific or practical sense.

Finally, the provision establishing that a wetland is ''adjacent'' if a jurisdictional water inundates it by flooding in a typical year is also 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. Indeed, the NWPR acknowledges 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, April 21, 2020. Given the absence of existing records of inundation by flooding, determining whether inundation by flooding has occurred in a typical year is extremely difficult in many circumstances.

Compounding the challenge, the NWPR provides 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 compelling 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 compounds 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, April 21, 2020; 33 CFR 328.3(c)(vi).

iii. Ditches

Among other requirements, the NWPR provides that a ditch [34] is jurisdictional as a tributary if it was originally built in a tributary or adjacent wetland, as those terms are defined in the NWPR, and emphasizes 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, April 21, 2020. In other words, in order to find a ditch jurisdictional, the agencies must 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 territorial sea (4) in a ''typical year.'' Alternatively, the agencies must 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 (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. Therefore, to determine whether a ditch is jurisdictional under the NWPR, the agencies must 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 fifty, one hundred, or 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 have approached the agencies seeking assistance in assessing the jurisdictional status of ditches, but the agencies are often unable to provide significant help given the burdens imposed by the NWPR's ditch definition.

The NWPR also provides that ditches are jurisdictional if they relocate a tributary, as that term is defined in the rule, 85 FR 22341, April 21, 2020, 33 CFR 328.3(a)(2), (c)(12), but this standard as defined is also often extremely difficult to assess. The NWPR explains 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. In other words, the NWPR appears 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 significant implementation challenges. As a practical matter, when a tributary is relocated it often reroutes just a portion to the ditch. Assessing whether a ditch relocated 100% of a tributary's flow, however, as opposed to 80% or 50% of its flow, is extremely difficult and may not be possible in some circumstances. By establishing a jurisdictional standard that is extremely difficult to meet, the NWPR effectively removes 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, interstate waters, and the territorial seas. As is the case with tributaries, lakes and ponds, impoundments, and wetlands, the NWPR's impracticable approach to ditches makes it extremely difficult to find that many waters subject to the NWPR are actually jurisdictional, further undermining the viability of the

[34] 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, interstate waters, and the territorial seas.

NWPR as an alternative to the proposed rule.

d. The NWPR Has Significantly Reduced Clean Water Act Protections Over Waters

The failure of the NWPR to achieve the objective of the 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 are protected by the Clean Water Act under the NWPR compared to 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 NPDES and dredged and fill permitting programs, but water quality standards, impaired waters and total maximum daily loads, oil spill prevention, preparedness and response programs, and the state and tribal water quality certification programs—because such programs apply only to ''waters of the United States.'' While the NWPR was enacted with the expressed intent to decrease the scope of federal jurisdiction, the agencies now believe the actual decrease in water resource protections has been more pronounced than the qualitative predictions in the NWPR preamble and supporting documents anticipated and acknowledged to the public. This data supports the agencies' conclusion that the NWPR is not a suitable alternative to the proposed 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,[35] EPA and the Army have identified consistent indicators of a substantial reduction in waters protected by the NWPR (*see* Technical Support Document section III.B.ii 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 NWPR's definitions. Additionally, the agencies believe these indicators account for only a fraction of the NWPR's impacts, because many project proponents do not need to seek any form of jurisdictional determinations for waters that the NWPR categorically excludes, such as ephemeral streams, and the Corps does not have purview over such projects and does not track them. A closer look at each of these indicators will help demonstrate some of the more pronounced impacts of the NWPR on foundational waters of this country than was identified for the public in the NWPR and its supporting documents. As explained in detail above, when a water falls outside the scope of the 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 or fill into such waters. And by virtue of the fact that the NWPR's scope means that for many waters entities do not even need to seek a jurisdictional determination, it is impossible to fully understand the scope of degradation to foundational waters caused by the NWPR's definition.

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 (*see supra* note 30), 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 NWPR, the probability of finding resources to be non-jurisdictional also increased precipitously. Of the 9,399 AJDs completed by the Corps during the first twelve months in which the NWPR was in effect,[36] the agencies found approximately 75% of AJDs completed had identified non-jurisdictional water resources and approximately 25% of AJDs completed identified jurisdictional waters.[37] Conversely, when the 1986 regulations and applicable guidance were in effect during the previous five years (including following the 2019 recodification of those regulations), significantly more jurisdictional waters were identified in AJDs than compared to the first twelve months of the NWPR. During similar 1-year calendar intervals when the 1986 regulations and applicable guidance were in effect, approximately 27% to 45% of AJDs completed identified non-jurisdictional aquatic resources, with percentages varying between each of the different periods, and 55% to 72% of AJDs identified jurisdictional resources.[38]

[35] 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 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.

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

[37] This excludes drylands and waters identified as being jurisdictional only under section 10 of the Rivers and Harbors Act. In addition, under the 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 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 this can be found in the Technical Support Document section III.B.ii.

[38] 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. Because the proposed rule is marking a return to prior longstanding practice, 2015 Clean Water Rule determinations were left out of this analysis.

The change from a range of 27% to 45% non-jurisdictional AJD findings prior to the NWPR to 75% non-jurisdictional findings following issuance of the NWPR indicates that significantly fewer waters are protected by the Clean Water Act under the NWPR (*see* Technical Support Document section III.B.ii for additional discussion).

When evaluating the effect of the NWPR on the number of jurisdictional individual aquatic resources (as opposed to the AJDs completed), the agencies found a similar significant reduction in protections. Within the first twelve months of implementation of the NWPR, the Corps documented the jurisdictional status of 48,313 individual aquatic resources or water features through AJDs completed between June 22, 2020, and June 21, 2021; 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 that did not meet the NWPR's revised adjacency criteria (and thus are non-jurisdictional under the NWPR). Ditches were also frequently found to be non-jurisdictional (4,706 individual exclusions), which is likely the result of the narrowed definition of a relocated tributary under the 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 1986 regulations implemented consistent with Supreme Court case law.[39] The agencies anticipate that this increase in non-jurisdictional determinations, to a level of approximately 75% of water bodies being non-jurisdictional under the NWPR as opposed to only 45% under the prior regulations, would reduce the integrity of the nation's waters.

Of particular concern to the agencies is the NWPR's disproportionate effect on arid regions of the country, which are dominated by ephemeral stream systems. The Corps' data show that in New Mexico, of the 263 streams assessed via AJDs in the first twelve months of implementation of the NWPR (*i.e.,* between June 22, 2020, to June 21, 2021), 100% were found to be non-jurisdictional ephemeral resources.[40] In Arizona, of the 1,525 streams assessed in AJDs in the first year of implementation of the NWPR, 1,518, or 99.5%, were found to be non-jurisdictional ephemeral resources. While the Corps found high percentages of streams in Arizona to be non-jurisdictional between 2016 and 2020, the NWPR resulted in a ten-fold increase in the total number of individual resources documented as non-jurisdictional in AJDs.

For example, 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 NWPR (of which 1,521 were determined non-jurisdictional accounting for all exclusions). The number of stream reaches assessed in Arizona also dominated the number of evaluations completed nationally under the NWPR, which is incongruent with the geographic extent of water resources in this country. 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 NWPR was implemented.[41] This increase in the number of streams assessed and found to be non-jurisdictional in Arizona under the NWPR highlights the disproportionate impacts this rule had on water resource protection in this state and in similar arid regions of this country.

The number of individual stream reaches considered under PJDs also declined precipitously in these states under the NWPR, while many more streams were evaluated and determined to be non-jurisdictional through AJDs. As mentioned previously, project proponents who request an AJD obtain 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. 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. However, proportionally fewer PJDs being requested under the NWPR indicate that fewer project proponents are requesting that aquatic resources on their project site be treated as if they are 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 NWPR in 2020–2021 it was only 45.[42] When looking at the total number of individual streams reaches over time, under the 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, compared to pre-2015 regulatory practice. 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 NWPR. Based on averages for non-jurisdictional streams from 2016–2020 compared to non-jurisdictional streams under the NWPR, there has been a 10-fold increase in non-jurisdictional findings for streams in Arizona and a 36-fold increase in non-jurisdictional findings for streams in New Mexico following implementation of the NWPR. Compounding resource losses, eliminating these streams from jurisdiction under the NWPR also typically eliminated jurisdiction over wetlands which otherwise might meet adjacency criteria.

The NWPR also significantly reduced the number of Clean Water Act section 404 permits required for dredging and filling activity nationwide. The Corps has 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 pre-NWPR, but no longer did under the NWPR's definition of ''waters of the United States.''[43] Moreover, in comparing 2020–2021 to similar annual data from 2016 to 2020 from

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

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

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

[42] The AJD values associated with the 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 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 III.B.ii for more analysis.

[43] This tracking method only applies when 100% of jurisdiction is lost under 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 has not been implemented uniformly across the United States, and is likely under-representative even for those cases in which 100% of jurisdiction was lost under the NWPR.

implementation of the 1986 regulations consistent with Supreme Court case law, there was on average an 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 NWPR. The number of projects that did not require a section 404 permit under the 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 may not have sought a jurisdictional determination or applied for a permit at all if they believed their aquatic resources were non-jurisdictional under the NWPR. Many projects could have occurred without consultation with the Corps due to the 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 NWPR, it is fair to assume that these impacts are a significant underestimate.[44]

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

Some stakeholders have argued that the diminished scope of ''waters of the United States'' would not necessarily reduce protections for waters as a practical matter, because states, tribes, and local entities may regulate discharges even in the absence of Clean Water Act regulation. *See* section V.A.3.b of this preamble. This perspective is consistent with the 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 Act. 85 FR 22259, April 21, 2020. Yet while some states and tribes regulate ''waters of the state'' or ''waters of the tribe'' more broadly than the federal government under their own laws, many newly non-jurisdictional waters under the NWPR were in states and on tribal lands that do not regulate waters beyond those covered by the Clean Water Act. Under the NWPR, discharges into these waters could have occurred without any restriction.

As discussed in the Economic Analysis for the Proposed Rule, many states and tribes do not regulate waters more broadly than the Clean Water Act requires. Economic Analysis, Chapter II; NWPR Economic Analysis at 30–31. Contrary to the predictions made in the NWPR Economic Analysis, during the year in which the 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, whereas no states that had previously lacked these broader protections established them. *See* 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 Proposed Rule Chapter II (indicating that two of those states sought to reduce the scope of state clean water protections after the NWPR was finalized, and none of them sought to expand protections.).

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 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 NWPR federal floor would have established them. Indeed, the External Environmental Economics Advisory Committee (E–EEAC) has stated that the model that the 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'' (*i.e.,* only two states directly changed 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' significant resulting change in implementation of the Act). *See* E–EEAC 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) 5–6, *available at https://www.e-eeac.org/wotusreport.*

The agencies are also not aware of any tribes that expanded their clean water protections to compensate for a reduction in protections under the NWPR. During the agencies' tribal consultation and coordination for this rulemaking process, tribes overwhelmingly indicated that they lack the independent resources and expertise to protect their waters and therefore rely on Clean Water Act protections. *See* section IV.C of this preamble and the Summary of Tribal Consultation and Coordination, available in the docket for this proposed rule. This feedback is consistent with the concerns expressed during the NWPR rulemaking process. *See, e.g.,* 85 FR 22336–22337, April 21, 2020 (''many Tribes may lack the capacity to create a tribal water program under tribal 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 authority of many states and tribes to regulate waters more broadly than the Federal government, the narrowing of federal jurisdiction would mean that discharges into the newly non-jurisdictional waters would in many cases 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 stakeholders, including states, tribes, scientists, and non-governmental organizations, that corroborated the agencies' data and indicated that the NWPR's reduction in the jurisdictional scope of the Clean Water Act would cause significant environmental harms. Ephemeral streams and their associated wetlands, wetlands that do not meet the NWPR's revised adjacency criteria, and other aquatic resources not protected by the NWPR provide numerous ecosystem services. The absence of protections for such resources and any subsequent unregulated and unmitigated impacts to such resources would have caused cascading, cumulative, and substantial downstream harm, including damage

[44] 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 also 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 quite 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.

connected to water supplies, water quality, flooding, drought, erosion, and habitat integrity, thereby undermining the objective of the Clean Water Act (*see* section V.A.2 of this preamble). *See Pascua Yaqui* v. *EPA,* no. 4:20–cv–00266, slip op. at 9–10 (citing evidence that the agencies and plaintiffs provided of a ''substantial reduction in waters covered under the NWPR'' as demonstrating ''the possibility of serious environmental harm'' that weighed in favor of vacating the rule.); *see also Navajo Nation* v. *Regan,* no. 2:20–cv–00602, slip op. at 6–7 (citing the same reduction particularly '''an increase in determinations by the Corps that waters are non-jurisdictional,' including excluded ephemeral resources, 'and an increase in projects for which CWA Section 404 permits are no longer required,''' as weighing in favor of vacatur).

In conclusion, the agencies do not believe the NWPR is a suitable alternative to the proposed rule because it failed to advance the objective of the Act, including through its elimination of the significant nexus standard and the absence of any alternative standard that would protect the chemical, physical, and biological integrity of the nation's waters; it is inconsistent with scientific information about protecting water quality; its implementation proved confusing, difficult, and often infeasible; and it drastically reduced the numbers of waters protected by the Clean Water Act, including waters that affect the integrity of downstream traditional navigable waters, interstate waters, and the territorial seas.

C. Proposed Rule

The agencies are proposing to restore the longstanding, 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 Supreme Court case law. Therefore, this proposed rule retains the structure of the agencies' 1986 definition of ''waters of the United States,'' and the text of that definition where revisions are not warranted. Continuity with the 1986 regulations will minimize confusion and provide regulatory stability for the public, the regulated community, and the agencies, while protecting the nation's waters. Each aspect of the proposed rule will be discussed in more detail below.

The implementation section V.D of this preamble identifies features that the agencies have, as a matter of practice, generally not asserted jurisdiction over and the agencies propose to continue implementing the regulations consistent with that longstanding interpretation and practice. In addition, the agencies note that Congress has exempted or excluded certain discharges from the Clean Water Act or from specific permitting requirements. The proposed rule also would 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. The proposed rule would 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 122.3(f), 122.2. 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 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.

The agencies have highlighted areas throughout the proposal where they are seeking comment on specific aspects of the revised definition of ''waters of the United States'' and implementation of that definition. The agencies are also generally seeking comment from the public on all aspects of this proposal to support development of the final rule.

1. Traditional Navigable Waters

The proposed rule retains the provision in the 1986 regulations that defines ''waters of the United States'' to 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.'' 33 CFR 328.3(a)(1) (2014); 40 CFR 122.2 (2014); 40 CFR 230.3(s)(1) (2014). Such waters are often referred to as ''traditional navigable waters.'' With respect to traditional navigable waters, the text of the 1986 regulations and the text of the NWPR are identical. The agencies are not proposing to amend this longstanding text defining ''traditional navigable waters.''

The NWPR maintained the categories of traditional navigable waters and the territorial seas in the definition of ''waters of the United States,'' but consolidated these two categories into a single paragraph in the regulatory text in order to streamline the text. 85 FR 22280, April 21, 2020. Because the 1986 regulations kept the traditional navigable waters provisions and the territorial seas provisions separate, this proposed rule does as well. The agencies are seeking comment, however, on whether it would be useful to similarly streamline the proposed rule by consolidating the traditional navigable waters, interstate waters, and the territorial seas provisions into one provision since under the 1986 regulations and the proposed rule the jurisdictional status of the other categories of waters relies on their connection to a traditional navigable water, interstate water, or the territorial seas (and, where required, meeting either the relatively permanent or the significant nexus standard). The agencies also seek comment on whether consolidation would cause confusion regarding the consistency of the proposed rule with the 1986 regulations, because such a change would require corresponding changes to cross references and the numbering of other provisions.

Supreme Court decisions have not questioned the inclusion of traditional navigable waters in the definition of ''waters of the United States.'' *E.g., SWANCC,* 531 U.S. 159, 172 (''[t]he 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.'').

The agencies also are making no changes to their longstanding guidance on traditional navigable waters for purposes of Clean Water Act jurisdiction. Waters will continue to be considered traditional navigable waters, and thus jurisdictional under this provision of the proposed rule, if they:

- Are subject to section 9 or 10 of the Rivers and Harbors Act of 1899;
- have been determined by a federal court to be navigable-in-fact under federal law;
- are waters currently being used for commercial navigation, including commercial waterborne recreation (for example, boat rentals, guided fishing trips, or water ski tournaments);
- have historically been used for commercial navigation, including commercial waterborne recreation; or

• are susceptible to being used in the future for commercial navigation, including commercial waterborne recreation.

See ''U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook, Appendix D, 'Traditional Navigable Waters''' (hereinafter, ''Appendix D''). The NWPR also continued use of Appendix D, stating ''because the agencies have not modified the definition of 'traditional navigable waters,' the agencies are retaining Appendix D to help inform implementation of that provision of this final rule.'' 85 FR 22281, April 21, 2020.[45] However, after the NWPR was promulgated the agencies issued a coordination memo 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 Memo''). The memorandum established an implementation process by which the agencies elevate to their headquarters for coordination certain case-specific and stand-alone Clean Water Act traditional navigable water determinations concluding a water is ''susceptible to use'' solely based on evidence of recreation-based commerce. *Id.* On November 17, 2021, the TNW Coordination Memo was rescinded. Regardless of any confusion caused by the TNW Coordination Memo, 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 and quoting *Appalachian Elec. Power Co.,* 311 U.S. at 416 (''[P]ersonal or private use by boats demonstrates the availability of the stream for the simpler types of commercial navigation''); *Utah,* 283 U.S. at 82 (fact that actual use has ''been more of a private nature than of a public, commercial sort . . . cannot be regarded as controlling'')).

2. Interstate Waters

The proposed rule would restore 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 until the promulgation of the NWPR. Interstate waters are waters of the several states and therefore unambiguously ''waters of the United States.'' Categorical protection of interstate waters is the interpretation 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.

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, 907 (1965)); *see also* 33 U.S.C. 1173(e) (1970) (retaining definition of ''interstate waters''). In the 1972 Act, Congress abandoned the ''abatement'' approach initiated in the 1948 statute in favor of a focus on permitting for discharges of pollutants.

The NWPR asserted that Congress' replacement of the term ''navigable or interstate waters'' with ''navigable waters'' in 1972 was an ''express rejection'' of the regulation of interstate waters as an independent category, reflecting Congress' intent to protect interstate waters only to the extent that they are navigable. 85 FR 22583, April 21, 2020. In support of its rationale, the NWPR cited the order of the U.S. District Court for the Southern District of Georgia remanding the 2015 Clean Water Rule. *Id.;* citing *Georgia* v. *Wheeler,* 418 F. Supp. 3d 1336 (S.D. Ga. 2019). That order found that the categorical inclusion of interstate waters exceeds the agencies' authority under the Clean Water Act because it ''reads the term navigability out of the CWA,'' and would assert jurisdiction over waters that are not navigable-in-fact and otherwise have no significant nexus to any other navigable-in-fact water. *Id.* at 1358–59. The court also found the standard overly broad because it would result in Clean Water Act jurisdiction over tributaries, adjacent waters, and case-by-case waters based on their relationship to non-navigable interstate waters. *Id.* at 1359–60.

The agencies view the interpretation of the agencies' authority over interstate waters articulated in the NWPR and in *Georgia* v. *Wheeler* as inconsistent with both the text and the history of the Clean Water Act, as well as Supreme Court case law. 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.'' 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). Interstate waters are, by their very nature, waters of the ''several States,'' U.S. Const. section 8, and, consequently, waters ''of the United States.'' The Clean Water Act reflects Congress' recognition that the degradation of water resources in one state may cause significant harms in states other than that in which the pollution occurs.

In addition, the text of the 1972 Act specifically addresses ''interstate waters'' regardless of their connection to navigability. The 1972 statute retains the term ''interstate waters'' in 33 U.S.C. 1313(a), a provision added in 1972, which 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. That plain language is a clear indication that Congress

[45] Appendix D is an attachment to the U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook that was published in 2007 concurrently with the 2007 *Rapanos* Guidance, *available at https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/2316.* The *Rapanos* Guidance was updated in 2008, but Appendix D has remained unchanged since 2007. Appendix D notes (at page 1) that ''EPA and the Corps are providing this guidance on determining whether a water is a 'traditional navigable water' for purposes of the *Rapanos* Guidance, the Clean Water Act (CWA), and the agencies' CWA implementing regulations.'' Appendix D operates in tandem with the *Rapanos* Guidance, along with other agency resources, to assist in guiding field implementation of Clean Water Act jurisdictional determinations.

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 disregards the plain language of section 303(a).

The Supreme Court has concluded that the 1972 amendments ''were 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). 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 Act do not unambiguously resolve the issue, the situation addressed by the Supreme Court in the *City of Milwaukee* cases highlights the reasonableness of the agency's interpretation that the Clean Water 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. The Clean Water Act, however, replaced this unpredictable and inefficient approach with ''a comprehensive regulatory program supervised by an expert administrative agency.'' *Id.* The Court in *Arkansas* v. *Oklahoma* also stated 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. at 106.

The potential for interstate harm, and the consequent need for federal regulation, is particularly clear with respect to water bodies 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 and parties in different states 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; 85 FR 22286, April 21, 2020. Restoration of longstanding protections for interstate waters, regardless of whether they are navigable-in-fact, would enable the agencies to efficiently and effectively address interstate water quality issues. 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. Pub. L. 80–845, sec. 10, 62 Stat. 1155, at 1161 (1948). These waters need not meet the relatively permanent standard or significant nexus standard. See Technical Support Document section I.B. for further discussion of interstate waters.

Interstate waters may be streams, lakes or ponds, or wetlands. Under this provision of the proposed rule, consistent with the pre-2015 regulatory regime, the agencies would consider lakes, ponds, and similar lentic (or still) water features, as well as wetlands, crossing state boundaries jurisdictional as interstate waters in their entirety. For streams and rivers, including impoundments, the agencies would 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.'' One method of determining the extent of a riverine ''interstate water'' is the use of 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'' would extend upstream and downstream of the state boundary for the entire length that the water is of the same stream order. For interstate waters that are lakes and ponds or wetlands, the entire lake, pond, or wetland could be considered the interstate water through the entirety of its delineated extent. The agencies are requesting comment on this approach or others for implementing the interstate waters provision of the proposed rule. For instance, if a water serves as the state boundary, the entire length of the river that serves as the boundary could be considered the appropriate extent of the interstate water.

The agencies are seeking comment on whether interstate waters should encompass waters that flow across, or form a part of, boundaries of federally recognized tribes because these waters flow across, or form a part of, state boundaries. *See* Public Law 80–845, sec. 10, 62 Stat. 1155, at 1161 (1948). In comments submitted to the agencies as part of the tribal consultation and coordination process for this proposed rule, several tribes and tribal organizations stated that interstate waters should include waters that border upon or traverse tribal lands, both between and from state to tribe (or vice versa) and between and from one tribe to another (in instances where tribal lands are adjacent to each other). The agencies are also interested in comments on whether and how to identify what constitutes a tribal boundary for purposes of interstate waters under the Clean Water Act, for example, boundaries associated with the term ''Indian country'' as defined at 18 U.S.C. 1151 or reservation boundaries.

3. Other Waters

The agencies are proposing to retain the ''other waters'' category from the 1986 regulations in the definition of ''waters of the United States,'' but with changes informed by relevant Supreme Court precedent. Under the 1986 regulations, ''other waters'' (such as intrastate rivers, lakes, and wetlands that are 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. The proposed rule amends the 1986 regulations to delete all of the provisions referring to authority over activities that ''could affect interstate or foreign commerce'' and replace them with the relatively permanent and significant nexus standards the agencies have developed based on their best judgment and relevant Supreme Court case law. The proposed rule provides that ''other waters'' meet the relatively permanent standard if they are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to a traditional navigable water, interstate water, or the territorial seas. The proposed rule also provides that ''other waters'' meet the significant nexus standard if they, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of a traditional navigable water, interstate water, or the territorial seas. Thus, the proposed 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. In light of agency guidance discussed below, the agencies have not in practice asserted jurisdiction over ''other waters'' based on the 1986 regulations' provision since *SWANCC.* Section V.D of this preamble solicits comment on this practice and other implementation approaches for this provision of the proposed rule.

The text of the 1986 regulations reflected the agencies' interpretation at the time, based primarily on the legislative history of the Act, that the jurisdiction of the Clean Water Act extended to the maximum extent permissible under the Commerce Clause of the Constitution. *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.'' Based on that case and subsequent Supreme Court decisions, the agencies conclude that asserting jurisdiction over non-navigable, intrastate ''other waters'' based solely on whether the use, degradation, or destruction of the water could affect interstate or foreign commerce pushes the scope of the Clean Water Act beyond the limitations intended by Congress. The proposal is consistent with many of the concerns the agencies identified in guidance issued in 2003 (discussed further below). In addition, the proposed rule reflects consideration of the principles the NWPR identified as foundational to the Court's opinion in *SWANCC. See* 85 FR 22265, April 21, 2020 (''the reasoning in the SWANCC decision stands for key principles related to federalism and the balancing of the traditional power of States to regulate land and water resources within their borders with the need for national water quality regulation.'').

The proposed rule would replace the interstate commerce test with the relatively permanent and significant nexus standards because, as discussed in section V.A of this preamble, those standards are consistent with the text of the Clean Water Act, advance the objective of the Act, and are consistent with relevant decisions of the Supreme Court. Waters that do not fall within one of the more specific categories identified in the proposed rule may still meet either the relatively permanent or significant nexus standard. For example, a lake that is not a tributary and is not a wetland may have a continuous surface connection to a traditional navigable water, and the ''other waters'' provision as proposed would allow for such a water to be evaluated for jurisdiction. This is consistent with Supreme Court precedent. As 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. And as Justice Kennedy concluded, *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).

The agencies note that in 2003, they issued a Joint Memorandum regarding *SWANCC. See* 68 FR 1991, 1995 (January 15, 2003) (''*SWANCC* Guidance''). In the guidance, the agencies stated that in view of *SWANCC,* neither agency would assert Clean Water Act jurisdiction over isolated waters that are both intrastate and non-navigable, where the sole basis available for asserting Clean Water Act jurisdiction rests on the factors listed in the ''Migratory Bird Rule.'' In the preamble to the 1986 regulations, the agencies had stated that ''waters of the United States'' include waters ''[w]hich are or would be used as habitat by birds protected by Migratory Bird Treaties,'' as well as waters ''[w]hich are or would be used as habitat by other migratory birds which cross state lines.'' 51 FR 41216–17 (November 13, 1986). That preamble language became known as the ''Migratory Bird Rule.'' In addition to ending use of the ''Migratory Bird Rule,'' the *SWANCC* Guidance also stated that, cognizant of the Supreme Court's direction in *SWANCC,* with respect to *all* waters subject to the ''other waters'' provision, ''field staff should seek formal project-specific Headquarters approval prior to asserting jurisdiction over such waters, including permitting and enforcement actions.'' 68 FR 1996 (January 15, 2003). The *Rapanos* Guidance ''[did] not address *SWANCC* nor does it affect the Joint Memorandum regarding that decision issued by the General Counsels of EPA and the Department of the Army on January 10, 2003.'' *Rapanos* Guidance at 4 n.19. As a result of the *SWANCC* Guidance's directive to field staff, field staff have not in practice sought Headquarters approval and the agencies have not asserted jurisdiction over waters based on the ''other waters'' provision of the 1986 regulations since then.

The ''other waters'' provision in the 1986 regulations contains a non-exclusive list of water types that could be jurisdictional under this provision if they are 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 are not proposing to change this language. Rather, the agencies are proposing to replace the Commerce Clause-based standard for determining jurisdiction with the relatively permanent and significant nexus standards. It is important to note that the list of water types does not reflect a conclusion that these waters are necessarily jurisdictional; rather the list is simply meant to inform the public of types of waters that can be jurisdictional if they meet the requisite test (under the proposal, either the relatively permanent standard or the significant nexus standards), even though they do not fall within the other provisions of the proposed rule. The list led to confusion in the past when 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 a traditional navigable water, interstate water, or territorial sea but which under the 1986 regulations could affect interstate commerce and under the proposed rule could meet the significant nexus standard) and not to imply that intermittent streams were not jurisdictional under the tributary provision of the 1986 regulations.

The agencies are seeking comment 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. For instance, the agencies could delete the list of water types in the ''other waters'' provision of the 1986 regulations and simply state in the rule that the ''other waters'' category includes ''all other intrastate waters (including wetlands)'' that meet either the relatively permanent standard or the significant nexus standard. However, removing the list of water types would not be meant to imply that any of the water types listed in the 1986 regulations are *not* subject to jurisdiction under this provision of the proposed rule if they meet either the relatively permanent standard or the significant nexus standard. The agencies

also solicit comment on whether the final rule should add or delete particular water types from the list.

In the NWPR, the category of waters most analogous to the ''other waters'' category was the category for lakes, ponds, and impoundments of jurisdictional waters that met certain tests. Because those limitations on the scope of jurisdiction were not related to the effects of other waters on the water quality of foundational waters, the agencies are proposing an approach based in the relatively permanent and significant nexus standards.

4. Impoundments

The proposed rule retains the provision in the 1986 regulations that defines ''waters of the United States'' to include impoundments of ''waters of the United States'' with one change. Waters that are determined to be jurisdictional under the ''other waters'' provision would be excluded from this provision under the proposed rule.

The Supreme Court has confirmed that damming or impounding a ''water of the United States'' does not make the water non-jurisdictional. *See S.D. Warren Co.* v. *Maine Bd. of Envtl. Prot.,* 547 U.S. 370, 379 n.5 (2006) (''[N]or can we agree that one can denationalize national waters by exerting private control over them.''). While the definition of ''waters of the United States'' was not before the Court in *S.D. Warren,* the Court's conclusion supports the agencies' longstanding interpretation of the Clean Water Act that a ''water of the United States'' remains a ''water of the United States'' even if it is impounded, as reflected in the 1986 regulations and continued in this proposal. 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).

The agencies are proposing to exclude impoundments of waters that are determined to be jurisdictional under the ''other waters'' provision. This proposal is practical: as discussed in sections V.C.5 and 7 below, the agencies are proposing that the ''tributaries'' category not include tributaries of ''other waters'' and the adjacent wetlands category not include wetlands adjacent to ''other waters.'' This change reflects the agencies' consideration of 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 ''other waters'' would have too tenuous a connection to traditional navigable waters, interstate waters, or the territorial seas. The proposed rule retains the provisions of the 1986 regulations under which tributaries and adjacent wetlands to impoundments may be determined to be jurisdictional. The proposed change ensures that the impoundment of an ''other water'' does not change the jurisdictional status of tributaries or adjacent wetlands to it. This change reflects the agencies' consideration of the jurisdictional concerns and limitations of *SWANCC* and *Rapanos.* To be clear, an impoundment of an ''other water'' could still meet the relatively permanent standard or the significant nexus standard under the ''other waters'' provision; the impoundment simply would not retain its jurisdictional status under this impoundment provision.

Impoundments of jurisdictional waters were not addressed in the *Rapanos* decision and thus were not directly addressed by the agencies in the *Rapanos* Guidance. Under the proposed rule and pre-2015 practice, impounding waters can create traditional navigable waters, even if the waters that are impounded are not themselves traditional navigable waters. In addition, under the proposed rule impounding a water can create a relatively permanent water, even if the water that is being impounded is a non-relatively permanent water. For purposes of implementation, relatively permanent waters include waters where water is standing or ponded at least seasonally.

In the NWPR, the agencies changed their longstanding position that impoundments of jurisdictional waters remain jurisdictional and added new requirements for impoundments of jurisdictional waters to be considered ''waters of the United States.'' Specifically, under the NWPR, impoundments of jurisdictional waters had to either contribute surface water flow to a downstream jurisdictional water in a typical year or be inundated by flooding from a jurisdictional water in a typical year. In support of the NWPR's position that impounding a jurisdictional water could potentially create a non-jurisdictional feature, the agencies stated that ''the agencies are aware of no decision of the Supreme Court that has ruled that the indelibly navigable principle applies to all waters of the United States, although the principle does apply to certain traditional navigable waters or any decision that would prohibit the United States from consenting to defederalization of a water by a lawfully issued section 404 permit.'' 85 FR 22303, April 21, 2020.

The agencies disagree that jurisdiction over impoundments of ''waters of the United States'' reflects application of the principle of indelible navigability. The indelible navigation principle is applicable to Rivers and Harbors Act jurisdiction, not Clean Water Act jurisdiction, and holds that sudden or man-made changes to a water body or its navigable capacity do not alter the extent of Rivers and Harbors Act jurisdiction, and thus the area occupied or formerly occupied by that water body will always be subject to Rivers and Harbors Act jurisdiction even when the area is no longer a water.[46] The agencies are not aware of any statement relying on that concept as the justification for its longstanding position that impoundments of ''waters of the United States'' remain ''waters of the United States'' for Clean Water Act purposes, absent a legally authorized change of jurisdictional status under a Clean Water Act permit (such as a section 404 permit authorizing creation of an excluded waste treatment system).

In departing from the agencies' longstanding position regarding the jurisdictional status of impoundments, the NWPR also stated that the agencies were unaware of any judicial decision ''that would prohibit the United States from consenting to defederalization of a water by a lawfully issued section 404 permit.'' 85 FR 22303, April 21, 2020. As noted above, the agencies recognize that a lawfully issued section 404 permit, with any accompanying appropriate and practicable mitigation, can authorize filling of a ''water of the United States'' such that it is no longer a ''water of the United States.'' The ''impoundment'' provision of the definition of ''waters of the United States'' simply retains jurisdiction over ''waters of the United States'' that are naturally or artificially impounded. If the impoundment occurs pursuant to a section 404 permit and the permit

[46] This principle has been incorporated in the Corps' definition of ''navigable waters of the United States'' for purposes of the Rivers and Harbors Act: ''A determination of navigability, once made, applies laterally over the entire surface of the water body, and is not extinguished by later actions or events which may impede or destroy navigable capacity.'' 33 CFR 329.4. The rule is expanded upon in 33 CFR 329.9 and 329.13: ''an area will remain 'navigable in law,' even though no longer covered with water, whenever the change has occurred suddenly, or was caused by artificial forces intended to produce that change.'' EPA has no such regulations for purposes of implementing the Clean Water Act.

authorizes the removal of the resulting impoundment from jurisdiction, such as in the case of the creation of a waste treatment system excluded from the ''waters of the United States'' by regulation, the impoundment would no longer be jurisdictional pursuant to this provision. On the flip side, an impoundment of a water that is not a ''water of the United States'' could become jurisdictional if, for example, the impounded water becomes navigable-in-fact and is thus covered under the traditional navigable waters provision of the rule.

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. *See* Technical Support Document section IV.C. 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 (''All dams are designed to lose some water through seepage.''); U.S. Bureau of Reclamation (''All dams seep, but the key is to control the seepage through properly designed and constructed filters and drains.''); Federal Energy Regulatory Commission 2005 (''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, e.g.,* U.S. Army Corps of Engineers 1992 at 1–1; U.S. Army Corps of Engineers 1993 at 1–1; U.S. Army Corps of Engineers 2004 at 6–1.

That said, there may be circumstances where an impoundment authorized under a section 404 permit completely and permanently severs surface or subsurface hydrologic connections. *See* ''U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook,'' at 58. The agencies are considering whether there are certain types of impoundments—such as the example in the preceding sentence—that should be assessed under the ''other waters'' provision of the regulation. The agencies are seeking comment on this approach and accompanying implementation issues.

5. Tributaries

The proposed rule retains the tributary provision of the 1986 regulations, updated to reflect consideration of relevant Supreme Court decisions. The 1986 regulations defined ''waters of the United States'' to include tributaries of traditional navigable waters, interstate waters, ''other waters,'' or impoundments. The proposed rule defines ''waters of the United States'' to include tributaries of traditional navigable waters, interstate waters, impoundments, or the territorial seas if the tributary meets either the relatively permanent standard or the significant nexus standard. The agencies solicit comment on all aspects of the tributary provision in this proposed rule.

The 1986 regulations include tributaries to interstate waters. Since interstate waters, like traditional navigable waters and the territorial seas, are foundational waters protected by the Clean Water Act, the agencies are proposing to protect them in a similar manner by providing that tributaries that meet either the relatively permanent standard or the significant nexus standard in relation to an interstate water are jurisdictional under the proposed rule. Ample scientific information makes clear that the health and productivity of rivers and lakes, including interstate waters, depends upon the functions provided by upstream tributaries. As discussed in section V.A.2.c of this preamble, tributaries, adjacent wetlands, and ''other waters'' that are relatively permanent or that have a significant nexus to downstream waters, including interstate waters, have important beneficial effects on those waters, and polluting or destroying these tributaries, adjacent wetlands, or ''other waters'' can harm downstream jurisdictional waters.

The agencies are proposing to delete the cross reference to ''other waters'' as a water to which tributaries may connect to be determined ''waters of the United States.'' This change reflects the agencies' consideration of 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 ''other waters'' would have too tenuous a connection to traditional navigable waters, interstate waters, or the territorial seas. Rather, any such streams that are tributaries to jurisdictional ''other waters'' could be assessed themselves under the ''other waters'' category to determine if they meet the relatively permanent or significant nexus standard. Thus, a tributary to, for example, a lake that meets the significant nexus standard under the ''other waters'' provision could not be determined to be jurisdictional simply because it significantly affects the physical integrity of the lake; rather, the tributary would need to be assessed under the ''other waters'' provision for whether it significantly affects a traditional navigable water, interstate water, or the territorial seas.

Additionally, the agencies are proposing to add 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 and are a type of traditional navigable water. The agencies are unaware of a legal basis for the 1986 regulation's failure to include the term ''territorial seas'' in the original tributaries provision of the rule. The proposed rule clarifies that tributaries to the territorial seas where they meet either the relatively permanent standard or the significant nexus standard fall within the definition of ''waters of the United States.'' The territorial seas are explicitly covered by the Clean Water Act and they are also traditional navigable waters, so it is reasonable to protect tributaries to the territorial seas that meet either the relatively permanent standard or the significant nexus standard for the same reasons as tributaries to traditional navigable waters are covered.

Finally, the agencies are retaining the 1986 regulations' coverage of tributaries to impoundments, updated to include the requirement that the tributaries meet either the relatively permanent or significant nexus standard. As discussed above, the agencies' longstanding interpretation of the Clean Water Act is that a ''water of the United States'' remains a ''water of the United States'' even if it is impounded. Since the impoundment does not ''defederalize'' the ''water of the United States,'' *see S.D. Warren* at 379 n. 5, the agencies similarly interpret the Clean Water Act to continue to protect tributaries that fall within the tributary provision of the proposed rule upstream from the jurisdictional impoundment.

The agencies' longstanding interpretation of tributary for purposes

of Clean Water Act jurisdiction includes not only rivers and streams, but also lakes and ponds that flow directly or indirectly to downstream traditional navigable waters, interstate waters, the territorial seas, or impoundments of jurisdictional waters. *See* ''U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook,'' at 8, 9. They may be at the headwaters of the tributary network (*e.g.,* a lake with no stream inlets that has an outlet to the tributary network) or farther downstream from the headwaters (*e.g.,* a lake with both a stream inlet and a stream outlet to the tributary network). Once a water is determined to be a tributary, under the proposed rule the tributary must meet either the relatively permanent or significant nexus standards to be jurisdictional. Implementation of those standards is addressed in section V.D of this preamble.

Finally, the 1986 regulations do not contain a definition of tributary, and the agencies are not proposing a definition in this rule. However, the agencies have decades of experience implementing the 1986 regulations. The agencies' longstanding interpretation of tributary for purposes of the definition of ''waters of the United States'' includes natural, man-altered, or man-made water bodies that flow directly or indirectly into a traditional navigable water, interstate water, or the territorial seas. *See Rapanos* Guidance at 6. 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 manmade or man-altered. Because natural, man-altered, and manmade tributaries provide many of the same functions, especially as conduits for the movement of water and pollutants to other tributaries or directly to traditional navigable waters, interstate waters, or the territorial seas, the agencies have interpreted the 1986 regulations to cover such tributaries. The OHWM, a term unchanged since 1977, *see* 41 FR 37144 (July 19, 1977); and 33 CFR 323.3(c) (1978), defines the lateral limits of jurisdiction in non-tidal waters, provided the limits of jurisdiction are not extended by adjacent wetlands.

The agencies are proposing a different approach to tributaries than the NWPR's interpretation of that term. The NWPR defined ''tributary'' as a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to a territorial sea 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. 85 FR 22251, April 21, 2020. The agencies are proposing an alternative to the NWPR's approach to tributaries for the reasons discussed in this section and in section V.B.3 of this preamble. The definition of ''tributary'' in the NWPR failed to advance the objective of the Clean Water Act and was inconsistent with scientific information about the important effects of ephemeral tributaries on the integrity of downstream traditional navigable waters. In addition, key elements of the NWPR's definition of tributary were extremely difficult to implement. All of these deficiencies are reflected in significant losses of federal protections on the ground. *See* section V.B.3 of this preamble.

6. Territorial Seas

The Clean Water Act, the 1986 regulations, and the NWPR all include ''the territorial seas'' as a ''water of the United States.'' This proposed rule makes no changes to that provision, and would retain the territorial seas provision near the end of the list of jurisdictional waters, consistent with the 1986 regulations.

The Clean Water Act defines ''navigable waters'' to include ''the territorial seas'' at 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.''

7. Adjacent Wetlands

As discussed further in section V.C.9.b of this preamble, in this proposed rule, the agencies are retaining the definition of ''adjacent'' unchanged from the 1986 regulations, which defined ''adjacent'' as follows: ''The term 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.'' In addition to retaining the definition of ''adjacent'' from the 1986 regulations, the proposed rule adds language to the adjacent wetlands provision regarding which adjacent wetlands can be considered ''waters of the United States'' to reflect the relatively permanent and significant nexus standards. As such, adjacent wetlands that would be jurisdictional under the proposed rule include wetlands adjacent to traditional navigable waters, interstate waters, or the territorial seas; wetlands adjacent to relatively permanent, standing, or continuously flowing impoundments or tributaries and that have a continuous surface connection to such waters; and wetlands adjacent to impoundments or tributaries that meet the significant nexus standard when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of foundational waters.

Under the proposed rule, the agencies would continue, as they did under the 1986 regulations and the *Rapanos* Guidance, to assert jurisdiction over wetlands adjacent to traditional navigable waters without need for further assessment. Indeed, the *Rapanos* decision did not affect the scope of jurisdiction over wetlands that are adjacent to traditional navigable waters because at least five justices agreed that such wetlands are ''waters of the United States.'' *See Rapanos,* 547 U.S. at 780 (Kennedy, J., concurring) (''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. 121, 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 foundational waters, depends upon the functions provided by upstream tributaries, adjacent wetlands, and ''other waters.''

Under the proposed rule the agencies would also define ''waters of the United States'' to include wetlands adjacent to the territorial seas as they did under the 1986 regulations without need for further assessment; the territorial seas are categorically protected under the

Clean Water Act and are a type of traditional navigable water.

The 1986 regulations also include wetlands adjacent to interstate waters and since interstate waters, like traditional navigable waters and the territorial seas, are foundational waters protected by the Clean Water Act, under the proposed rule the agencies would define ''waters of the United States'' to include wetlands adjacent to interstate waters without need for further assessment.

The proposed rule also would add the relatively permanent standard and the significant nexus standard to the 1986 regulations' adjacent wetlands provisions for wetlands adjacent to impoundments and tributaries. The relatively permanent standard and the significant nexus standard are independent of each other and this provision in the proposed rule is structured so that jurisdiction over wetlands adjacent to jurisdictional waters would be determined using the same standard under which the impoundment or tributary would be determined to be jurisdictional. For example, a wetland adjacent to a relatively permanent tributary must have a continuous surface connection to the tributary to be jurisdictional under the relatively permanent standard. Similarly, under the significant nexus standard an adjacent wetland and a tributary would be assessed for whether the waters either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of foundational waters. Wetlands adjacent to relatively permanent tributaries but that lack a continuous surface connection to such waters would then be assessed under the significant nexus, along with the tributary.

The agencies are proposing to delete the cross reference to ''other waters'' as a water to which wetlands may be adjacent to be determined ''waters of the United States.'' This change reflects the agencies' consideration of the jurisdictional concerns and limitations of *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 ''other waters'' would have too tenuous a connection to traditional navigable waters, interstate waters, or the territorial seas. Rather, any such wetlands that are adjacent to jurisdictional ''other waters'' could be assessed themselves under the ''other waters'' category to determine if they meet the relatively permanent or significant nexus standard. Thus, a wetland adjacent to, for example, a lake that meets the significant nexus standard under the ''other waters'' provision could not be determined to be jurisdictional simply because it significantly affects the physical integrity of the lake; rather, the wetland would need to be assessed under the ''other waters'' provision for whether it significantly affects a traditional navigable water, interstate water, or the territorial seas.

Finally, the agencies are retaining the 1986 regulations' coverage of wetlands adjacent to impoundments and wetlands adjacent to tributaries to impoundments, updated to include the requirement that the wetlands meet either the relatively permanent or significant nexus standard. As discussed above, the agencies' longstanding interpretation of the Clean Water Act is that a ''water of the United States'' remains a ''water of the United States'' even if it is impounded. Since the impoundment does not ''defederalize'' the ''water of the United States,'' *see S.D. Warren* 379 n.5, the agencies similarly interpret the Clean Water Act to continue to protect wetlands adjacent to the jurisdictional impoundment and adjacent to jurisdictional tributaries to the impoundment.

For wetlands adjacent to impoundments of jurisdictional waters, such waters were not addressed in the *Rapanos* decision and thus were not addressed by the agencies in the *Rapanos* Guidance. Under the proposed rule, the agencies would assess if the impoundment (*i.e.,* the water identified in paragraph (a)(4) of the proposed rule) itself is or is not a relatively permanent, standing, or continuously flowing body of water. If it is, the agencies would assess if the adjacent wetlands have a continuous surface connection with the impoundment. Wetlands adjacent to relatively permanent impoundments and that lack a continuous surface connection to the impoundment and wetlands adjacent to non-relatively permanent impoundments would be considered under the significant nexus standard. The agencies are soliciting comment on the approach in the proposed rule for wetlands adjacent to impoundments and if they should instead consider alternative approaches for wetlands adjacent to impoundments, such as determining which jurisdictional standard should apply based on the water that is being impounded (*e.g.,* if a non-relatively permanent tributary is impounded, the agencies would assess the wetlands adjacent to the impoundment under the significant nexus standard, even if the impoundment itself contains standing water at least seasonally).

Finally, the agencies retain in the proposed rule the parenthetical from the 1986 regulations that limited the scope of jurisdictional adjacent wetlands under (a)(7) to wetlands adjacent to waters ''(other than waters that are themselves wetlands).'' Under this provision, a wetland is not jurisdictional simply because it is adjacent to another adjacent wetland. *See Universal Welding & Fabrication, Inc.* v. *United States Army Corps of Engineers,* 708 Fed. Appx. 301 (9th Cir. 2017) (''Despite 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.''). The provision has created confusion, as some have argued that a wetland that is indeed adjacent to a jurisdictional tributary should not be determined to be a ''water of the United States'' simply because another adjacent wetland was located between the adjacent wetland and the tributary. Some have 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. *Id.* at 303 (holding the Corps' interpretation is ''the most reasonable reading of the regulation's text'' and ''[t]o the extent that Plaintiff argues that all wetlands adjacent to other wetlands fall outside the Corps' regulatory authority, regardless of their adjacency to a non-wetland water that would otherwise render them jurisdictional, we conclude that this reading is unsupported by the regulation's plain language.''). In addition, under the 1986 regulations and longstanding practice, wetlands adjacent to an interstate wetland or wetlands adjacent to tidal wetlands, which are traditional navigable waters, are jurisdictional. Because this provision has caused confusion at times for the public and the regulated community, the agencies are requesting comment on whether to remove the parenthetical ''(other than waters that are themselves wetlands)'' because it is confusing and unnecessary.

The agencies are proposing a different approach to adjacent wetlands than the NWPR's interpretation of that term. The NWPR defined ''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. 85 FR 22251, April 21, 2020. Wetlands that do not have these types of connections to other waters were not jurisdictional.

The agencies are not proposing the NWPR's approach to adjacent wetlands for the reasons discussed in this section and in section V.B.3 of this preamble. Specifically, the definition of ''adjacent wetlands'' in the NWPR failed to advance the objective of the Clean Water Act and was inconsistent with scientific information about the important effects of wetlands that do not abut jurisdictional waters and that lack evidence of surface water to such waters on the integrity of downstream foundational waters. In addition, key elements of that definition were extremely difficult to implement. These deficiencies are reflected in significant losses of federal protections on the ground. *See* section V.B.3 of this preamble.

8. Exclusions

The agencies are also proposing to repromulgate two longstanding exclusions from the definition of ''waters of the United States'': the exclusion for prior converted cropland and the exclusion for waste treatment systems. These longstanding exclusions from the definition provide important clarity.[47] The agencies are not proposing to codify the list of exclusions established by the NWPR or the 2015 Clean Water Rule, as they view the two proposed regulatory exclusions as most consistent with the goal of this proposed rule to return to the familiar and longstanding framework that will ensure Clean Water Act protections, informed by relevant Supreme Court decisions. Moreover, as discussed in section V.D.1.b of this preamble, the agencies would expect to implement the proposed rule consistent with longstanding practice, pursuant to which they have generally not asserted jurisdiction over certain other features. The agencies solicit comment on this approach to codifying and implementing exclusions.

a. Prior Converted Cropland

The proposed rule would repromulgate the regulatory exclusion for prior converted cropland first codified in 1993, which provided that prior converted cropland is ''not 'waters of the United States,'' and that ''for purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA,'' notwithstanding any other Federal agency's determination of an area's status. 58 FR 45008, 45036. This proposal would restore longstanding and familiar practice under the pre-2015 regulatory regime and generally maintain consistency between the agencies' implementation of the Clean Water Act and the U.S. Department of Agriculture's (USDA) implementation of the Food Security Act, providing certainty to farmers seeking to conserve and protect land and waters pursuant to federal law.

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 lose eligibility for certain USDA program benefits. If a farmer had converted wetlands to cropland prior to December 23, 1985, then the land is considered prior converted cropland and the farmer does not lose eligibility for benefits. USDA defines prior converted cropland for Food Security Act purposes in its regulations at 7 CFR part 12. *See* 7 CFR 12.2(a) and 12.33(b).

In 1993, EPA and the Corps codified an exclusion for prior converted croplands 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; 33 CFR 328.3(a)(8) (1994); 40 CFR 230.3(s) (1994). The preamble stated that EPA and the Corps would interpret prior converted cropland 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. It cited USDA's definition of prior converted cropland to mean ''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. PC [prior converted] cropland is inundated for no more than 14 consecutive days during the growing season and excludes pothole or playa wetlands.'' *Id.*

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 Act to include prior converted cropland, and to ''help achieve consistency among various federal programs affecting wetlands.'' *Id.* The 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. Due to this manipulation, [prior converted] cropland no longer performs the functions or has values that the area did in its natural condition. PC 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. Similarly, 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.* at 45032.

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 45033. Specifically, the preamble states that prior converted cropland that now

[47] The agencies note that they have never interpreted groundwater be a ''water of the United States'' under the Clean Water Act. *See, e.g.,* 80 FR 37099–37100 (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). The proposed rule makes no change to that longstanding interpretation. This interpretation 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 a ''water of the United States,'' discharges of pollutants to groundwater that reach a jurisdictional surface 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.

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 changed this ''abandonment'' principle, replacing it with a new approach referred to as ''change in use.'' *See* Public Law 104–127, 110 Stat. 888 (1996). Under the 1996 amendments, an area retains its status as prior converted cropland for purposes of the wetland conservation provisions so long as it continues to be used for agricultural purposes. 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.'' [48] The Memorandum stated, ''[a] certified PC 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 PC 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 programs, or diverted from crop production to an approved cultural practice that prevents erosion or other degradation.''

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). The court explained, ''prior to issuance of the policy, prior converted cropland that was shifted to non-agricultural use was treated as exempt. Following [its issuance], the opposite was true.'' *Id.* Following *New Hope Power,* the agencies did not implement change in use in areas subject to the court's jurisdiction.

The NWPR provided a definition of prior converted cropland for purposes of the Clean Water Act for the first time since 1993. Generally speaking, the NWPR's approach to prior converted cropland significantly reduced the likelihood that prior converted cropland will ever lose its excluded status. The NWPR provided that an area remains prior converted cropland for purposes of the Clean Water Act unless the area is abandoned and has reverted to wetlands, defining 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 22339, April 21, 2020; 33 CFR 328.3(c)(9). The 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. 85 FR 22321, April 21, 2020. Under the NWPR, prior converted cropland maintained its excluded status if it is used at least once in the five years preceding a jurisdictional determination for any of these agricultural purposes. Given the breadth of ''agricultural purposes'' under the NWPR, former cropland that reverts to wetlands otherwise meeting the definition of ''waters of the United States'' could maintain its excluded prior converted cropland status simply by, for example, being grazed or idled for habitat conservation once in five years. These wetlands could then be filled without triggering any Clean Water Act regulatory protection.

The NWPR's imprecise language in defining prior converted cropland for purposes of the Clean Water Act 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,'' which provides for annual tilling of the soil, while the NWPR defined prior converted cropland to encompass any area used to produce an ''agricultural product,'' a term not used in the regulations that therefore introduces significant ambiguity and further distinguishes the Clean Water Act's prior converted cropland exclusion from USDA's approach. *Compare* 7 CFR 12.2(a) *with* 33 CFR 328.3(c)(9). The NWPR's definition provided that the agencies would recognize prior converted cropland designations made by USDA, 33 CFR 328.3(c)(9), but the list of examples that the NWPR provided for ''agricultural product'' suggests the term is significantly broader than the USDA's exclusion for land used for ''commodity crops.'' The absence of a definition for the term ''agricultural product'' or any explanation as to how it is different from a ''commodity crop'' undermined transparency and the original purpose of the exclusion, which was to help achieve consistency among various federal programs affecting wetlands. *See* 58 FR 45031.

The proposed rule would restore the exclusion's original purpose of maintaining consistency among federal programs addressing wetlands, while furthering the objective of the Clean Water Act. *Id.* at 45031–32. As was the case between 1993 and promulgation of the NWPR, the agencies propose that, for purposes of the Clean Water Act exclusion, a landowner may demonstrate that a water retains its prior converted cropland status through a USDA prior converted cropland certification. *See id.* at 45033 (''recognizing [NRCS]'s expertise in making these [prior converted] cropland determinations, we will continue to rely generally on determinations made by [NRCS].''). The agencies' proposal 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. Moreover, by limiting the implementation of the exclusion to areas with a USDA prior converted cropland certification, the exclusion would only encompass significantly degraded waters that no longer perform the functions of the waters in their natural condition. *See id.* at 45032. The proposal would therefore align the exclusion with the objective of the Clean Water Act, to restore and maintain the integrity of the nation's waters, consistent with the agencies' intent in 1993.

The agencies request comment as to whether any other changes could enhance consistency between the prior converted cropland status under the Food Security Act and the exclusion of prior converted cropland under the Clean Water Act, while effectuating the goals of the Clean Water Act. One way of increasing consistency could be to implement the text of the original prior

[48] This 2005 joint Memorandum was rescinded on January 28, 2020. *See https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/4288.*

converted cropland exclusion consistent with USDA's current and longstanding approach, outlined in USDA's final rule addressing the Highly Erodible Land and Wetland Conservation provisions of the Food Security Act of 1985. 85 FR 53137 (August 28, 2020). Pursuant to this approach, cropland would lose its exclusion if it ''changes use,'' as USDA interprets that term. *See* 61 FR 47036 (September 6, 1996); 7 CFR 12.30(c)(6) (''As long as the affected person is in compliance with the wetland conservation provision of this part, and as long as the area is devoted to the use and management of the land for production of food, fiber, or horticultural crops, a certification made under this section will remain valid and in effect until such time as the person affected by the certification requests review of the certification by NRCS.''). This approach would fulfill the exclusion's purpose of ensuring consistency among federal programs affecting wetlands. *See* 58 FR 45031. Alternatively, the agencies request comment as to whether to implement the exclusion consistent with the interpretation in the 1993 preamble, under which an area only loses its prior converted cropland status if the cropland is ''abandoned,'' meaning that commodity crop production ceases and the area reverts to a wetland state. *See id.* at 45033. Under this approach, an area that has been designated as prior converted cropland and has not reverted to a wetland state (meaning the area would not meet the definition of wetland) would not become a ''water of the United States'' regardless of agricultural activity. However, an area which has been designated as prior converted cropland and has reverted to a wetland state could be reviewed for a potential loss of the exclusion status under the Clean Water Act. The following scenarios provide examples of the way in which the exclusion could cease following either ''abandonment'' or ''change in use.''

First, if the agencies were to apply the abandonment principle, the reverted wetland area would only regain jurisdictional status if:

(1) The area had not been used for the production of an agricultural commodity, or the area had not been used and would continue to not be used for the production of an agricultural commodity in a commonly used rotation with aquaculture, grasses, legumes, or pasture production, at least once in every five years and

(2) the area reverts to a wetland that meets the definition of ''waters of the United States.''

Under the abandonment principle, if an agricultural producer with an area designated as prior converted cropland fails to produce an agricultural commodity, or the area fails to be used in rotation as described above, for a period of six years, and the prior converted cropland area reverts to wetland, the wetland would lose the benefit of the exclusion and discharges of a pollutant to the wetland would be subject to regulation under the Clean Water Act if it meets the definition of ''waters of the United States'' and activities taking place on it are not otherwise exempt. In a second example of abandonment, if an agricultural producer with an area designated as prior converted cropland produces an agricultural commodity two years prior to selling its property for a residential development, the area retains its prior converted cropland designation even if it reverts to wetlands that would otherwise meet the definition of ''waters of the United States.'' In this example, discharges of dredged or fill material from the construction of the residential development into the wetlands which occurred within the three years remaining out of the five-year timeframe allowed before the abandonment provision would be triggered would not require authorization under Clean Water Act section 404.

Alternatively, if the agencies were to apply the change in use principle in the second example scenario above, the reverted wetland area could regain jurisdictional status if it were subject to a change in use, meaning the area is no longer available for production of an agricultural commodity, and if the reverted wetland met the definition of ''waters of the United States.'' In that scenario, if an agricultural producer with an area certified by NRCS as prior converted cropland produces an agricultural commodity two years prior to selling their property for a residential development, the prior converted cropland designation would no longer apply when the area is no longer available for the production of an agricultural commodity crop. If the prior converted cropland area reverts to wetlands and meets the definition of ''waters of the United States'' the discharge of dredged or fill material from the construction of the residential development would require authorization under Clean Water Act section 404. The agencies hope this discussion and set of examples will illuminate the differences between interpreting the prior converted cropland designation to cease upon abandonment as opposed to change in use, to allow for input to best inform the agencies' path forward.

The agencies solicit comment on alternative approaches to the prior converted cropland exclusion as well, including retaining the definition of prior converted cropland in the NWPR. While the agencies have concerns with that definition, as discussed above, the agencies request comment with regard to those concerns and whether they should nonetheless retain the NWPR's interpretation that prior converted cropland retains its designation so long as it has been used for agricultural purposes at least once in the preceding five years, and that agricultural purposes include 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 like hurricanes and drought. Finally, the agencies request comment as to whether certain specific types of documentation aside from USDA certification should be considered sufficient to demonstrate that an area is prior converted cropland.

b. Waste Treatment System Exclusion

The agencies are also proposing to retain the waste treatment system exclusion from the 1986 regulations and return to the longstanding version of the exclusion that the agencies have implemented for decades. Specifically, the proposed 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 version of the waste treatment system exclusion, 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.[49]

EPA first promulgated the waste treatment system exclusion in a 1979

[49] The NWPR defined a waste treatment system as ''all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).'' 85 FR 22339, April 21, 2020.

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 further 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 [section] 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 (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 re-examined,'' EPA announced that it was ''suspending [the] effectiveness'' of the sentence limiting the 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.*

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 it 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 rulemaking, the agencies are proposing to delete this obsolete cross-reference, consistent with other recent rulemakings addressing the definition of ''waters of the United States.'' [50]

The proposed rule also deletes the suspended sentence in EPA's NPDES regulations limiting application of the exclusion to manmade bodies of water. The suspended sentence, which appeared only in the version of the waste treatment system exclusion contained in EPA's NPDES regulations (40 CFR 122.2) prior to the NWPR, states: ''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.'' As discussed above, EPA suspended this sentence limiting application of the exclusion in 1980. As a result, EPA has *not* limited application of the waste treatment system exclusion to manmade bodies of water for over four decades. The proposed rule maintains the NWPR's deletion of the suspended sentence in EPA's NPDES regulations and is thus consistent with the other versions of the exclusion found in EPA's and the Corps' 1986 regulations and EPA's decades-long practice implementing the exclusion under the 1986 regulations.

Indeed, for decades, both agencies have not limited application of the exclusion to manmade bodies of water. This longstanding approach to excluding waste treatment systems—including those that are *not* manmade bodies of water—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''). For all of these reasons, the agencies are proposing to delete the suspended sentence referenced above. The agencies solicit comment on this approach.

Further, consistent with the 1986 regulations, the proposed 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 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 for pollutants discharged *from* a waste treatment system to a water of the

[50] 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.'').

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 constructed in ''waters of the United States,'' and a section 402 permit for discharges of pollutants from a waste treatment system into ''waters of the United States.'' Further, consistent with the agencies' general practice implementing the exclusion, under the proposed rule, a waste treatment system that is abandoned or otherwise 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 the proposed rule's definition of ''waters of the United States.''

The agencies are aware of concerns raised by some stakeholders that features subject to the waste treatment system exclusion could be used by any party to dispose waste or discharge pollutants with abandon. In this proposal, the agencies are clarifying that for waters that would otherwise meet the proposed rule's definition of ''waters of the United States,'' the agencies' intent, consistent with prior practice, is that the waste treatment system exclusion is generally available only to the permittee using the system for the treatment function for which such system was designed. Relatedly, the agencies are also clarifying that, consistent with the agencies' longstanding practice, a waste treatment system does not sever upstream waters from Clean Water Act jurisdiction. In other words, discharges into those upstream waters remain subject to Clean Water Act requirements and thus may require a section 402 permit.[51] The agencies request comment on whether to add language to the regulatory text of the waste treatment system exclusion clarifying these aspects of the exclusion.

9. Other Definitions

The proposed rule contains a number of defined terms unchanged from the 1986 regulations. Some of the terms appeared only in the Corps' regulations, but in the 2019 Rule and the NWPR, the agencies included these definitions in both agencies' regulations. The agencies are not proposing to amend the definitions of ''wetland,'' ''high tide line,'' ''ordinary high water mark,'' and ''tidal water'' from the 1986 regulations, but to provide additional clarity and consistency in comparison to the 1986 regulations, the proposed rule would include all the defined terms in EPA's regulations, where such definitions are not already contained. Only the definition of the term ''adjacent'' was amended in the NWPR; the agencies are proposing to define the term unchanged from the 1986 regulations. This section briefly describes the definitions and their history and implementation. See section V.D of this preamble for further discussion on implementation.

a. Wetlands

The proposed rule makes no changes to the definition of ''wetlands'' contained in the NWPR, which made no changes to the 1986 regulations and defined ''wetlands'' 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.'' The agencies are not proposing to amend this definition.

b. Adjacent

The proposed rule defines the term ''adjacent'' with no changes from the 1986 regulations 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 Supreme Court case law and science. *See, e.g., Riverside Bayview,* 474 U.S. 121, 134 (''. . . 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.''). The Supreme Court has noted 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. *Id.* at 134–35. As discussed in section V.C.7 of this preamble and consistent with the pre-2015 regulatory regime, to be jurisdictional under the adjacent wetlands provision of the proposed rule, wetlands must meet this definition of adjacent *and* either be adjacent to a traditional navigable water, interstate water, or territorial sea *or* otherwise fall within the adjacent wetlands provision and meet either the relatively permanent standard or the significant nexus standard. See section V.D of this preamble for further discussion on implementation.

The NWPR substantially narrowed the definition of ''adjacent'' based primarily on the *Rapanos* plurality standard. The NWPR interprets ''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. 85 FR 22251, April 21, 2020. Wetlands that do not have these types of connections to other jurisdictional waters are not jurisdictional under the NWPR. The 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 are inconsistent with the scientific information in the record demonstrating the effects of wetlands on the integrity of 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 due to long-term drought; wetlands with shallow subsurface connections to other protected waters; or other wetlands proximate to jurisdictional waters. As discussed in section V.B.3.d of this preamble, within the first year of implementation of the NWPR, 70% of streams and wetlands evaluated were found to be non-jurisdictional, including 15,675 wetlands that did not meet the NWPR's revised adjacency criteria. The agencies anticipate that this increase in determinations of wetlands to be non-jurisdictional as compared to prior regulations could reduce the integrity of the nation's waters (*see* section V.B.3.d of this preamble), particularly in the absence of comparable state, tribal, or local regulations and associated efforts to avoid, minimize, or compensate for impacts to aquatic resources regulated under such programs.

[51] *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.'').

Proposing the longstanding definition of ''adjacent'' is 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, interstate waters, and territorial seas. See section V.A of this preamble. The agencies are proposing to retain the provision of this definition from the 1986 regulations that includes wetlands separated from other ''waters of the United States'' by man-made dikes or barriers, natural river berms, beach dunes and the like. The Supreme Court in *Riverside Bayview* deferred to the agencies' interpretation of the Clean Water Act to include adjacent wetlands. *Riverside Bayview,* 474 U.S. at 135 (''the 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* at 775.

Wetlands separated from other ''waters of the United States'' by man-made dikes or barriers, natural river berms, or beach dunes generally continue to have a hydrologic connection to downstream waters. This is because constructed dikes or barriers, natural river berms, beach dunes, and the like typically do not block all water flow. 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.

River berms, natural levees, and beach dunes are all examples of features 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, which allows for a hydrologic connection to the stream or river via openings in the levees 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 man-made 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 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, serving to filter pollutants and sediment before they reach downstream waters. Wetlands behind berms, where the system is extensive, can help reduce the impacts of storm surges caused by hurricanes. Such adjacent wetlands, separated from waters by berms and the like, 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 utilize both the wetlands and the nearby water, including 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 utilize both habitats despite the presence of such a berm, and in some cases, the natural or artificial barrier can serve the purpose of providing extra refuge from predators or for rearing young or other life cycle needs.

Thus, the longstanding definition of ''adjacent'' reasonably advances the objective of the Act. To be jurisdictional under the proposed rule, however, wetlands must meet this definition of adjacent *and* either be adjacent to a traditional navigable water, interstate water, or territorial sea *or* otherwise fall within the adjacent wetlands provision and meet either the relatively permanent standard or the significant nexus standard.

c. High Tide Line

The proposed rule makes no changes to the definition of ''high tide line'' contained in the NWPR, which made no changes to the 1986 regulations and defines the term ''high tide line'' 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 proposing to amend this definition. This definition has been in place since 1977 (*see* 42 FR 37144, July 19, 1977; and 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

The proposed rule makes no changes to the definition of ''ordinary high water mark'' (''OHWM'') contained in the NWPR, which made no changes to the 1986 regulations and defines OHWM 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.'' This term, unchanged since 1977, *see* 41 FR 37144 (July 19, 1977) and 33 CFR 323.3(c) (1978), 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. *Id.;* Regulatory Guidance Letter (RGL) 05–05 (December 7, 2005) at 1. The agencies are not proposing to amend this definition. Establishing the presence of a non-tidal traditional navigable water's OHWM can be informed by remote sensing and mapping information.

e. Tidal Water

The proposed rule makes no changes to the definition of ''tidal water'' contained in the NWPR, which made no changes to the 1986 regulations, and defines the term ''tidal water'' 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 (*e.g., see* 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 proposing to amend this definition.

10. Significantly Affect

The proposed rule defines the term ''significantly affect'' for purposes of determining whether a water meets the significant nexus standard to mean ''more than speculative or insubstantial effects on the chemical, physical, or biological integrity of'' a traditional navigable water, interstate water, or the territorial seas. Waters, including wetlands, would be evaluated either alone, or in combination with other similarly situated waters in the region,[52] based on the functions the evaluated waters perform. The proposal also identifies specific ''factors'' that will be considered when assessing whether the ''functions'' provided by the water, alone or in combination, are more than speculative or insubstantial. The factors include readily understood criteria (*e.g.,* distance, hydrologic metrics, and climatological metrics) that influence the types and strength of chemical, physical, or biological connections and associated effects on those downstream foundational waters. The functions can include measurable indicators (*e.g.,* nutrient recycling, runoff storage) that are tied to the chemical, physical, and biological integrity of foundational waters. 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 what waters must be protected to achieve the Clean Water Act's objective. The proposed definition recognizes that not all waters have the requisite connection to foundational waters sufficient to be determined jurisdictional.

The significant nexus standard that would be established by the proposed rule is carefully constructed to fall within the bounds of the Clean Water Act. First, the standard is limited to consideration of effects on downstream traditional navigable waters, interstate waters, and the territorial seas. Second, the standard is limited to effects only on the three statutorily identified aspects of those foundational waters: Chemical, physical, or biological integrity. Third, the standard cannot be met by merely speculative or insubstantial effects on those aspects of those foundational waters. Thus, the agencies must assess a particular water and determine whether, based on the factual record, relevant scientific data and information, and available tools, the water, alone or combination, has a more than speculative or insubstantial effect on the chemical, physical, or biological integrity of a specific foundational water.

This section explains the proposed definition and its consistency with the *Rapanos* Guidance, then explains how the proposed definition is consistent with the best available science and case law, and, finally, provides examples of functions that are not relevant to the significant nexus standard and waters that have not met the significant nexus standard under the pre-2015 regulatory regime.

The proposed definition is consistent with the pre-2015 regulatory regime. Under the *Rapanos* Guidance, the agencies evaluate whether waters ''are likely to have an effect that is more than speculative or insubstantial on the chemical, physical, and biological integrity of a traditional navigable water.'' *Rapanos* Guidance at 11.

In evaluating a water individually or in combination with other similarly situated waters for the presence of a significant nexus to a traditional navigable water, interstate water, or the territorial seas, the agencies consider factors that influence the types and strength of the chemical, physical, or biological connections and associated effects on those downstream waters. The agencies are proposing to include in the definition of ''significantly affect'' the factors to be considered in assessing the strength of the effects: (1) The distance from a jurisdictional water, (2) the distance from the downstream traditional navigable water, interstate water, or territorial sea, (3) hydrologic factors, including subsurface flow, (4) the size, density, and/or number of waters that have been determined to be similarly situated (and thus can be evaluated in combination), and (5) climatological variables such as temperature, rainfall, and snowpack. The agencies are seeking comment on this list of factors and whether there are other factors that influence the types and strength of the chemical, physical, or biological connections and associated effects on those downstream waters the agencies should consider.

These factors influence the strength of the connections and associated effects that streams, wetlands, and open waters have on the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, and territorial seas and are not the functions themselves that the agencies might consider as part of a significant nexus standard. These factors also cannot be considered in isolation, but rather must be considered together and in the context of the case-specific analysis. For example, the likelihood of a connection with associated significant effects is generally greater with increasing number and size of the aquatic resource or resources being considered and decreasing distance from the identified foundational water as well as with increased density of the waters that can be considered in combination as similarly situated waters. However, the agencies also recognize that in watersheds with fewer aquatic resources, even a small number or low density of similarly situated waters can have disproportionate effects on downstream foundational waters. Hydrologic factors include volume (or magnitude), duration, timing, rate, and frequency of flow, size of the watershed or subwatershed, and surface and shallow subsurface hydrologic connections. The presence of a surface

[52] For example, under the *Rapanos* Guidance, the agencies consider the flow and functions of the reach of a tributary that is the same 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) together with the functions performed by all the wetlands adjacent to that tributary in evaluating whether a significant nexus is present. *Rapanos* Guidance at 10. The agencies are taking comment on other approaches to ''similarly situated'' and ''in the region'' in section V.D.2.b.ii of this preamble.

or shallow subsurface hydrologic connection, as well as increased frequency, volume, or duration of such connections, can increase the chemical, physical (*i.e.,* hydrologic), or biological impact that a water has on downstream foundational waters. In other situations, streams with low duration but a high volume of flow can significantly affect downstream foundational waters by transporting large volumes of water, sediment, and woody debris that help maintain the integrity of those larger downstream waters. The lack of hydrologic connections can also contribute to the strength of effects for certain functions such as floodwater attenuation or the retention and transformation of pollutants. Climatological factors like temperature, rainfall, and snowpack in a given region can influence the agencies' consideration of the effects of subject waters on downstream foundational waters by providing information about expected hydrology and the expected seasonality of connections and associated effects. The agencies are seeking comment on whether these factors are sufficiently clear or if further explanation or examples would be useful.

The agencies are also taking comment on whether it would be useful to add to the definition of ''significantly affect'' a specific list of functions of upstream waters to assess when making a significant nexus determination. The *Rapanos* Guidance identified some relevant functions upstream waters can provide including temperature regulation, sediment trapping and transport, nutrient recycling, pollutant trapping, transformation, filtering and transport, retention and attenuation of floodwaters and runoff, contribution of flow, provision of habitat for aquatic species that also live in foundational waters (*e.g.,* for refuge, feeding, nesting, spawning, or rearing young), and provision and export of food resources for aquatic species located in foundational waters. Evaluation of such functions is consistent with the agencies' implementation of the pre-2015 regulatory regime. *See Rapanos* Guidance at 8, 9. Under the pre-2015 regulatory regime, a water did not need to perform all of the listed functions. *See* U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. If a water, either alone or in combination with similarly situated waters, performs one function, and that function has a more than speculative or insubstantial impact on the integrity of a traditional navigable water, interstate water, or the territorial seas, that water would have a significant nexus.

These functions identified in the *Rapanos* Guidance that can be provided by tributaries, wetlands, and open waters are keyed to the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, and the territorial seas. Water temperature is a critical factor governing the distribution and growth of aquatic life in downstream 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 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 downstream waters. Streams, wetlands, and open waters improve water quality through the assimilation and sequestration of pollutants, including chemical contaminants such as pesticides and metals that can degrade downstream water integrity. Small streams and wetlands are particularly effective at retaining and attenuating floodwaters. This function can reduce flood peaks downstream and can also maintain downstream river baseflows. Streams, wetlands, and open waters are the dominant sources of water in most rivers. Streams, wetlands, and open waters supply downstream waters with organic matter which supports biological activity throughout the river network and provide life-cycle dependent aquatic habitat for species located in foundational waters.

Consistent with the pre-2015 regulatory regime, the agencies are also proposing that a water may be determined to be a ''water of the United States'' when it ''significantly affects'' any one form of chemical, physical, or biological integrity of a downstream traditional navigable water, interstate water, or the territorial seas. Congress intended the Clean Water Act to ''restore and maintain'' all three forms of ''integrity,'' section 101(a), so if any one is compromised then that is contrary to the statute's stated objective. It would contravene the plain language of the statute and subvert the objective if the Clean Water Act only protected waters upon a showing that they had effects on every attribute of the integrity of a traditional navigable water, interstate water, or the territorial sea. 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 and surrounding text.

The proposed rule's definition of ''significantly affect'' also is consistent with the conclusions of the Science Report. *See* Technical Support Document section IV.E. 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 physical, chemical, and biological environments and by human activities. Those spatial and temporal variations are reflected in the agencies' proposed requirement that ''significantly affect'' means more than speculative or insubstantial, in the functions the agencies evaluate, and in the factors they use to evaluate those functions. The proposed 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, which gave as an example that 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 substantial consequences on the integrity of the downstream waters. 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 agencies are seeking comment on how to implement this aspect of the proposed rule in section V.D.2.b of this preamble.

The agencies' definition of the term ''significantly affect'' in the proposed rule is also informed by and consistent with Supreme Court case law. The definition reflects that not all waters have a requisite connection to foundational waters sufficient to be determined jurisdictional. Under the significant nexus standard, to be jurisdictional, waters, alone or in combination with other similarly situated waters in the region, must

significantly affect the chemical, physical, or biological integrity of a downstream traditional navigable water, interstate water, or territorial sea, and significantly affect means more than ''speculative or insubstantial.'' *Rapanos,* at 780. The agencies propose to define ''significantly affect'' in precisely those terms.

The facts in the cases before the justices further inform the scope of the proposed definition. Justice Kennedy was clear 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. The agencies recognize that ''more than speculative or insubstantial'' is not a bright line definition, but as the Supreme Court has recently recognized in *Maui,* the scope of Clean Water Act jurisdiction does not always 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. Because of the factual nature of the connectivity inquiry, any standard will require some case-specific factual determinations. The 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. But, like the Court in *Maui,* the agencies have proposed factors to be used in assessing the strength of the effects on downstream foundational waters and have identified the functions they will consider in making significant nexus determinations under the proposed rule. This approach is consistent with major congressional objectives, as revealed by the statute's language, structure, and purposes.[53]

It is also important to note that the agencies' significant nexus standard in the proposed rule is carefully tailored so that only particular types of functions provided by upstream waters can be considered. 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 that have a nexus to the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas. Therefore, there are some very important functions provided by wetlands, tributaries, and ''other waters'' that will not be considered by the agencies when making jurisdictional decisions under the proposed rule because they do not have a sufficient nexus to downstream waters.

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 analysis under the proposed rule.[54] Furthermore, the agencies would not consider 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 uplands. 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 considered in a significant nexus analysis under the proposed rule. These include recreation (*e.g.,* fishing, hunting, boating, and birdwatching), 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 ecosystem services can contribute to the economy, they are not relevant to a significant nexus analysis that the agencies would conduct under the proposed rule.

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 has a more than speculative or insubstantial effect. In their experience many waters under the proposed rule will not have a significant nexus to downstream foundational waters, and thus will not be jurisdictional under the Act, and the agencies under current practice routinely conclude that there is no significant nexus. The following are examples of waters that the agencies found to not have a significant nexus and determined to be non-jurisdictional under the pre-2015 regulatory regime. The agencies are citing these samples to provide an indication of waters that would likely not be jurisdictional under the proposed rule, though they recognize that the significant nexus determination is case-specific.

Examples of waters that were determined not to have a significant nexus to downstream foundational waters and that were non-jurisdictional under the pre-2015 regulatory regime, and which therefore would likely not be jurisdictional under the proposed rule, are a linear stream in Ohio, hundreds of feet long, which is miles from a traditional navigable water and does not provide any significant functions for that water; an ephemeral stream in Ohio in an agricultural field, which loses bed and bank and flows into an upland swale; and ditches in California that were created from uplands, drain only uplands, and that do not carry a relatively permanent flow of water.

Examples of wetlands that have been determined not to meet the significant nexus standard and therefore to be non-jurisdictional under the pre-2015 regulatory regime and would likely not be jurisdictional under the proposed rule include wetlands or open waters that drain into upland areas, such as emergent wetlands in Idaho that drain into upland swales that terminate in a closed basin upland area; wetlands in Wisconsin surrounded by uplands that do not exchange surface water or have ecological connections with the nearest tributary; wetlands in Ohio surrounded by upland that have no connections to any apparent surface water channel or to a jurisdictional water; and a non-navigable lake in Oregon contained within a valley and that lacks surface hydrologic connections to the river network. Other wetlands determined not meet the significant nexus standard include an emergent wetland in Alaska

[53] Through rulemaking the agencies could make some categorical jurisdictional determination based on standards and factors that are consistent with the Act's objective. *See Riverside Bayview* at 135, n.9 (''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.''); *see also Rapanos* at 780–81 (Kennedy, J.) (''Through regulations or adjudication, the Corps may choose to identify categories of tributaries that . . . are significant enough that wetlands adjacent to them are likely, in the majority of cases, to perform important functions for an aquatic system incorporating navigable waters.'').

[54] As the agencies have discussed, consideration of biological functions such as provision of habitat is relevant for purposes of significant nexus determinations under the proposed rule only to the extent that the functions provided by tributaries, adjacent wetlands, and ''other waters'' significantly affect the biological integrity of a downstream foundational water.

surrounded by development that severed any hydrologic connections between the wetland and a nearby wetland complex and lake; wetlands in Washington separated by potential jurisdictional waters by thousands of feet of well-drained soils as well as impervious surfaces; a large forested wetland in Washington separated by the nearest jurisdictional waters by residential and commercial developments on a topography that would preclude flows into these waters and with no identified ecological connections; a wetland in Oregon surrounded by a concrete and cinder block wall, preventing any flows into downstream waters; and a wetland in Arkansas separated from other wetlands and surrounded by uplands.

While in most of these examples, the tributary, wetland, or lake may well have had some effect on traditional navigable waters, interstate waters, or the territorial seas, the agencies concluded that those effects were not significant and so concluded that jurisdiction did not lie under the Clean Water Act. See implementation section V.D of this preamble for more information on significant nexus determinations.

D. Implementation of Proposed Rule

The agencies are proposing to return to the longstanding definition of ''waters of the United States'' that two other Administrations have codified over the years, updated to reflect consideration of the intervening Supreme Court decisions. This section first discusses features over which the agencies generally did not assert jurisdiction under the preambles, guidance, and practice of the pre-2015 regulatory regime. The agencies intend to continue generally not asserting jurisdiction over such features. Then the agencies explain the *Rapanos* Guidance and how they have determined jurisdiction under the two *Rapanos* standards for various categories of waters under the pre-2015 regulatory regime and solicit comment on potential alternative approaches for applying the *Rapanos* standards. The agencies then discuss the implementation tools and resources available for making such determinations. The agencies welcome comment on all of these topics, including the availability and efficacy of all of the tools and resources discussed. The agencies intend to issue an updated ''Approved Jurisdictional Determination'' form and instruction manual upon promulgating a final rule to aid the public and field staff in determining which waters are ''waters of the United States'' under the final rule. The agencies may provide additional guidance in the final rule based on public input received on this proposal.

1. Generally Not Considered ''waters of the United States''

Under the pre-2015 regulatory regime, the waters described below were generally not considered ''waters of the United States'' even though they were not explicitly excluded by regulation. The agencies intend to continue this longstanding approach and are soliciting comment on this approach for the proposed rule. The preamble to the 1986 regulations states that the agencies ''generally do not consider [these] waters to be 'Waters of the United States.' '' 51 FR 41217. 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.* In practice, the agencies have not generally asserted jurisdiction over such waters and would continue to implement the proposed rule consistent with this practice.

Even when not themselves considered jurisdictional waters subject to the Clean Water Act, the features described below (*e.g.,* certain ditches, swales, gullies, erosional features) may either be relevant to a ''water of the United States'' jurisdictional analysis or otherwise be subject to the Clean Water Act. The features may still contribute to a surface hydrologic connection relevant for asserting jurisdiction (*e.g.,* between an adjacent wetland and a jurisdictional water). *Rapanos* Guidance at 12. In addition, these waters may function as point sources (*i.e.,* ''discernible, confined, and discrete conveyances''), such that discharges of pollutants to other waters through these features could require a Clean Water Act section 402 or 404 permit. Discharges to these waters may be subject to other Clean Water Act regulations (*e.g.,* Clean Water Act section 311). *Id.*

a. Certain Ditches

Under the agencies' longstanding approach to determining which waters are ''waters of the United States,'' certain ditches are generally not considered ''waters of the United States.'' 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. 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. The agencies explained that these features are generally not considered ''waters of the United States'' ''because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters.'' *Id.*

The agencies intend to continue implementing the approach to ditches described in the *Rapanos* Guidance. This approach is more consistent with the relatively permanent standard than the approach in the preamble to the 1986 regulations. Consistent with previous practice, ditches constructed wholly in uplands and draining only uplands with ephemeral flow would generally not be considered ''waters of the United States.''

Also consistent with previous practice, the agencies would typically assess a ditch's jurisdictional status based on whether it could be considered a tributary (and, consistent with previous practice, would not assess whether the ditch was jurisdictional under the ''other waters'' provision). The implementation section below includes discussion on the application of relevant reach under the *Rapanos* Guidance, and the agencies solicit comment on potential alternative approaches (*see* section V.D.2.b.ii.1.b of this preamble), such as whether relevant reaches can be distinguished based on a change from relatively permanent flow to non-relatively permanent flow. The agencies acknowledge that for ditches in particular there may be scenarios that make identification of relevant reach especially challenging and encourage stakeholders to identify and discuss these situations in their comments on relevant reach. The agencies specifically request comment regarding whether the interpretation of relevant reach for ditches should consider any particular factors for situations where ditches are tidal, are treated as tributaries, or contain wetlands.

In some situations, ditches with wetland characteristics have been considered jurisdictional as adjacent wetlands. In most cases, such ditches have been constructed in adjacent wetlands and would be considered part of that larger adjacent wetland. However, consistent with previous practice, wetlands that develop entirely within the confines of a ditch that was excavated in and wholly draining only uplands that does not carry a relatively permanent flow would be considered

part of that ditch and generally would not be considered ''waters of the United States.''

Where a ditch is jurisdictional, the agencies have historically taken the position that the ditch can be both a ''water of the United States'' and a point source and are proposing to reinstate this position. For example, in 1975, the General Counsel of EPA issued an opinion interpreting the Clean Water Act: ''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 (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.* Further, 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 a water 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); *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.'').

The agencies recognize that this position is different than the position in the NWPR, which stated that a ditch is either a water of the United States or a point source. 85 FR 22297, April 21, 2020. The 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.'' 547 U.S. at 735–36 (Scalia, J., plurality), NWPR Response to Comments, section 6 at 12–13. The NWPR, however, did not address that even this statement in the plurality opinion in *Rapanos* acknowledges that there may be some overlap between point sources and ''waters of the United States'' as indicated by its finding that the two categories should not be ''significantly'' overlapping. *Id.* Moreover, there is no indication in the text of the Clean Water Act that ditches that meet that plain language definition of a point source cannot also be a ''water of the United States.'' The agencies therefore believe that their longstanding, historic view that a ditch can be both a point source and a water of the United States is the better interpretation.

b. Certain Other Features

In addition to the ditches described above, the agencies have generally not asserted jurisdiction over certain other features under the pre-2015 regulatory regime and the agencies intend to continue the practice for these features. The preamble to the 1986 regulations explains that these other waters include: Artificially irrigated areas which would revert to upland 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.'' 51 FR 41217. In the *Rapanos* Guidance, the agencies added an additional category to this list, explaining that ''[s]wales or erosional features (*e.g.,* gullies, small washes characterized by low volume, infrequent, or short duration flow) are generally not waters of the United States.'' *Rapanos* Guidance at 11–12. The agencies explained that these features are generally not ''waters of the United States'' ''because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters.'' *Id.*

Swales and gullies are generally not jurisdictional, and these features differ from ephemeral streams because they lack indicators of an OHWM, whereas ephemeral streams typically have at least one indicator of an OHWM. Ephemeral streams are jurisdictional where they are tributaries and have a significant nexus to downstream waters. Colloquial terminology may differ across the country; for example, some streams in the arid West are known as ''gullies'' but are in fact ephemeral streams because they have at least one indicator of an OHWM.

2. Determining Jurisdiction Under the Relatively Permanent Standard and the Significant Nexus Standard

In this section, the agencies explain how they have determined jurisdiction under the relatively permanent standard and significant nexus standard for various categories of waters under the pre-2015 regulatory regime. The agencies describe how each standard has been implemented consistent with the *Rapanos* Guidance, *SWANCC* Guidance, and other aspects of longstanding practice where not addressed explicitly by the guidances. The agencies then solicit comment on implementing the standards consistent with the pre-2015 regulatory regime as well as potential alternative approaches for applying the relatively permanent and significant nexus standards. Additionally, the agencies solicit comment on whether the implementation approaches adequately account for expected changes in climate, and whether alternative approaches to implementing the relatively permanent standard and significant nexus standard should be considered.

a. ''Waters of the United States'' Under the Relatively Permanent Standard

i. Approaches Under the Pre-2015 Regulatory Regime

(1) Background

Under the relatively permanent standard, relatively permanent tributaries and adjacent wetlands that have a continuous surface connection to such tributaries are jurisdictional under the Clean Water Act as ''waters of the United States.'' Under the *Rapanos* Guidance, the agencies assert jurisdiction over tributaries as ''relatively permanent'' waters where the waters typically (*e.g.,* except due to drought) flow year-round or have a continuous flow at least seasonally (*e.g.,* typically three months). *Rapanos* Guidance at 6–7 (citing 126 S Ct. at 2221 n.5 (Justice Scalia, plurality opinion) (explaining 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'')). The agencies also assert jurisdiction over adjacent wetlands that have a continuous surface connection to a relatively permanent, non-navigable tributary. *Id.* at 6–7.

(2) Tributaries

Under the *Rapanos* Guidance, ''relatively permanent'' tributaries include perennial streams that typically flow year-round and intermittent streams that have continuous flow at least seasonally. However, ''relatively permanent'' tributaries do not include ephemeral streams that flow only in response to precipitation and intermittent streams which do not have continuous flow at least seasonally. Importantly, under the *Rapanos* Guidance, some intermittent streams are considered ''relatively permanent'' and some are not. Scientists, including agency staff, have used the terms ''perennial,'' ''intermittent,'' and ''ephemeral'' for decades to characterize tributary flow classifications.

Under the *Rapanos* Guidance, a ''tributary'' includes ''the entire reach of the stream that is of the same 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).'' *Id.* at 6, n. 24. The flow characteristics of a particular tributary generally are evaluated at the farthest downstream limit of such tributary (*i.e.,* the point the tributary enters a higher order stream). *Id.* However, for purposes of determining whether the tributary is relatively permanent, where data indicate the flow regime at the downstream limit is not representative of the entire tributary (*e.g.,* where data indicate the tributary is relatively permanent at its downstream limit but not for the majority of its length, or vice versa), the flow regime that best characterizes the entire tributary is used. A primary factor in making this determination is the relative lengths of segments with differing flow regimes. *Id.* The agencies stated that it is reasonable to characterize the entire tributary in light of the Supreme Court's observation that the phrase ''navigable waters'' generally refers to ''rivers, streams, and other hydrographic features.'' *Citing Rapanos* at 734, quoting *Riverside Bayview,* 474 U.S. at 131. The entire reach of a stream is a reasonably identifiable hydrographic feature.

(3) Wetlands

Under the pre-2015 regime, the agencies utilize the *Rapanos* Guidance to determine where adjacent wetlands have a continuous surface connection with a relatively permanent, non-navigable tributary. The *Rapanos* Guidance notes that these wetlands are a subset of the broader definition of ''adjacent'' wetlands. The plurality opinion indicates that ''continuous surface connection'' is a ''physical connection requirement.'' *Rapanos* Guidance at 6, *citing Rapanos* at 754. Accordingly, under the *Rapanos* Guidance, a continuous surface connection exists between a wetland and a relatively permanent, non-navigable tributary where the wetland directly abuts the tributary (*e.g.,* they are not separated by uplands, a berm, dike, or similar feature). *Rapanos* Guidance at 7, *citing Rapanos* at 751, n. 13 (referring to ''our physical-connection requirement''). A continuous surface connection does not require surface water to be continuously present between the wetland and the tributary. *Rapanos Guidance* at 7, n.28, *citing* 33 CFR 328.3(b) and 40 CFR 232.2 (defining wetlands as ''those 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'').

In some circumstances, the United States has determined that a continuous surface connection can include a physical connection such as a non-jurisdictional ditch that connects the adjacent wetland to the relatively permanent tributary. *United States* v. *Cundiff,* 555 F.3d at 213 (holding wetlands were jurisdictional under the 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; ''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''). Generally, the agencies completed significant nexus analyses on adjacent wetlands with such connections.

The term ''adjacent'' has been defined in agency regulations since 1986 to mean ''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'' (*see* section V.C.7 of this preamble). Under the *Rapanos* Guidance, the agencies consider wetlands ''adjacent'' if one of following three criteria is satisfied. First, there is an unbroken surface or shallow subsurface connection to jurisdictional waters and this hydrologic connection maybe intermittent. Second, they are physically separated from jurisdictional waters by man-made dikes or barriers, or natural breaks (*e.g.,* river berms, beach dunes). Or third, their proximity to a jurisdictional water is reasonably close, supporting the science-based inference that such wetlands have an ecological interconnection with jurisdictional waters and therefore, will not generally require a case-specific demonstration of an ecologic interconnection. *Rapanos* Guidance at 5–6.

As stated above, under the *Rapanos* Guidance the agencies assert jurisdiction over wetlands that have a continuous surface connection with a relatively permanent, non-navigable tributary. These wetlands are a subset of adjacent wetlands previously discussed that must have a continuous surface connection with the tributary. This physical connection requires that the wetland not be separated from the relatively permanent, non-navigable tributary by uplands, a berm, dike, or other similar feature. Although a constant hydrologic connection is not required, there must be a continuous surface connection on the landscape for these wetlands to be jurisdictional under this standard.

It is important to note that under the pre-2015 regulatory regime, features such as uplands, a berm, dike, or similar feature that separate a wetland from a relatively permanent, non-navigable tributary may not be continuous. For example, an upland levee that separates a wetland from a relatively permanent, non-navigable tributary may have gaps along the length of the levee that provide for a connection between the wetlands and the tributary. In such cases under the pre-2015 regulatory regime, this type of connection would satisfy the physical connection requirement.

ii. Other Potential Approaches To Implementing the Relatively Permanent Standard

The agencies are seeking comment on whether they should implement the relatively permanent standard in the proposed rule consistent with the pre-2015 regulatory regime described above and if so whether there are clarifications or other issues to be addressed. In addition, the agencies are seeking comment on other options for making jurisdictional determinations under the relatively permanent standard.

(1) Tributaries

The *Rapanos* Guidance limits the scope of relatively permanent tributaries to perennial tributaries and certain

intermittent tributaries. The agencies could interpret relatively permanent waters more generally to include perennial tributaries and all intermittent tributaries. With such an interpretation, the agencies could use an approach to ''perennial,'' ''intermittent,'' and ''ephemeral'' as the NWPR did and could specify that the agencies generally intend to consider perennial and intermittent tributaries as relatively permanent waters in light of their characteristics and flow, but ephemeral tributaries would not be considered relatively permanent. Such an approach would not limit intermittent tributaries under the relatively permanent standard to only those that have continuous flow at least seasonally (*e.g.,* typically three months). The agencies could clarify that intermittent streams under the relatively permanent standard may flow less than three months (*e.g.,* streams that flow ''continuously during certain times of the year,'' similar to the language in the NWPR), as certain intermittent streams may flow for shorter periods of time but are still distinct from ''ephemeral'' streams.

The *Rapanos* Guidance does not explicitly address whether intermittent flow must come from particular sources (*e.g.,* groundwater, snowpack melt, effluent flow, or upstream contributions of flow) under the relatively permanent standard. The agencies solicit comment about whether the final rule should clarify the required sources of intermittent flow, and what those sources of flow should be. For instance, the NWPR clarified that intermittent flow must occur more than in direct response to precipitation, and the NWPR explained that could mean, for example, seasonally when the groundwater table is elevated or when snowpack melts. The NWPR differentiated between ephemeral flows driven by ''snowfall,'' and intermittent flows driven by ''snowpack melt,'' where snowpack was 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).'' Alternatively, the final rule could allow for regionally specific interpretations of intermittent flow sources to allow for flexible implementation of the rule.

This proposed rule does not provide specific definitions for tributary flow classifications, including the terms ''perennial,'' ''intermittent,'' and ''ephemeral.'' The agencies are seeking comment on whether they should define these flow classifications in the final rule. Any specific definitions would depend in part on how the agencies describe intermittent tributaries under the relatively permanent standard in the final rule, including the scope of intermittent tributaries and any description of required sources of flow. For example, if the agencies interpret the relatively permanent standard to include all perennial and intermittent tributaries and decide to include groundwater and snowpack melt as appropriate sources of intermittent flow, the agencies could use the same definitions as the NWPR:

- The term ''perennial'' means surface water flowing continuously year-round.
- The term ''intermittent'' means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (*e.g.,* seasonally when the groundwater table is elevated or when snowpack melts).
- The term ''ephemeral'' means surface water flowing or pooling only in direct response to precipitation (*e.g.,* rain or snow fall).

Alternatively, the agencies could interpret the relatively permanent standard using modified definitions of these terms.

(2) Wetlands

In some circumstances, the United States has concluded that a non-jurisdictional ditch or other such feature can serve as a physical connection that maintains a continuous surface connection between a wetland and a relatively permanent water. *See United States* v. *Cundiff.* The agencies seek comment on whether to provide guidance on when specific features (*e.g.,* ditches, culverts, pipes, or swales) can serve as physical connections that can maintain a continuous surface connection between a wetland and a relatively permanent water.

(3) Open Waters

The agencies do not discuss in the *Rapanos* Guidance the assessment of open waters such as lakes and ponds under the relatively permanent waters standard. As discussed above, the agencies' longstanding position, reflected in the U.S. Army Corps of Engineers Jurisdictional Determination Instructional Guidebook, is that tributaries for purposes of the definition of ''waters of the United States'' include lakes and ponds that flow directly or indirectly to downstream traditional navigable waters, interstate waters, or the territorial seas. *See* U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook, at 8, 9. In practice, the agencies have asserted jurisdiction over relatively permanent tributary lakes and ponds. The agencies are soliciting comment on whether they should explicitly explain this implementation approach in the final rule.

The agencies do not address the ''other waters'' category in the *Rapanos* Guidance with respect to either the relatively permanent standard or the significant nexus standard. The proposed rule adds both standards to the ''other waters'' category. The agencies are soliciting comment on whether they should take an approach to assessing jurisdiction over non-tributary open waters under the relatively permanent standard that is similar to the approach described in the *Rapanos* Guidance for assessing jurisdiction over adjacent wetlands with a continuous surface connection to relatively permanent waters. Under such an approach, the agencies would assert jurisdiction over relatively permanent open waters that have a continuous surface connection with a relatively permanent, non-navigable tributary. The agencies note that some such lakes and ponds are jurisdictional under the NWPR when they are inundated by flooding from a jurisdictional water in a typical year.

b. ''Waters of the United States'' Under the Significant Nexus Standard

ii. Approaches Under the Pre-2015 Regulatory Regime

(1) Background

The significant nexus standard as clarified by Justice Kennedy's opinion in *Rapanos* is: ''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.'" *Rapanos* at 780. The agencies in the *Rapanos* Guidance use the significant nexus standard for determining jurisdiction over certain adjacent wetlands and tributaries. As discussed above, the proposed rule would add the significant nexus standard to the ''other waters,'' tributary, and adjacent wetland categories in the 1986 regulations. In the *Rapanos* Guidance, the agencies explain: ''While Justice Kennedy's opinion discusses the significant nexus standard primarily in the context of wetlands adjacent to non-navigable tributaries, his opinion also addresses Clean Water Act jurisdiction over tributaries themselves. Justice Kennedy states that, based on the Supreme Court's decisions in *Riverside Bayview*

and *SWANCC,* 'the connection between a non-navigable *water or wetland* may be so close, or potentially so close, that the Corps may deem the *water or wetland* a ''navigable water'' under the Act.''' *Rapanos* Guidance at 9, *citing Rapanos* at 767 (emphasis added in *Rapanos* Guidance).

(2) Scope of Significant Nexus Analysis

In the *Rapanos* Guidance, the agencies assess tributaries and their adjacent wetlands together and state: ''In considering how to apply the significant nexus standard, the agencies have 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 and biological integrity of the Nation's traditional navigable 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. The flow parameters and ecological functions that Justice Kennedy describes as most relevant to an evaluation of significant nexus result from the ecological inter-relationship between tributaries and their adjacent wetlands.'' *Rapanos Guidance* at 9.

Under the *Rapanos* Guidance, when performing a significant nexus analysis, the first step is to determine the relevant reach of the tributary being assessed, even when the subject water may only include a wetland. Under the guidance, a tributary is the entire reach of the stream that is of the same 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). The guidance states that for purposes of demonstrating a connection to traditional navigable waters, it is appropriate and reasonable to assess the flow characteristics of the tributary at the point at which water is in fact being contributed to a higher order tributary or to a traditional navigable water. As discussed above, the agencies' longstanding position is that tributaries for purposes of the definition of ''waters of the United States'' include lakes and ponds that flow directly or indirectly to downstream traditional navigable waters, interstate waters, or the territorial seas. *See* ''U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook,'' at 8, 9. In practice, the agencies have asserted jurisdiction over tributary lakes and ponds that meet the significant nexus standard.

After establishing the relevant reach of the tributary, under the *Rapanos* Guidance the agencies then determine if the tributary has any adjacent wetlands. Where a tributary has no adjacent wetlands, the agencies consider the flow characteristics and functions of only the tributary itself in determining whether such tributary has a significant effect on the chemical, physical and biological integrity of downstream traditional navigable waters, interstate waters, or the territorial seas. *Rapanos* Guidance at 10. If the tributary has adjacent wetlands, the significant nexus evaluation needs to recognize the ecological relationship between tributaries and their adjacent wetlands, and their closely linked role in protecting the chemical, physical, and biological integrity of downstream traditional navigable waters. *Id.* at 10.

Under the *Rapanos* Guidance the agencies consider the flow and functions of the tributary together with the functions performed by all the wetlands adjacent to the tributary in evaluating whether a significant nexus is present. This approach reflects the agencies' interpretation in the *Rapanos* Guidance of Justice Kennedy's term ''similarly situated'' to include all wetlands adjacent to the same tributary. Under this approach, where it is determined that a tributary and its adjacent wetlands collectively have a significant nexus with traditional navigable waters, the tributary and all of its adjacent wetlands are jurisdictional. *Id.* at 10.

In addition, the *Rapanos* Guidance states that certain ephemeral waters in the arid West are distinguishable from the geographic features like non-jurisdictional swales and erosional features, where such ephemeral waters are tributaries and they have a significant nexus to downstream traditional navigable waters. For example, in some cases these ephemeral tributaries may serve as a transitional area between the upland environment and the traditional navigable waters. The guidance explains that during and following precipitation events, ephemeral tributaries collect and transport water and sometimes sediment from the upper reaches of the landscape downstream to the traditional navigable waters. These ephemeral tributaries may provide habitat for wildlife and aquatic organisms in downstream traditional navigable waters. These biological and physical processes may further support nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, functions that may significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters. *Id.* at 12. In practice, the agencies have regulated some but not all ephemeral tributaries evaluated under the significant nexus standard under the pre-2015 regulatory regime.

(3) Assessment of a Significant Nexus

To implement the *Rapanos* Guidance, the agencies instruct field staff evaluating the significant nexus of a tributary and its adjacent wetlands to evaluate all 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 when assessing significant nexus. *Rapanos* Guidance at 10. The use of relevant geographic water quality data in conjunction with site-specific data produced from improved field sampling methodology and hydrologic modelling are important for understanding the chemical, physical, and biological functions provided by tributaries and their adjacent wetlands and their effects on downstream traditional navigable waters.

While EPA regions and Corps districts must exercise judgment to identify the OHWM on a case-by-case basis, the regulations identify the factors to be applied. These regulations have been further explained in RGL 05–05, and the Corps continues to improve regulatory practices across the country through ongoing research and the development of regional and national OHWM delineation procedures. The agencies will apply the regulations, RGL 05–05, and applicable OHWM delineation manuals and take other steps as needed to ensure that the OHWM identification factors are applied consistently nationwide. *Rapanos* Guidance at 10–11, n. 36.

In the *Rapanos* Guidance, the agencies identify numerous functions provided by tributaries and wetlands that are relevant to the significant nexus determination. The duration, frequency, and volume of flow in a tributary, and subsequently the flow in downstream traditional navigable waters, is directly affected by the presence of adjacent wetlands that hold floodwaters, intercept sheet flow from uplands, and then release waters to tributaries in a more even and constant manner. Wetlands may also help to maintain more consistent water temperature in tributaries, which is important for some

aquatic species; adjacent wetlands trap and hold pollutants that may otherwise reach tributaries (and downstream traditional navigable waters) including sediments, chemicals, and other pollutants. Tributaries and adjacent wetlands provide habitat (*e.g.,* refuge, feeding, nesting, spawning, or rearing young) for many aquatic species that also live in traditional navigable waters. *Id.* at 9. Under the *Rapanos* Guidance, the agencies take into account other relevant considerations, including the functions performed by the tributary together with the functions performed by any adjacent wetlands.

Another specific consideration from the *Rapanos* Guidance is the extent to which the tributary and adjacent wetlands have the capacity to carry pollutants (*e.g.,* petroleum wastes, toxic wastes, sediment) or flood waters to traditional navigable waters, or to reduce the amount of pollutants or flood waters that would otherwise enter traditional navigable waters. *Id.* at 11; *citing Rapanos* at 782, *citing Oklahoma ex rel. Phillips* v. *Guy F. Atkinson Co.,* 313 U.S. 508, 524–25 (1941) (''Just 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.'').

The agencies under the *Rapanos* Guidance also evaluate ecological functions performed by the tributary and any adjacent wetlands which affect downstream traditional navigable waters, such as the capacity to transfer nutrients and organic carbon vital to support downstream foodwebs (*e.g.,* macroinvertebrates present in headwater streams convert carbon in leaf litter making it available to species downstream), habitat services such as providing spawning areas for recreationally or commercially important species in downstream waters, and the extent to which the tributary and adjacent wetlands perform functions related to maintenance of downstream water quality such as sediment trapping. *Rapanos* Guidance at 11. In the context of the *Rapanos* Guidance, ecological functions were meant to represent the suite of chemical, physical, and biological functions performed by the waters being assessed that affect downstream traditional navigable waters.

To demonstrate effects on physical integrity of downstream waters, the agencies have used evidence of physical connections, such as flood water or sediment retention (flood prevention). Indicators of hydrologic connections between the water being evaluated and jurisdictional waters may also provide evidence of a physical connection. In addition, relevant considerations for physical connectivity could include rain intensity, duration of rain events or wet season, soil permeability, distance of hydrologic connection between the water and the traditional navigable water, and depth from surface to water table, all of which may indicate evidence of connection to stream baseflows, and any preferential flowpaths.

Evidence of a significant effect on the chemical integrity of foundational waters has been found by identifying the properties of the water(s) under evaluation in comparison to the traditional navigable water; signs of retention, release, or transformation of nutrients or pollutants; and the effect of landscape position on the strength of the connection to the nearest jurisdictional water and through those waters to a traditional navigable water. Relevant considerations for chemical connectivity could include hydrologic connectivity, surrounding land use and land cover, the landscape setting, and deposition of chemical constituents (*e.g.,* acidic deposition).

To determine whether a water has a significant effect on the biological integrity of traditional navigable waters, interstate waters, or territorial seas, the agencies have identified biological factors or uses present in the relevant stream reach, and then evaluated the effects of these factors or uses on the downstream waters. Examples of biological factors and uses include: Resident aquatic or semi-aquatic species present in the water being evaluated, the tributary system, and downstream traditional navigable waters (*e.g.,* fish, amphibians, aquatic and semi-aquatic reptiles, aquatic birds, benthic macroinvertebrates); whether those species show life-cycle dependency on the identified aquatic resources (foraging, feeding, nesting, breeding, spawning, use as a nursery area, etc.); and whether there is reason to expect presence or dispersal around the water being evaluated, and if so, whether such dispersal extends to the tributary system or beyond or from the tributary system to the water being evaluated. In addition, relevant factors influencing biological connectivity and effects could include species' life history traits, species' behavioral traits, dispersal range, population sizes, timing of dispersal, distance between the water being evaluated and a traditional navigable water, the presence of habitat corridors or barriers, and the number, area, and spatial distribution of habitats. Under such an approach, non-aquatic species or species such as non-resident migratory birds do not demonstrate a life cycle dependency on the identified aquatic resources and are not evidence of a significant nexus.

As discussed in section V.C.10 of this preamble, the agencies' proposed definition of ''significantly affect'' at paragraph (g) includes a list of factors that the agencies will consider when assessing the significance of the effect of a function. These factors are consistent with the approach the agencies used in assessing significant nexus under the *Rapanos* Guidance, and the agencies are soliciting comment on whether to include these or other factors, as well as whether to include functions identified in the *Rapanos* Guidance or other functions in the proposed rule or in approaches for implementing the rule.

ii. Other Potential Approaches To Implementing the Significant Nexus Standard

The agencies solicit comment on how to apply the significant nexus standard in the field, including whether they should implement the significant nexus standard in the proposed rule consistent with the *Rapanos* Guidance for all waters under the proposed rule that require a significant nexus evaluation—*i.e.,* certain ''other waters,'' non-relatively permanent tributaries, and certain adjacent wetlands (*i.e.,* waters identified in paragraphs (a)(3)(ii), (a)(5)(ii), (a)(7)(iii) of the proposed rule). Should the agencies implement the significant nexus standard consistent with the *Rapanos* Guidance, the agencies are seeking comment on whether there are clarifications or other issues to be addressed to improve that implementation approach. The agencies are also seeking comment on other approaches to implementing the significant nexus standard, such as a broader, science-based approach to some aspects of a significant nexus analysis or an approach that tailors the scope of a significant analysis based on facts like the geographic region or type of water being assessed, as discussed below.

(1) Scope of Significant Nexus Analysis for Adjacent Wetlands and Tributaries

Under the significant nexus standard, waters possess the requisite significant nexus if they ''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* at 780. These significant nexus analyses underpin

determinations of jurisdiction for certain categories of waters under the proposed rule. However, several terms in this standard were not defined in *Rapanos.* The agencies are soliciting comment on approaches for implementing the proposed rule, including regarding (1) which waters are ''similarly situated,'' and thus should be analyzed in combination, in (2) the ''region,'' for purposes of a significant nexus analysis, and (3) the types of functions that should be analyzed to determine if waters significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas. Discussion of the alternative approaches regarding relevant functions is in section V.D.2.b.ii.2 of this preamble.

a. Similarly Situated Waters

As discussed above, the *Rapanos* Guidance interpreted ''similarly situated'' to mean a tributary and its adjacent wetlands. The agencies could implement the final rule consistent with this approach or take an approach that interprets which waters are ''similarly situated'' differently than the *Rapanos* Guidance. One such approach would be to interpret ''similarly situated'' in terms of particular waters that are providing common, or similar, functions for downstream waters such that it is reasonable to consider their effect together. Such an approach could consider tributaries to be similarly situated with other tributaries, adjacent wetlands to be similarly situated with adjacent wetlands, and ''other waters'' to be similarly situated with ''other waters'' (*e.g.,* lakes and ponds with similar functions and geographic position on the landscape). Another approach would be to consider similarly situated waters to be tributaries of the same flow regime (for example, assessing an ephemeral stream in combination with other ephemeral streams in the region). The agencies could also consider tributaries of the same stream order to be similarly situated (for example, assessing all first order streams in combination with other first order streams in the region).

The agencies note that the best available science supports evaluating the connectivity and effects of streams, wetlands, and open waters to downstream waters in a cumulative manner in context with other streams, wetlands, and open waters. *See* Technical Support Document.

b. In the Region

The agencies could implement the scope of the significant nexus analysis (what is considered ''in the region'') consistent with the *Rapanos* Guidance, which relied on a concept of a relevant ''reach'' of a tributary—defined as the entire reach of the stream that is of the same 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). *Rapanos* Guidance at 10.

Alternatively, the agencies could implement what is considered ''in the region'' for significant nexus evaluations with an approach different from that in the *Rapanos* Guidance. For example, the relevant reach for purposes of considering what is ''in the region'' for a significant nexus evaluation could be implemented the way the term ''reach'' was interpreted in the NWPR, meaning a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope. 85 FR 22290, April 21, 2020. Under the NWPR's approach, a reach can be any length of a stream or river, but for implementation purposes that length is bounded by similar flow characteristics. Similarly, the agencies could implement the ''relevant reach'' to incorporate the entire length of the stream that is of the same flow regime (*i.e.,* relatively permanent and non-relatively permanent flow, or perennial, intermittent, and ephemeral flow). For example, if a perennial tributary becomes intermittent and then ephemeral and then perennial again, it may be viewed as four separate relevant reaches (*e.g.,* perennial reach, intermittent reach, ephemeral reach, perennial reach). Alternatively, the agencies could use an approach that is substantially similar to the *Rapanos* Guidance but that identifies the relevant reach based on certain hydrologic or geomorphic characteristics. For instance, the relevant reach of a tributary could rely on factors identified in stream field assessments and monitoring protocols such as the similarity of the channel's substrate or geomorphic classification. Additional factors identified through field observations or remote-sensing could also be used to determine the extent of a tributary's relevant reach such as the presence of natural features like bedrock outcrops or valley confinements, and non-natural features like culverts or road crossings, which can modify or influence hydrologic characteristics and geomorphic processes. Aerial and satellite imaging, National Hydrography Dataset (NHD) Plus High Resolution data, and high resolution digital elevation models could be used to evaluate whether hydrologic and geomorphic conditions within a channel are similar enough to be defined as the relevant reach of a tributary. Another option is for the agencies to interpret a tributary for purposes of the significant nexus analysis to be the entire length of a stream based on maps or best professional judgment.

There are also a range of approaches for determining the ''region'' in which waters to be assessed lie and which could allow for a more regionalized approach to significant nexus assessments. For example, the region could be sub-watersheds or the watershed defined by where a tributary and its upstream tributaries drain into a traditional navigable water, interstate water, or the territorial seas. If the watershed draining to the traditional navigable water, interstate water, or territorial sea is too large, the watershed could be evaluated at a subwatershed scale (*e.g.,* at the hydrologic unit code (HUC) 8, 10, or 12 watershed scale). Alternatively, the watershed could be considered just the watershed of the relevant reach (*i.e.,* catchment), and the relevant reach could be determined using the options described above. Another option is for the watershed to be delineated from the downstream-most point of the relevant reach—that is, the region would be the watershed that drains to and includes the relevant reach in question. Many existing spatial analysis tools based on watershed frameworks and elevation models can be used to delineate watersheds quickly and reliably in most parts of the country.

Other options for determining a ''region'' in which similarly situated waters would be considered cumulatively could include a narrower interpretation such as waters within a contiguous area of land with relatively homogeneous soils, vegetation, and landform (*e.g.,* plain, mountain, valley, etc.) providing similar functions such as habitat, water storage, sediment retention, and pollution sequestration. This approach would be highly case specific and rely on the use of resources such as soil surveys and possibly watershed assessment reports to determine those waters that are similarly situated within a region.

More broadly, ''region'' could be interpreted to mean an ecoregion which serves as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. Ecoregions are areas where ecosystems (and the type, quality, and quantity of environmental resources) are generally similar (*see https://www.epa.gov/eco-research/ecoregions*). Ecoregions are identified by

analyzing the patterns and composition of biotic and abiotic phenomena that affect or reflect differences in ecosystem quality and integrity.[55] [56] These phenomena include geology, landforms, soils, vegetation, climate, land use, wildlife, and hydrology. Under the ecoregion approach, similarly situated waters would be considered cumulatively within an ecoregion (*see, e.g., https://www.epa.gov/eco-research/ecoregions-north-america*). The scale of ecoregion (*e.g.,* Level I, Level II, Level III, or Level IV ecoregions identified by EPA in North America) used for determining the ''region'' could be quite broad, such as the 12 different Level I ecological regions in the continental United States or narrower like the 105 different Level III ecological regions in the continental United States or the 967 Level IV ecoregions in the conterminous United States. Because Level I ecoregions are quite large, considerations of similarly situated waters at the Level I ecoregion scale could potentially obscure the measurable effects of a single aquatic resource on a downstream traditional navigable water, interstate water, or territorial sea. However, the scale of the similarly situated analysis within an ecoregion could be refined using the smaller Level III or Level IV ecoregions which allow local characteristics to be identified and are more specifically oriented towards environmental management strategies. Under this approach in a jurisdictional analysis, scientific literature describing or studying characteristics of the Level III or Level IV ecoregions could be used to inform the evaluation of specific ecological functions performed by similarly situated waters. A benefit of using this approach is that ecoregions are spatial datasets which have been, or could be, incorporated into many existing spatial analysis tools and mapping platforms. In addition, stakeholders have called for acknowledging regional differences in the definition of ''waters of the United States,'' and an ecoregion approach could allow for such consideration in implementation.

In addition to ecoregions, other methods of mapping boundaries where similarly situated waters could be considered cumulatively for a significant nexus analysis would be to rely on hydrologic landscape regions or physiographic groupings. Hydrologic landscape regions are groups of watersheds that are clustered together on the basis of similarities in land-surface form, geologic texture, and climate characteristics.[57] Hydrologic landscape regions are based on a concept that reflects fundamental hydrologic processes that are expected to affect water quality and other environmental characteristics. Based on a commonly used method to delineate hydrologic landscape regions that was developed by the USGS, there are 20 regions that cover the entire United States.[58] This method could present similar challenges as the Level I ecoregion approach described above, whereby the hydrologic landscape region scale obscures the measurable effects of single aquatic resources. Alternatively, the agencies could rely on well-established physiographic divisions based on topography, geology, and geomorphology, including the eight physiographic regions across the contiguous United States, the 25 physiographic provinces within those regions, or the 85 physiographic sections within those regions (available at *https://water.usgs.gov/GIS/metadata/usgswrd/XML/physio.xml*).

(2) Other Waters

The agencies seek comment on potential approaches to address a significant nexus analysis for waters under the ''other waters'' provision of the proposed rule. As discussed in section V.C.3 of this preamble, ''other waters'' were not addressed by the *Rapanos* Guidance. The agencies could adopt the approach used in the *SWANCC* Guidance, whereby field staff were directed to seek approval from agency headquarters before asserting jurisdiction over isolated waters that are intrastate and non-navigable. *See* 68 FR at 1996, January 15, 2003. As a matter of practice since the issuance of the *SWANCC* Guidance, the Corps has not asserted jurisdiction over such ''other waters.'' The agencies would not be precluded as a legal matter from asserting jurisdiction over ''other waters'' under this proposed rule, which would retain the ''other waters'' provision from the 1986 regulations and add the relatively permanent and significant nexus standards, but following the *SWANCC* Guidance approach would require an additional approval process before the agencies asserted jurisdiction. The agencies could also modify the prior approach by identifying a subsection of ''other waters'' that could be determined jurisdictional without headquarters' authorization, such as lakes and ponds which meet the definition of ''adjacent,'' but do not fall within the adjacent wetlands provision because they are open waters, not wetlands (*e.g.,* oxbow lakes and ponds).

''Other waters'' that meet the definition of ''adjacent'' could be treated like adjacent wetlands under the *Rapanos* Guidance. Under such an approach, the agencies could adopt the same interpretation of ''similarly situated'' that is used to complete a significant nexus determination for adjacent wetlands (*see* section V.D.2.b.ii.1 of this preamble), or the agencies could adopt a different interpretation of ''similarly situated'' that is specifically applicable to ''other waters.''

The various options for implementing significant nexus are not mutually exclusive and the agencies are interested in any other approaches for assessing significant nexus under the proposed rule, particularly approaches that utilize existing science-based tools and resources to assist in predictability and ease of implementation for the public and the agencies.

3. Resources for Making Jurisdictional Determinations

Many field-based and remote tools and sources of data are available to determine Clean Water Act jurisdiction under the proposed rule. In some cases, a property owner may be able to determine whether a property includes a ''water of the United States'' based on observation or experience. In other cases, a property owner may seek assistance from a consultant to assess the jurisdictional status of features on their property. Property owners may also seek a jurisdictional determination from the Corps, which provides jurisdictional determinations as a public service. When conducting a jurisdictional determination, the Corps will review any documentation that a property owner, or consultant, provides to assist in making a jurisdictional determination. EPA staff also regularly assess the jurisdictional status of waters in implementing Clean Water Act programs. The agencies expect that EPA and Corps staff, as well as private consultants, would be the primary users of the tools and sources of remote data described below, and they have ample

[55] Omernik, J.M. 1987. Ecoregions of the conterminous United States. Map (scale 1:7,500,000). Annals of the Association of American Geographers 77(1):118–125.

[56] Omernik, J.M. 1995. Ecoregions: A spatial framework for environmental management. In: Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making. Davis, W.S. and T.P. Simon (eds.), Lewis Publishers, Boca Raton, FL. p. 49–62.

[57] Winter, T.C., 2001. The concept of hydrologic landscapes: Journal of the American Water Resources Association, v. 37, p. 335–349.

[58] Wolock, D.M. 2003. Hydrologic landscape regions of the United States (No. 2003–145). US Geological Service.

experience in using them from prior regulatory regimes.

The resources covered in this section include tools for identifying relatively permanent tributaries (section V.D.3.a of this preamble); tools for identifying wetlands adjacent to traditional navigable waters, interstate waters, the territorial seas, impoundments of jurisdictional waters, or tributaries (section V.D.3.b of this preamble); and tools for applying a significant nexus standard (section V.D.3.c of this preamble). This section presents a non-exclusive list of tools that the agencies have used in the past and will continue to use to assist in making jurisdictional decisions, but other tools could also be used to determine jurisdiction. The agencies have also identified a number of recent advancements in the data, tools, and methods that can be used to make jurisdictional decisions (section V.D.3.d of this preamble).

a. Identifying Relatively Permanent Tributaries

Relatively permanent tributaries include rivers, streams, and other hydrographic features with standing or flowing bodies of water, and may also include certain lakes and ponds. These features can be identified on the landscape using 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/core-science-systems/ngp/tnm-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*), NHD data, National Wetland Inventory (NWI) data, maps and geospatial datasets from state, tribal, or local governments, and/or aerial or satellite imagery. For example, tributaries are 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 such as perennial and intermittent tributaries (*see* ''Topographic Map Symbols,'' available at *https://pubs.usgs.gov/gip/TopographicMapSymbols/topomapsymbols.pdf*). Due to limitations associated with some remote tools, field verification for accuracy may be necessary, and some examples of field indicators will be discussed in more detail below.

Under the *Rapanos* Guidance, tributaries may be considered relatively permanent if they typically flow year-round or have continuous flow at least seasonally (*e.g.,* typically three months). A key factor that the agencies typically consider when assessing the length and timing of expected ''seasonal'' flows is the geographic region. The time period, including length, constituting ''seasonal'' varies across the country due to many relevant factors including climate, hydrology, topography, soils, and other conditions. For example, in parts of the southeastern United States (Southeast), precipitation is distributed somewhat uniformly throughout the year, but increased evapotranspiration during the growing season can reduce surficial ground water levels and lead to reduced or absent surface flows late in the growing season (*e.g.,* late summer or early autumn). Consequently, ''seasonal'' flows in the Southeast may typically occur in the winter or early spring. In other areas, snowmelt drives streamflow more than rainfall, with seasonal flow coinciding with warming temperatures typically in the spring or early summer. In addition, the agencies have found that two months of continuous flow, for example, is considered ''seasonal'' flow in certain regions of the country and can be sufficient to support a relatively permanent designation.[59] Sources of information that can facilitate the evaluation of seasonal flow from snowmelt are NOAA national snow analyses maps (available at *https://www.nohrsc.noaa.gov/nsa/*), NRCS sources (available at *https://www.wcc.nrcs.usda.gov/snow/*), or use of hydrographs to indicate a large increase in stream discharge due to the late spring/early summer thaws of melting snow. The agencies have experience evaluating seasonal flow and will continue to use multiple tools, including remote and field-based indicators to inform decisions.

While not providing explicit flow classifications (*e.g.,* perennial, intermittent, or ephemeral), various remote or desktop tools can help the agencies and the public better understand streamflow and inform determinations of flow classifications. 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/wy-mt-water/science/probability-streamflowpermanence-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.

Remote or desktop tools can also illustrate the relative permanence of flow. Aerial photographs showing visible water on multiple dates can provide evidence of the sufficient frequency and duration of surface flow to facilitate a potential flow classification. Aerial photographs may also show other indicators commonly used to identify the presence of an OHWM (*see* definition of OHWM in section V.C.9.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/*). These 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 a potential flow classification for a tributary. In addition to 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 light detection and ranging (LIDAR) derived data can also be used to help implement this proposed rule. 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 inform the potential

[59] *See, e.g.,* Memorandum to Assert Jurisdiction for NWP–2007–945 (January 23, 2008), *available at https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll5/id/1437.*

flow regime 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. 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 potential flow regime.

Field indicators for the region can be used to verify desktop assessments of the relative permanence of a tributary, when necessary. Geomorphic indicators could include active/relict floodplain, substrate sorting, clearly defined and continuous bed and banks, depositional bars and benches, and recent alluvial deposits. Hydrologic indicators might 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. Regionalized streamflow duration assessment methods (SDAMs) that use physical and biological field indicators, such as the presence of hydrophytic vegetation and benthic macroinvertebrates, can also be used to determine the flow duration class of a tributary as perennial, intermittent, or ephemeral (*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 *http://portal.ncdenr.org/c/document_library/get_file?uuid=0ddc6ea1-d736-4b55-8e50-169a4476de96&groupId=38364*). 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 are working to develop additional regionalized SDAMs in other parts of the country. Flow duration classifications can then be used to assist in determining the relative permanence of the tributary. Ultimately, multiple indicators, data points, and sources of information may be used to determine flow classification.

b. Identifying Wetlands Adjacent to Traditional Navigable Waters, Interstate Waters, Territorial Seas, Impoundments, or Tributaries

Before determining if a wetland is jurisdictional, the agencies first determine if the wetland in question meets the definition of ''wetlands'' (*see* section V.C.9.a of this preamble). As under prior regimes, wetlands are identified in the field in accordance with Corps' 1987 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, including USGS topographic maps (*available at https://www.usgs.gov/core-science-systems/ngp/tnm-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/wetlands/data/mapper.html*).

Once a feature is identified as a wetland, if the wetland itself is not a traditional navigable water (*i.e.,* it is not a tidal wetland) or an interstate water, the agencies assess whether it is adjacent to a traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary. 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, USGS topographic maps, elevation data, and NHD data may identify a physical barrier or illustrate the location of the traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary; the wetland's proximity to the jurisdictional water; and the nature of topographic relief between the two aquatic resources. Aerial photographs or high-resolution satellite imagery may illustrate hydrophytic vegetation from the boundary (*e.g.,* ordinary high water mark for non-tidal waters or high tide line for tidal waters) of the traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary to the wetland boundary, or the presence of water or soil saturation. 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. NWI maps may identify that the wetlands are near the traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary. Field work can help confirm the presence and location of the OHWM or high tide line of the traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary and can provide additional information about the wetland's potential adjacency to that water (*e.g.,* by traversing the landscape from the traditional navigable water, interstate water, territorial sea, jurisdictional impoundment, or jurisdictional tributary to the wetland and examining topographic and geomorphic features, as well as hydrologic and biologic indicators). Wetlands adjacent to traditional navigable waters, interstate waters, or the territorial seas do not need further analysis to determine if they are ''waters of the United States.''

For a wetland adjacent to relatively permanent, non-navigable tributaries and relatively permanent impoundments of jurisdictional waters, similar remote tools and resources as those described above may be used to identify if the wetland has a continuous surface connection to such waters. The tools and resources most useful for addressing this standard are those that reveal breaks in the surface connection between the wetland and the relatively permanent water, such as separations by uplands, or a berm, dike, or similar feature. For example, USGS topographic maps may show topographic highs between the two features, or simple indices can be calculated based on topography to indicate where these connectivity breaks occur. FEMA flood zone or other floodplain maps may indicate constricted floodplains along the length of the tributary channel with physical separation of flood waters that could indicate a break. High-resolution elevation data can illustrate topographic highs between the two features that

extend along the tributary channel. Aerial photographs or high-resolution satellite imagery may illustrate upland vegetation along the tributary channel between the two features, 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 relatively permanent, non-navigable tributary's OHWM. In addition, field work may confirm whether there is a continuous physical connection between the wetland and the relatively permanent, non-navigable tributary, or identify breaks that may sever the continuous surface connection (*e.g.,* by traversing the landscape from the tributary to the wetland and examining topographic and geomorphic features, as well as hydrologic and biologic indicators).

For adjacent wetlands that lack a continuous surface connection to jurisdictional relatively permanent tributaries or jurisdictional relatively permanent impoundments or that are adjacent to non-relatively permanent tributaries, the agencies will conduct a significant nexus analysis to assess if the wetlands are jurisdictional. Tools to assess if the adjacent wetlands significantly affect foundational waters are discussed in section V.D.3.c of this preamble.

c. Applying the Significant Nexus Standard

The agencies have used many tools and sources of information to assess significant effects on the chemical, physical, and biological integrity of downstream traditional navigable waters, interstate waters, or the territorial seas. Some tools and resources that the agencies have used to provide and evaluate evidence of a significant effect on the physical integrity of foundational waters include USGS stream gage data, floodplain maps, statistical analyses, hydrologic models and modeling tools such as USGS's StreamStats (available at *https://streamstats.usgs.gov/ss/*) 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 foundational waters, the agencies and practitioners have used tools and resources such as: population survey data and reports from federal, state, and tribal 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 provide and evaluate evidence of a significant effect on the chemical integrity of foundational waters include data from USGS water quality monitoring stations, state, tribal, 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 cumulative effects of wetlands on other waters they may drain into. 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 filtering capabilities 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 traditional navigable water, interstate water, or territorial sea may include qualitative reviews of available information or incorporate quantitative analysis components including predictive transport modeling.

A variety of modeling approaches can be used to quantify the connectivity and cumulative effects of wetlands, including non-floodplain wetlands, on other waters. Some examples include the Soil and Water Assessment Tool (SWAT, available at *https://swat.tamu.edu/*), the Hydrologic Simulation Program in Fortran (*see 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*).

d. Advancements in Implementation Data, Tools, and Methods

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 defensible jurisdictional decision-making under the relatively permanent and significant nexus standards. Agency staff were forced to heavily rely 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 U.S. Army Corps of Engineers Jurisdictional Determination Form 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 Corps field staff to consider all 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 Regulatory Guidance Letter (RGL) No. 07–01 [60] in 2007 that 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, and 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 of the guidance. Despite these challenges, the agencies and others in the practitioner community gained significant 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. The agencies can use online mapping tools to determine whether waters are connected or sufficiently close to a water 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. An overview of several tools and data that have been developed or improved since 2015 can help demonstrate how the agencies are now able to make case-specific evaluations more quickly and consistently than ever before.

[60] It should be noted that RGL No. 07–01 was later superseded by RGL 08–02 and RGL 16–01, neither of which addressed significant nexus evaluations.

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. 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. 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 is 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. The agencies can use this dataset to help assess potential hydrologic connectivity between waterways and wetlands in support of jurisdictional decisions. For example, the NWI Version 2 dataset can be used in part to help the agencies identify wetlands that do not meet the definition of adjacent (''other waters''). 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 availability of aerial and satellite imagery has improved dramatically since 2015, which 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 classification for a tributary, as a first step to determine if additional field-based information is needed to determine the flow classification. The growth of the satellite imagery industry through services such as DigitalGlobe (available at *https://discover.digitalglobe.com/*) in addition to resources for aerial photography and imagery, 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/*) have reduced the need to perform as many field investigations to verify Clean Water Act jurisdiction, though some of these services charge a fee for use. The USGS Landsat Level-3 Dynamic Surface Water Extent (DSWE) product (available at *https://www.usgs.gov/core-science-systems/nli/landsat/landsat-dynamic-surface-water-extent?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.

Similarly, the availability of LIDAR data has increased in availability and utility for determining Clean Water Act jurisdiction. 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. LIDAR-indicated tributaries can be correlated with aerial photography interpretation to reasonably conclude the presence of a channel with 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.

Since 2015, tools have been developed that automate some of the standard practices the agencies rely on to assist in 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 V.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 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, standardized methods, which reduces errors, and enabled more people to perform these analyses themselves, including members of the public. The APT will continue to be an important tool to support jurisdictional decision-making.

Site visits are still sometimes needed to perform on-site observations of surface hydrology or collect 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, and 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. Additional information on the agencies' efforts to develop SDAMs is available at *https://www.epa.gov/streamflow-duration-assessment.*

E. Publicly Available Jurisdictional Information and Permit Data

The agencies intend to work to enhance information that is already available to the public on jurisdictional determinations. The Corps maintains a website 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. Similarly, EPA maintains a website 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. These websites will incorporate 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 (*https://www.epa.gov/enviro/pcs-icis-overview*), as well as the EnviroMapper (*https://enviro.epa.gov/enviro/em4ef.home*), and How's My Waterway (*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.''

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) to better align their regulatory needs with DOI's existing processes and national mapping capabilities. 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 of such geospatial products to the Clean Water Act programs that EPA and the Corps implement.

F. Placement of the Definition of ''Waters of the United States'' in the Code of Federal Regulations

The definition of ''waters of the United States'' had historically been placed in eleven locations in the Code of Federal Regulations (CFR). For the sake of simplicity, in the NWPR, the agencies codified the definition of ''waters of the United States'' in only two places in the CFR—in Title 33 of the CFR, which 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. 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 NWPR cross-references the newly created section of the regulations containing the definition of ''waters of the United States.'' The agencies placed EPA's definition of ''waters of the United States'' in a previously unassigned part of 40 CFR and stated that the change in placement had no implications on Clean Water Act program implementation; rather, the placement made it clearer to members of the public that there is a single definition of ''waters of the United States'' applicable to the Clean Water Act and its implementing regulations. 85 FR 22328–29, April 21, 2020. The agencies agree with this approach and propose no change to the placement of the definition of ''waters of the United States.'' As the agencies indicated in the NWPR, the placement of the definition in two locations, at 33 CFR 328.3 and 40 CFR 120.2, increases convenience for the reader but has no substantive implications for the scope of Clean Water Act jurisdiction. 85 FR 22328, April 21, 2020.

The agencies are proposing to delete the definition of ''navigable waters'' at 120.2 and to add it to the ''purpose and scope'' of part 120 at 40 CFR 120.1. The agencies are also proposing to add additional clarifying text to the ''purpose and scope'' at 40 CFR 120.1. The agencies intend this to be an editorial and clarifying change and not a substantive change from EPA's regulations at 40 CFR 120. The agencies believe that this minor revision adds 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 would have parallel numerical and alphabetical subsections, providing clarity for the public. The Corps similarly includes the

definition of ''navigable waters'' within 33 CFR 328.1, which contains the purpose of the Corps' regulations at part 328. The agencies propose to retain the same definition of ''navigable waters'' within 40 CFR 120.1 as the term is defined at section 502(7) of the Clean Water Act and as it was defined in the NWPR at 40 CFR 120.2, which is ''the waters of the United States, including the territorial seas.''

The agencies solicit comment on their deletion of the definition of ''navigable waters'' at 40 CFR 120.2 and adding it instead with the ''purpose and scope'' at 40 CFR 120.1.

VI. Summary of Supporting Analyses

This section provides an overview of the supporting analyses for the proposed rule. Additional detail on these analyses is contained in and described more fully in the Economic Analysis for the Proposed Rule and the Technical Support Document for the Proposed Rule. Copies of these documents are available in the docket for this proposed action.

This proposed rule establishing the definition of ''waters of the United States'' by itself imposes no costs or benefits. Potential costs and benefits would only be incurred as a result of actions taken under existing Clean Water Act programs (*i.e.,* sections 303, 311, 401, 402, and 404) that would not otherwise be modified by this proposed rule. Entities currently are, and would 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.

While the rule imposes no costs and generates no benefits under the primary baseline, the agencies nonetheless analyzed its benefits and costs relative to a secondary baseline and have prepared an illustrative economic analysis to provide the public with information on the potential benefits and costs associated with various Clean Water Act programs that could result under a state of the world without the proposed rule that would have the NWPR still in effect. The agencies prepared this economic analysis pursuant to the requirements of Executive Orders 12866 and 13563 to provide information to the public.

Two courts have vacated the NWPR and since then, the agencies have been implementing the pre-2015 regulatory regime, which is very similar to the proposed rule. While the NWPR has been vacated, the agencies have chosen to provide additional information to the public and have considered two baselines in the Economic Analysis for the Proposed Rule: A primary baseline of the pre-2015 regulatory regime, and a secondary baseline of the NWPR. Because the agencies are not currently implementing the NWPR, the proposed rule would not depart in material respects from current practice; as such, the agencies find that the proposed rule generally maintains the legal status quo such that there would be no appreciable costs or benefits in comparison to the primary baseline of the pre-2015 regulatory regime.

The agencies use the NWPR as a secondary baseline to provide information to the public on the estimated differential effects of the proposed rule in comparison to the NWPR. The agencies estimated that the NWPR would result in an increase in non-jurisdictional findings in jurisdictional determinations compared to prior regulations and practice, and that compared to the NWPR, the proposed rule would define more waters as within the scope of the Clean Water Act.

Under the primary baseline, there are no costs or benefits as the regulatory scope between the presently implemented pre-2015 regulatory regime is approximately the same as the proposed rule. Comparatively, under the secondary NWPR baseline, quantified benefits for the 404 program are estimated to be between $376 and $590 million annually, while costs are estimated to be between $109 and $276 million annually. The analysis of estimated costs and benefits of the proposed rule is contained in the Economic Analysis for the Proposed Rule and is available in the docket for this action.

The agencies recognize that the burdens of environmental pollution and climate change often fall disproportionately on population groups of concern (*e.g.,* minority, low-income, and indigenous populations as specified in Executive Order 12898) and are quantifying impacts to these groups in the Economic Analysis for the Proposed Rule. Compared to the average population, these groups are more likely to experience water-related environmental and social stressors like contaminated drinking water, limited access to clean water, and inadequate water infrastructure—all of which increase their likelihood of being exposed to pollutants. In addition to external stressors, behavioral and cultural characteristics of these groups, like engaging in subsistence fishing and consuming higher rates of fish from polluted waters, increases their vulnerability to pollution. Taken together, these environmental, social, and behavioral factors often increase these groups' risk of experiencing negative health outcomes because of their exposure to environmental contaminants.

Climate change will exacerbate the existing risks faced by population groups of concern as identified by Executive Order 12898, in addition to giving rise to new risks and challenges, and such impacts are generally greater for disadvantaged communities. In particular, risks like sea level rise, flooding, and drought can all have disproportionate effects on these communities. Because of existing environmental and social stressors and their reliance on natural resources that may be negatively impacted by climate change (*e.g.,* fish and other aquatic life that provide income or food), these communities may be less able to mitigate and adapt to the effects of climate change.

The 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 state or tribal law (*see* section V.B.3 of this preamble). Absent regulations governing discharges of pollutants into previously jurisdictional waters, communities composed of groups of concern where these waters are located may experience increased water pollution and impacts from associated increases in health risk. Further, the NWPR categorically excluded ephemeral streams from jurisdiction, which disproportionately impacts tribes and communities of concern in the arid West. Tribes may lack the authority and often the resources to regulate waters within their boundaries, and may also be affected by pollution from adjacent jurisdictions. Therefore, the change in jurisdiction under the NWPR may have disproportionately exposed tribes to increased pollution and health risks. In this proposed rule the agencies affirm their commitment to assessing the impacts of a revised definition of ''waters of the United States'' on population groups of concern.

For the proposed 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 from the reinstatement of the pre-2015 practice may be differentially distributed among population groups of concern in the affected areas when compared to the secondary baseline of

the NWPR. In determining the potential for concerns in affected areas, the agencies considered the following factors in this analysis: Population characteristics, proximity to effects of the proposed rule, and selected indicators of vulnerability to environmental risk. The results of the agencies' analysis are presented in the Economic Analysis for the Proposed Rule. The change between the pre-2015 regulatory regime and NWPR in the number of impacted waters was approximated using Corps AJD and permit data. The analysis showed that for most of the HUC 12 wetlands and affected waters impacted by the proposed rule, there was no evidence of potential environmental justice concerns warranting further analysis; for a select set of HUC 12 wetlands and impacted waters, potential environmental justice concerns may exist, and additional analyses may be warranted. Additionally, analyses assessing the potential for impacts on tribes found an overlap in several states between tribal land and HUC 12 watersheds with relatively large wetland and affected waters changes, warranting further analysis. In the final rule, the agencies plan to expand upon the environmental justice analysis by including additional indicators of vulnerability to environmental risk in screening for potential environmental justice concerns and by adding illustrative case studies to evaluate localized impacts for areas where the need for additional analyses was identified.

The Technical Support Document provides additional legal, scientific, and technical discussion for issues raised in this proposed rule. 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 2015 Science Report and that contain findings relevant to the report's conclusions. Appendix D is the legal definition of ''traditional navigable waters'' (Appendix D from the U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook).

VII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.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 Proposed ''Revised Definition of 'Waters of the United States' '' Rule, is available in the docket for this action and briefly summarized in section VI of this preamble.

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.

C. Regulatory Flexibility Act (RFA)

The agencies certify that this proposed rule will not have a significant economic impact on a substantial number of small entities under the RFA. This rule would codify a regulatory regime generally comparable to the one currently being implemented nationwide due to the vacatur of the 2020 definition of ''waters of the United States.'' On this basis alone, the proposed rule would not impose any requirements on small entities. Additionally, the agencies note that the proposed rule does not ''subject'' any entities of any size to any specific regulatory burden. 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 Supreme Court case law, including the geographical and hydrological factors identified in *Rapanos* v. *United States,* 547 U.S. 715 (2006). None of these factors are readily informed by the RFA. *See, e.g., Cement Kiln Recycling Coal.* v. *EPA,* 255 F.3d 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.'').

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. In light of 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 https://www.epa.gov/wotus/2021-waters-united-states-public-meeting-materials*). A variety of small entities such as farmers and ranchers, environmental and conservation non-profits, as well as building, consulting, and brewing businesses provided their input on both the policies under discussion in the proposed rulemaking and their interest in additional outreach and engagement with small entities, including their desire for a SBREFA panel. 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 proposed definition of ''waters of the United States'' applies broadly to Clean Water Act programs. The action imposes no enforceable duty on any state, local, or tribal governments, or the private sector.

E. Executive Order 13132: Federalism

Under the technical requirements of Executive Order 13132 (64 FR 43255, August 10, 1999), the agencies have determined that this proposed rule may have federalism implications but believe that the requirements of the Executive Order will be satisfied, in any event.

The agencies believe that a revised definition of ''waters of the United States'' may be of significant interest to state and local governments. Consistent with the agencies' policies to promote communications between the Federal government and state and local governments, EPA and the Army consulted with representatives of state and local governments early in the process of developing the proposed rule to permit them to have meaningful and timely input into its development.

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 proposed 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. 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 proposed rule.

These meetings and the letters provided by representatives provide a wide and diverse range of interests, positions, comments, and recommendations to the agencies. 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 draft report is available in the docket (Docket ID. No. EPA–HQ–OW–2021–0602) for this proposed rule.

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 this proposed rule, including via two webinars on August 19, 2021, 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 met with two tribes at a staff-level and with two tribes at a leader-to-leader level. Additional consultations may be requested and scheduled after the rule is proposed. 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 proposed rule. 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 proposed rule.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that EPA has 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 it does not concern an environmental health risk or safety risk.

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 rulemaking does not involve technical standards.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA and Army believe that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in in the Economic Analysis for the Proposed Rule, which can be found in the docket for this action.

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.

Jaime A. Pinkham,

Acting 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, title 33, chapter II of the Code of Federal Regulations is proposed to be 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) 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;

(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:

(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), (a)(2), (a)(5)(i), or (a)(6) 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), (2), or (6) of this section;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition, other than impoundments of waters identified under paragraph (a)(3) of this section;

(5) Tributaries of waters identified in paragraph (a)(1), (2), (4), or (6) 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), (2), or (6) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to the following waters (other than waters that are themselves wetlands):

(i) Waters identified in paragraph (a)(1), (2), or (6) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(4) or (a)(5)(i) of this section and with a continuous surface connection to such waters; or

(iii) Waters identified in paragraph (a)(4) or (a)(5)(ii) 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), (2), or (6) of this section;

(8) 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; and

(9) 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.

(b) *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.

(c) *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.''

(d) *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.

(e) *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.

(f) *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.

(g) *Significantly affect* means more than speculative or insubstantial effects on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1), (2), or (6) of this section. When assessing whether the effect that the functions waters have on waters identified in paragraph (a)(1), (2), or (6) of this section is more than speculative or insubstantial, the agencies will consider:

(1) The distance from a water of the United States;

(2) The distance from a water identified in paragraph (a)(1), (2), or (6) of this section;

(3) Hydrologic factors, including shallow subsurface flow;

(4) The size, density, and/or number of waters that have been determined to be similarly situated; and

(5) Climatological variables such as temperature, rainfall, and snowpack.

Title 40—Protection of Environment

For reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be 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 purposes of this part, the following terms shall have the meanings indicated:

(a) *Waters of the United States* means:

(1) 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;

(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:

(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), (a)(2), (a)(5)(i), or (a)(6) 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), (2), or (6) of this section;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition, other than impoundments of waters identified under paragraph (a)(3) of this section;

(5) Tributaries of waters identified in paragraph (a)(1), (2), (4), or (6) 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), (2), or (6) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to the following waters (other than waters that are themselves wetlands):

(i) Waters identified in paragraph (a)(1), (2), or (6) of this section; or

(ii) Relatively permanent, standing, or continuously flowing bodies of water identified in paragraph (a)(4) or (a)(5)(i) of this section and with a continuous surface connection to such waters; or

(iii) Waters identified in paragraph (a)(4) or (a)(5)(ii) 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), (2), or (6) of this section;

(8) 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; and

(9) 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.

(b) *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.

(c) *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.''

(d) *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.

(e) *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.

(f) *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.

(g) *Significantly affect* means more than speculative or insubstantial effects on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1), (2), or (6) of this section. When assessing whether the effect that the functions waters have on waters identified in paragraph (a)(1), (2), or (6) of this section is more than speculative or insubstantial, the agencies will consider:

(1) The distance from a water of the United States;

(2) The distance from a water identified in paragraph (a)(1), (2), or (6) of this section;

(3) Hydrologic factors, including shallow subsurface flow;

(4) The size, density, and/or number of waters that have been determined to be similarly situated; and

(5) Climatological variables such as temperature, rainfall, and snowpack.

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