February 3, 2022

Ms. Damaris Christensen
Oceans, Wetlands, and Communities Division
Office of Water (4504-T)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Ms. Stacey Jensen
Office of the Assistant Secretary of the Army for Civil Works Department of the Army
108 Army Pentagon
Washington, DC 20310-0104

Re: Revised Definition of “Waters of the United States”
(Docket # EPA-HQ-OW-2021-0602; FRL -6027.4-03-OW)

Via: www.Regulations.gov

Dear Ms. Christensen and Ms. Jensen:

The National Association of Wetland Managers (NAWM, formerly the Association of State Wetland Managers (ASWM)) submits the following comments in response to the proposed rule, “Revised Definition of ‘Waters of the United States’,” EPA-HQ-OW-2021-0602.

NAWM is a national 501(c)(3) professional organization that supports the use of sound science, law, and policy in development and implementation of state and tribal wetland and aquatic resource protection programs. Since 1983, our organization and our member states and tribes have had longstanding positive and effective working relationships with federal agencies. As an association representing states and tribes as co-regulators tasked with implementation of regulations implementing the Clean Water Act (CWA), NAWM understands the complexity of the CWA and the implementation challenges the Act poses. We have worked for many years together with federal, state, and tribal agencies in the implementation of regulatory and non-regulatory programs designed to protect waters of the United States (WOTUS). Our collaboration has involved programs such as the CWA section 404 permit program for dredged or fill material, state and tribal water quality standards for wetlands, CWA section 401 water quality certification of federal licenses and permits, as well as determining the jurisdictional status of wetlands and other waters as WOTUS.

The CWA regulates discharges to “navigable waters,” defining the term to mean “the waters of the United States, including the territorial seas.” This single definition of jurisdictional boundaries applies to all regulatory provisions of the Act, including permit programs for discharges of dredged
or fill material, and for other polluting discharges, water quality standards, and oil spill prevention and cleanup. Whether a particular waterbody is jurisdictional as a “water of the United States” is a key threshold question for determining whether a discharge into that water will require a permit or otherwise be regulated under the CWA. As such, not surprisingly the scope of “the waters of the US” has been subject to considerable litigation, including three U.S. Supreme Court decisions, and several definitional rulemakings and implementation guidance by the U.S. Environmental Protection Agency and the Army Corps of Engineers (collectively referred to hereafter as “the Agencies”). NAWM strongly supports the agencies’ intention to revise the regulatory definition of WOTUS to be more environmentally protective and more reflective of peer-reviewed science. We submit this letter to assist in development of a proposed rule.

The NAWM letter addresses the following key issue areas:

1. Importance of Working with States and Tribes to Define WOTUS
2. Importance of a Durable Regulatory Definition of WOTUS
3. Importance of Proceeding to Rule 2
4. Environmental Justice Remains an Essential Consideration
5. Impacts of Climate Change and the Need for Climate Resiliency Must be Considered when Developing a WOTUS definition.
6. Waters Included in the Definition of WOTUS
   a. Traditional Navigable Waters
   b. Interstate Waters
   c. “Other” Waters
   d. Impoundments
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   b. NWPR’s “Typical Year” Implementation Challenges
   c. Regional Streamflow Duration Methods
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   e. WETS Tables
   f. Antecedent Precipitation Tool
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   i. Ongoing Coordination with the Corps
8. Considerations for Rule 2
9. Closing
1. Importance of Working with States and Tribes to Define WOTUS

The CWA uses a cooperative federalism approach to achieve its goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters. For example, the statute authorizes states (and tribes with Treatment as a State authority (TAS)) to implement the section 402 and 404 permitting programs. The CWA likewise establishes a role for states and tribes with TAS in implementing several other programs central to achieving the Act’s objective, such as administering the water quality standards program and impaired waters and total maximum daily loads program under section 303. Section 401 provides states and authorized tribes with authority to approve proposed federal permits and licenses that may result in a discharge into WOTUS. As a result, under the CWA states and tribes have a co-regulator relationship with the federal agencies and therefore a very strong interest in how WOTUS is defined.

Changes in the definition of WOTUS and scope of federal jurisdiction have significant direct and indirect impacts on states and tribes. Direct impacts arise because a changed WOTUS definition alters the extent of federal protection of vital clean water resources, and indirect impacts occur where the changed WOTUS definition alters the existing relationships among multiple state, tribal, federal, and local authorities that protect an array of public resources while minimizing overlap and delay of necessary permit processes.

In addition to being most familiar with existing relationships among the multiple water quality protection authorities, state and tribal coregulators have almost fifty years of experience implementing CWA programs. As a result, input from states and tribes is critical to ensure the revised definition of WOTUS developed under Rule 1 is defensible, informed by science and implementation experience, and is (as the agencies emphasize is their rulemaking goal) a durable rule.

NAWM appreciates the agencies’ outreach to date, including a focus on identifying regional issues through regional meetings. Moving forward with the WOTUS rulemaking process, NAWM encourages the agencies to have a series of interactive meetings with states and tribes both when finalizing Rule 1 and developing Rule 2. Meaningful engagement means actual collaborative discussion and troubleshooting. The value of state and tribal opportunity to provide meaningful input can be seen in past EPA and Army Corps efforts to garner input for defining WOTUS. We would like to propose that EPA and the Corps reach out to the governors and tribal leaders to invite them or their designees to participate in a future workshop or workshops focused on regional challenges given the differences in climate, geography, hydrology, and legal doctrines that are constraints to water, wetlands and water quality administration, in advance of initiating the second rulemaking process. We would be happy to assist in organizing co-regulator meetings similar to the workshop held at EPA headquarters on March 8-9, 2018, for states and March 10-11 for tribes. Those meetings stood out as an unusually open and frank discussion about possible paths forward in writing a new rule. A representative number of states and tribes were able to discuss federal and state responsibilities under the CWA. Rulemaking benefits from the engagement of those who must, in the end, implement those rules.

2. Importance of a Durable Regulatory Definition of WOTUS

As EPA Administrator Michael Regan noted in the press release announcing the proposed Rule 1 WOTUS definition, “[i]n recent years, the only constant with WOTUS has been change, creating a whiplash in how to best protect our waters in communities across America. Through our engagement with stakeholders across the country, we’ve heard overwhelming calls for a durable definition of WOTUS that protects the environment and that is grounded in the experience of those who steward our waters.” Administrator Regan is very correct: states and tribes face substantial difficulty implementing CWA programs when the waters protected by those programs is in a state of what feels like perpetual flux. States and tribes have been struggling to keep up with the rapid and dramatic changes in the WOTUS
definition, especially under the 2020 Navigable Waters Protection Rule (NWPR). Clear and efficient protection of the nation’s waters requires a stable and clear definition of what waters are protected.

The Agencies indicate their Rule 1 objective is to have a durable regulatory definition of WOTUS. NAWM agrees that a durable rule must be based strongly on both law and science and be capable of being implemented. A major shortcoming of the 2020 NWPR was its reliance on policy goals rather than legal precedent or scientific foundation. States and tribes have been repeatedly faced with the task of aligning their laws and regulatory programs with each new WOTUS Rule, needing to revisit and revise their program to conform with a new definition of protected waters. Such revisiting can consume substantial state and tribal administrative resources, and provides uncertainty for project proponents regulated under state and tribal programs,

NAWM believes that a new WOTUS Rule will only be “durable” if the rule clearly defines WOTUS in a scientifically and legally informed manner, and appropriately protects the nation’s waters consistent with CWA goals. The four different regulatory definitions developed since 2015 succeeded in providing clarity to varying extents. Some of that clarity, such as many policies under the 2020 NWPR, had little or no basis in science and was not environmentally protective. Other approaches, such as the 2015 Clean Water Rule (CWR) approach to impoundments, seemed based in science but was not particularly clear. A durable rule should clearly address categories of jurisdictional waters, the status of ditches, excluded waters and other features, definitions of key terms such as “tributary,” and other issues that have remained difficult to define.

3. Importance of Proceeding to Rule 2

The Agencies emphasize Rule 1 is a “foundational rule to restore longstanding protections,” and Rule 2 will build on that regulatory foundation. The agencies’ objective in Rule 1 is to interpret WOTUS to mean the waters defined in the familiar 1986 regulations, with amendments to reflect the U.S. Supreme Court decisions in SWANCC and Rapanos.

In so doing, the Rule 1 Proposal establishes only four categories of waters that are considered WOTUS without the need for further analysis: traditional navigable waters (TNWs), interstate waters, territorial seas, and impoundments of waters not considered “other” waters. All tributaries, wetlands, “other” waters, and impoundments of “other waters” require a case-specific analysis of relative permanence or presence of a significant nexus before determining jurisdiction. The proposal notes that “[w]hile 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.” The recognition that case-specific determinations are not unique to WOTUS neither addresses increases in uncertainty caused by having fewer categories of per se jurisdictional waters, nor increases in administrative and field effort in determining whether or not the waters are WOTUS.

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1 See, e.g., 86 Fed.Reg. 69372, 69386 (December 7, 2021), where the agencies observe the Rule 1 Proposal “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 caselaw, the Act, and the best available science.”


The Rule 1 Proposal, if finalized in its current form, would provide a platform for use in Rule 2 of peer-reviewed scientific literature to identify categories of waters that, individually or in combination, meet either the relatively permanent or significant nexus standards and therefore are WOTUS. For example, the Rule 1 Proposal discusses at length the numerous functions tributaries play in protecting the integrity of downstream foundational waters, such as trapping, storing, and modifying pollutants, and slowing and attenuating floodwaters. The proposal also discusses the important functions that adjacent wetlands provide to foundational waters, such as retention of sediment and prevention of drinking water contamination. The proposal discusses with approval the Connectivity Report prepared in support of the 2015 Clean Water Rule (CWR), which concluded peer-reviewed scientific literature demonstrated that tributaries and wetlands in the floodplain have important effects on the chemical, physical, and biological integrity of foundational waters that the CWR interpreted as indicating those waters had a significant nexus and therefore were categorically WOTUS. When commenting on the 2015 CWR, the independent EPA Science Advisory Board (SAB) explained “scientific literature has established that ‘other waters’ can influence downstream waters, particularly when considered in aggregate” and there is adequate scientific evidence to support a determination that certain subcategories and types of “other waters” in particular regions of the United States could be considered WOTUS categorically. The Technical Support Document supporting the Rule 1 Proposal summarizes peer-reviewed scientific literature developed since the 2015 Connectivity Report. The Technical Support Document and the SAB’s 2014 evaluation further support categorically asserting jurisdiction over tributaries, adjacent wetlands, and some “other” waters. A Rule 2 definition could incorporate additional categories of WOTUS that do not require a case-specific analysis based on available scientific literature, thereby reducing jurisdictional uncertainty and administrative burden. As discussed in this letter, peer-reviewed scientific literature supports a conclusion that tributaries and adjacent wetlands both have important effects on the integrity of downstream waters, a conclusion that could serve as a basis for determining such waters are categorically WOTUS. It may be possible to establish these WOTUS categories in a final Rule 1, although to do so may create a “logical outgrowth” challenge to Rule 1. As a result, NAWM strongly encourages the agencies to promulgate a Rule 2 expeditiously, and in that rule create additional categories of WOTUS that are supported by scientific literature and consistent with CWA authorities. Without additional categories of waters that do not require a case-specific analysis before being considered jurisdictional, a definition of WOTUS would cause more uncertainty, confusion, and administrative burden than is necessary.


NAWM supports EPA’s conclusion that the NWPR, through its categorical exclusion of ephemeral streams, disproportionately disadvantaged and impacted tribes and populations of concern in the arid West (as well as in other parts of the country). Ephemeral wetlands and streams provide valuable sources of water during drought due to their ability to absorb a significant amount of water and temporarily store it during precipitation and snow melt events. Tribes in the arid west are particularly dependent on these

aquatic ecosystems for providing clean drinking water as well as essential habitat for subsistence harvesting. Ephemeral wetlands were protected by federal jurisdiction under the CWR but were removed from federal jurisdiction under the NWPR. With extreme heat and drought events increasing due to climate change, these communities are increasingly at risk. Tribes were nearly unanimous in their opposition to the NWPR due to concerns regarding negative environmental impacts and tribal obligations and several tribes even sued to invalidate the NWPR.

Environmental justice concerns for low-income communities in general remain high under the Trump Administration’s definition of WOTUS. Many socially vulnerable populations are disproportionately located in flood-prone areas. These flood-prone lands were developed for low-income housing - a vestige of redlining created by past federal policies. Thus, these low-income communities are at greater risk of flood impacts, including property damage and loss of life. Flood risk for these areas significantly increased under the NWPR as federal protections were withdrawn. Not surprisingly, many of these flood-prone communities consist primarily of minorities and communities of color.

As discussed in our comments from October 4, 2021, some states, tribes, territories, and local communities may be able to fill the gap with new regulations of their own to protect aquatic resources left behind by the federal government. However, many, particularly those that are underserved, cannot or will not adopt their own regulations either due to existing state or local regulations that prohibit them from going above and beyond the floor of protection offered by the CWA or because they lack the technical and/or financial capacity to take on the added responsibility. Identification of WOTUS thus must not be too onerous but also sufficiently protective of vulnerable populations. NAWM urges the Corps and EPA to take into consideration the resources available and the capacity to implement a new rule so that water resources in ALL states and tribes, not only those with access to the most robust regulatory systems and the resources to implement them, are protected.

5. Impacts of climate change and climate resiliency must be considered when developing a WOTUS definition.

Both environmental justice and climate change should be overarching considerations as the agencies develop a definition of WOTUS. For example, some climate-related functions such as flow regime may be relevant to a significant nexus evaluation, while ecosystem services such as carbon storage may not be a significant nexus consideration but provide an important broader context for policymaking. Similarly, cultural traditions in tribal and low-income communities are an important policymaking consideration.

The dynamic interplay between wetlands and climate is extremely complicated. The way in which the chemical, biological and physical attributes of wetlands intersect with each other is analogous to a spider web as even minor changes in any of the three attributes can have significant impacts on how the remaining attributes perform their functions. As noted by Moomaw, et al, “Wetlands sequester some of the largest stores of carbon on the planet, but when disturbed or warmed, they release the three major heat-trapping greenhouse gases (GHGs), carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O).” Freshwater wetlands (approximately 91 percent of the wetland area in the continental U.S.) contain over 90 percent of the soil carbon stored in wetlands. Thus, a primary recommendation by scientists across the globe for addressing climate change is to avoid disturbing wetlands.


Wetlands are being substantially affected by even smallest changes in climate, including changes in hydrologic regimes due to sea level rise and decreased surface and ground water levels, air temperature changes, and soil temperature changes. Temperature, atmospheric carbon levels, and precipitation rates are strongly linked to wetland type, condition, and function. Reduced precipitation levels are likely to decrease surface water levels and flow, which will impact the adjacency parameters for their neighboring wetlands, resulting in an increase in isolated wetlands (e.g., ephemeral wetlands). Ephemeral wetlands and streams can have a significant impact on downstream water quality and quantity, even across state or tribal boundaries. Therefore, federal protections for ephemeral wetlands and streams are critical considering the uncertainty and risk to public health associated with climate change.

As discussed in the above section on environmental justice concerns, climate change worsens flood risk and endangers communities, particularly those that have the least capacity to mitigate and adapt to climate change. More extreme storms are expected in the near future, highlighting the importance of protecting wetlands which can serve as essential buffers against flooding and storm surges. Climate change will also affect water temperatures and flows which can result in increased fish disease and mortality. Tribal and low-income minority communities, that rely on fish and other aquatic life for food, income and cultural traditions, are disproportionately impacted by the lack of federal aquatic resource protections.

NAWM recommends that in order to fulfill the Biden administration’s commitment to address environmental justice inequities and climate change, the Agencies must address climate change in defining “waters of the United States” and extend broad protections to wetlands and streams that assist in combating the effects of a warming climate.

6. Waters Included in the Definition of WOTUS

The Rule 1 Proposal poses several questions regarding specific categories of WOTUS. This letter addresses each of those proposed jurisdictional categories of waters in turn.

   a. Traditional Navigable Waters (TNWs)

The Rule 1 Proposal retains the 1986 provision defining WOTUS as including “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 that are subject to the ebb and flow of the tide.”\(^{12}\)

The agencies indicate they intend to interpret the scope of these TNWs consistent with their longstanding guidance. Under “Appendix D,” a TNW includes waters a Corps District has determined to be a TNW based on physical criteria laid out in Corps regulations, waters that meet regulatory criteria, waters declared by a federal court to be navigable-in-fact, and waters that are navigable-in-fact under standards used by the federal courts.\(^{13}\) **NAWM supports the proposed Rule 1 approach to TNWs, which is consistent with longstanding guidance.** As the proposal preamble emphasizes, the longstanding approach is familiar with state and tribal co-regulators as well as the general public.

The Rule 1 Proposal seeks comment on whether the final Rule 1 should, in the interest of streamlining the WOTUS definition, combine the provisions for TNWs, interstate waters, and the territorial seas into one category of WOTUS. The Proposal considers these three categories of waters to be “foundational,” with the jurisdictional status of tributaries, adjacent wetlands, and “other” waters dependent on their relationship to the integrity of foundational waters. **NAWM supports combining TNWs and the territorial seas into a single category,** in part because we are unfamiliar with a territorial sea that would

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\(^{12}\) 33 C.F.R. 328.3(a)(1); 86 Fed.Reg. 69372, 69416 (December 7, 2021).
\(^{13}\) Id. at 69416-7; see also “U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook, Appendix D, 'Traditional Navigable Waters.'"
not be subject to the ebb and flow of the tide and therefore also a TNW. **NAWM strongly supports inclusion of interstate waters as WOTUS and foundational (see discussion below). However, we believe interstate waters should remain its own category** and not be combined with TNWs and territorial seas. Interstate waters raise additional issues less relevant to other foundational waters, such as the interstate status of waters crossing tribal boundaries and geographic limits on waters considered interstate. It may be difficult and confusing to address these and other issues specific to interstate waters in one combined foundational water category, because the interpretations unique to interstate waters could be incorrectly imputed to TNWs and territorial seas.

An issue associated with the scope of TNWs is when a water is “susceptible to being used in the future for commercial navigation, including commercial waterborne recreation.” The Agencies have not always agreed on what constitutes susceptibility to commercial navigation, with the resulting confusion affecting states and tribes implementing CWA programs in WOTUS. **NAWM recommends that the agencies clarify circumstances under which a water is susceptible to commercial navigation and therefore a TNW. Such clarification ideally would be in the final Rule 1 or Rule 2, although clarification in associated guidance could also be helpful.**

b. **Interstate Waters**

The Rule 1 Proposal restores the 1986 provision defining WOTUS as including “all interstate waters including interstate wetlands.” The Proposal considers interstate waters as “foundational waters,” along with traditional navigable waters and the territorial seas, and as a result are considered categorically WOTUS without the need for further analysis.14

**NAWM strongly supports inclusion of interstate waters as categorically WOTUS and foundational, with tributaries, adjacent wetlands, and “other” waters considered WOTUS based on their relationship to the integrity of interstate waters.** As detailed in NAWM’s October 2021 pre-proposal comments submitted as part of the Federalism consultation process, the CWA’s legislative history, statutory provisions, policy goals, the history of federal jurisdiction over interstate waters prior to the 1972 CWA, and CWA regulatory history all provide strong support for including interstate waters and their tributaries and adjacent waters within the scope of WOTUS.

The primary goal of the 1972 CWA, to restore and maintain the chemical, physical, and biological integrity of the nation’s waters,15 cannot be met unless interstate waters are regulated at the federal level. One of the primary CWA obligations of the federal agencies is to protect states and tribes from actions of upstream or neighboring states or tribes that harm downstream interstate waters. That obligation is not met if interstate waters are not categorically a WOTUS.

The 2020 NWPR did not include interstate waters as a category of WOTUS. Its preamble indicated “interstate waters without any connection to traditional navigable waters would be more appropriately regulated by the states…”16 The preamble also indicates the 2020 definition of WOTUS “preserves the traditional sovereignty of States over their own land and water resources.”17 Yet removing jurisdiction from interstate waters would serve only to place the financial and administrative burden of preventing the degradation of these waters on multiple state governments and ultimately the Supreme Court. A state or tribe has no mechanism -- short of a series of legal water wars fought in the Supreme Court -- to compel an upstream state to control pollution of waters flowing downstream if not regulated by the CWA. The result is a need for federal authority reflected in a regulatory definition of WOTUS. The CWA framework was intended to avoid precisely this type of litigation.

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Justice Scalia noted the importance of the federal agencies in regulating interstate waters in his *Rapanos* opinion: “...the Act protects downstream States from out-of-state pollution that they cannot themselves regulate.”¹⁸ In short, federal jurisdiction over interstate waters rather than threatening state sovereignty, protects it.

A final Rule 1 including interstate waters categorically as WOTUS will need to precisely define the term “interstate.” The Federal Water Pollution Control Act (FWPCA) defined “interstate waters” as “all rivers, lakes, and other waters that flow across, or form a part of, State boundaries.”¹⁹ However, issues arise not addressed by the FWPCA or similar definition. For example, does a lengthy interstate water remain an “interstate water” regardless of the distance from the border, and if it does not what is a clear demarcation of when the water stops being interstate?

The Rule 1 Proposal preamble indicates one potential method of determining the extent of a riverine interstate water is the use of stream order, with the water considered “interstate” upstream and downstream of the state boundary for the entire length that the water is of the same stream order.²⁰ The Proposal similarly notes that interstate lakes, ponds, and wetlands could be considered an “interstate” for the entirety of the water’s delineated extent.²¹ Another method of demarcation noted in the Proposal is a prescribed distance from the state border, which may or may not vary regionally. **NAWM supports the use of stream order as a consideration for identifying the extent of a riverine interstate water but believes it should not be the only consideration.** Boundaries of the watershed also should be relevant to identifying extent of a riverine interstate water. NAWM suggests the agencies consider including in the definition of WOTUS any water or wetland in an interstate HUC 12 watershed that has the potential to impact water quality or flooding in a downstream state in that same watershed.

A HUC-12 watershed-based approach to federal protection of waters and wetlands which have the potential to impact water quality or flooding in a downstream state would help address the downstream state/tribal issue with the proposed WOTUS definition. A significant nexus test could also be retained for larger than HUC 12 watersheds which are interstate. A confluence for a stream order may have smaller tributaries only a few feet from the stream boundary. Similarly, there may be a different water type associated with a delineated wetland in close proximity to the boundary. Use of applicable CWA section 401(a)(2) determinations may also be helpful in identifying extent of a water’s effects, and thereby inform the extent of a water that should be considered interstate. **NAWM supports the Rule 1 proposal’s suggestion that non-riverine interstate waters be considered to include as “interstate” the entire water.**

Both stream order and delineations are methods very familiar to state and tribal co-regulators, federal agency field staff, and the regulated public. As a result, these methods should be predictable and capable of being implemented. The Agencies should also consider adopting a regional approach to the extent of an interstate water. **NAWM observes that the issue of extent of an interstate water may benefit from regional approaches.**

Another issue associated with the definition of “interstate” is that of tribal boundaries, and whether a water crossing or forming a tribal boundary is an interstate water for WOTUS definitional purposes. During consultation on the definition of WOTUS, tribes have raised this issue and many recommended

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¹⁹ FWPCA § 10, 62 Stat. 1161.
²¹ *Id.*
that “interstate waters” include waters associated with tribal boundaries.\textsuperscript{22} Previous definitions of WOTUS avoided speaking to the status of waters associated with tribal boundaries despite requests from tribes to do so. To consider such waters as “interstate” would be fully consistent with the longstanding approach to interstate waters, particularly in circumstances where a water crosses between state and tribal lands, thereby crossing or forming a state boundary as well as a tribal one. The same argument could apply to the “interstate” status of U.S. international boundaries. As a result, this interpretation would be consistent with tribal lands’ status as sovereign nations. Explicitly recognizing waters associated with tribal boundaries as “interstate” would be clearer than any prior WOTUS definition and be fully consistent with Executive Orders and Memoranda signed by President Biden pledging to recognize and respect tribal sovereignty.\textsuperscript{23}

In summary, \textbf{NAWM recommends that a revised definition of WOTUS include a category for interstate waters.} As discussed above, interstate waters may be the water that is most clearly WOTUS because they are the waters of the several states and, therefore, the United States. Such a policy would be consistent with the CWA’s text and legislative history, reflect prior regulatory approaches, and help protect the quality of downstream waters. \textbf{NAWM also recommends that the final Rule 1 identify tributaries to interstate waters as WOTUS, as well as waters and wetlands adjacent to such tributaries.} If tributaries to interstate waters are not within the scope of CWA protections as WOTUS it will be difficult to ensure the chemical, physical, and biological integrity of interstate waters are restored and maintained. Finally, \textbf{NAWM recommends that a revised definition of WOTUS define “interstate waters” as including waters that cross or form tribal boundaries.} To do so would be responsive to past requests during tribal consultation, be clearer than previous definitions, and be consistent with President Biden’s call for recognition and respect for tribal sovereignty.

c. “Other” Waters

The Rule 1 Proposal refers to waters and wetlands not physically proximate to WOTUS as “other” waters, incorporating the 1986 regulatory definition’s name for such waters. The Proposal considers “other waters” as jurisdictional if they meet either the relatively permanent or significant nexus standards. This reflects a change from the 1986 regulatory definition in that it incorporates the \textit{Rapanos} standards for jurisdiction while removing references to interstate commerce.\textsuperscript{24}

“Other waters” can play important roles in the aquatic ecosystem, including wetlands and waters that are not considered traditional navigable waters, interstate, tributary, or adjacent. In its review of the adequacy of the scientific and technical basis of the proposed 2015 CWR, the EPA Science Advisory Board (SAB) found that “scientific literature has established that ‘other waters’ can influence downstream waters, particularly when considered in the aggregate.”\textsuperscript{25} The SAB found “it appropriate to define ‘other waters’ as waters of the United States on a case-by-case basis, either alone or in combination with similarly situated waters in the same region.”\textsuperscript{26}

\textsuperscript{22} 86 Fed.Reg. 69372, 69418 (December 7, 2021); \textit{See also} EPA and Department of the Army, “Final Summary of Tribal Consultation for the Clean Water Rule: Definition of ‘Waters of the United States’ Under the Clean Water Act; Final Rule at 7 (May 2015).
\textsuperscript{23} \textit{See, e.g.,} “Tribal Consultation and Strengthening Nation-to-Nation Relationships,” Memoranda signed by President Biden signed on January 26, 2021.
\textsuperscript{24} 86 Fed.Reg. 69372, 69418 - 69420 (December 7, 2021).
\textsuperscript{26} \textit{Id.}
These “other” waters typically were not protected under the 2020 NWPR but would have been considered as WOTUS under the 2015 CWR if they were shown to have a significant nexus to a traditional navigable water or interstate water. EPA and the Corps decided to not categorically declare a subset of “other” waters to be WOTUS in the 2015 rule. Instead, the CWR indicated that WOTUS included “other” waters found to have a significant nexus.

In 2014 the EPA Science Advisory Board stated there is “adequate scientific evidence to support a determination that certain subcategories and types of ‘other waters’ in particular regions of the United States … have a similar influence on the chemical physical, and biological integrity of downstream waters … and thus could be considered waters of the United States.”27 As summarized in the Rule 1 Proposal’s Technical Support Document discussing recent peer-reviewed literature28, science has continued to develop and may now provide a solid basis for determining some subsets of “other” waters are categorically WOTUS without the need for a case-by-case significant nexus evaluation. As a result, NAWM is supportive of the Rule 1 Proposal’s definition of WOTUS that considers “other” waters to be jurisdictional where the water meets either the significant nexus or relatively permanent standard. NAWM also recommends that where peer-reviewed scientific literature documents an important effect “other” waters have on the integrity of foundational waters, either individually or in combination, the agencies consider establishing categories of per se jurisdictional waters as they finalize Rule 1.

While the Rule 1 Proposal does not explicitly suggest such categories, one could argue the extensive discussion of effects “other” waters have on foundational waters found in both the proposal preamble and Technical Support Document would avoid creating a “logical outgrowth” problem were a final Rule 1 to create some sub-types of categorical “other” waters. If the agencies conclude categories of jurisdictional “other” waters are not appropriate to establish in a final Rule 1, NAWM strongly suggests they be considered during Rule 2 development.

d. Impoundments

Impoundments have been a difficult issue as EPA and the Army Corps have defined WOTUS over the past decades. The Supreme Court has confirmed that impounding a WOTUS water does not make the water non-jurisdictional.29 It is also possible that an impoundment of a non-jurisdictional water could make the impounded water a WOTUS if it has become navigable-in-fact.30 However, jurisdictional status is uncertain where a water is impounded by an appropriately permitted structure that completely and permanently severs surface or subsurface hydrologic connections to a foundational water. In this circumstance, it is unclear if the water could meet a significant nexus standard. On the one hand, the water now lacks hydrologic connections to a foundational water, and as a result may lack a chemical or biological connection as well. On the other hand, Justice Kennedy’s opinion in Rapanos suggests that it may be the absence of a hydrologic connection to foundational waters that creates a significant nexus that makes the water a WOTUS.31

The Rule 1 proposal retains the 1986 provision that includes impoundments of jurisdictional waters as categorically WOTUS, but with one change. Impoundments of waters that are jurisdictional under the “other waters” provision would not be considered WOTUS on the basis of being an impoundment. The proposal does provide, however, that an impoundment of an “other water” could be WOTUS as an “other water” if it meets either the relatively permanent or significant nexus standard. This is a distinction with

27 Id.
practical effect: an impoundment of an “other” water does not change the jurisdictional status of its tributaries or wetlands adjacent to it.\textsuperscript{32}

The Rule 1 Proposal asks for comments on whether waters without a hydrologic connection should be considered jurisdictional categorically as an impoundment or whether such waters should be evaluated under the “other” waters provision of the regulation. Evaluating jurisdictional status of hydrologically disconnected impoundments as “other” waters requires consideration of whether they meet either the relatively permanent or significant nexus standard. This seems a defensible approach given ambiguities about the importance of hydrologic connections to jurisdiction.

\textbf{NAWM supports the approach to impoundments in the Rule 1 proposal because it seems a reasonable compromise among factors in a significant nexus evaluation, is consistent with the goals of the CWA and scientific literature and appears defensible.}

c. Tributaries

The Rule 1 Proposal provides that tributaries to foundational waters, either directly or indirectly through another jurisdictional water, can be WOTUS if they meet either the relatively permanent or significant nexus standard. This is consistent with the tributary provision of the 1986 rule, updated to reflect \textit{Rapanos}.\textsuperscript{33} The Rule 1 Proposal deletes the 1986 rule’s cross-reference in the tributary provision to “other” waters as being waters to which a tributary may connect and be determined WOTUS. As a result, under the Proposal tributaries to an “other” water would itself be considered as an “other” water and would require showing the tributary has a relationship with a foundational water such that it meets either the relatively permanent or significant nexus test.\textsuperscript{34}

i. Definition of “Tributary.” The Rule 1 Proposal does not include a definition of “tributary,” but relies instead on longstanding interpretation of the term. Under the Proposal, tributaries include natural, man-altered, or man-made waterbodies that flow directly or indirectly into a TNW, interstate water, or territorial sea.\textsuperscript{35} This interpretation is found in the 2008 \textit{Rapanos Guidance}\textsuperscript{36} and in years of jurisdictional determinations. \textbf{NAWM supports the Proposed Rule’s longstanding interpretation of the term “tributary,” which does not distinguish among natural, human-altered, and human-made waters.} Distinguishing among natural, human-altered, and human-made waters can be quite difficult in practice and, as noted in the Proposed Rule preamble, such waters provide many of the same functions and have similar relationships with foundational waters.\textsuperscript{37}

\textbf{NAWM similarly supports the Proposed Rule’s conclusion that waters may be considered “tributary” regardless of their flow regime.} The 2020 NWPR provided that no ephemeral water could be considered tributary, which omitted protections from numerous ephemeral streams that peer reviewed science indicates have important effects on the integrity of downstream traditional navigable waters. As

\begin{itemize}
\item \textsuperscript{32}86 Fed.Reg. 69372, 69420 (December 7, 2021).
\item \textsuperscript{33}86 Fed.Reg. 69372, 69421 (December 7, 2021).
\item \textsuperscript{34}Id.
\item \textsuperscript{35}86 Fed.Reg 69372, 69422 (December 7, 2021).
\item \textsuperscript{36}The 2008 guidance, “Clean Water Jurisdiction Following the U.S. Supreme Court’s Decision in \textit{Rapanos} v. \textit{United States} \& \textit{Carabell} v. \textit{United States}” (December 2, 2008) provides that ephemeral tributaries (flowing only in direct response to rainfall) are WOTUS if they have a significant nexus to a downstream TNW. Following the 2008 Guidance the agencies asserted jurisdiction over ephemeral tributaries with a significant nexus, with Corps online data indicating virtually all ephemeral tributaries were found jurisdictional until the 2020 NWPR took effect. For example, EPA and the Corps issued a joint memorandum in 2007 asserting jurisdiction over a first-order ephemeral stream in Riverside County, California, based on its significant nexus to a TNW. Joint memoranda providing resolution to jurisdictional issues elevated to EPA and Corps headquarters can be found on the Corps’ website: \url{https://www.usace.army.mil/missions/civil-works/regulatory-program-and-permits/juris_info/}
\item \textsuperscript{37}86 Fed.Reg 69372, 69422 (December 7, 2021).
\end{itemize}
discussed in NAWM’s Pre-Proposal Comments submitted on October 1, 2021, considering ephemeral tributaries to categorically not be WOTUS would be inconsistent with the goal of the CWA to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” As scientific literature indicates, ephemeral tributaries have important effects on the integrity of downstream rivers and other waters. In effect, protecting traditional navigable waters by regulating only perennial and intermittent tributaries to those waters and not ephemerals would be analogous to hoping your house is protected by locking the front door and windows even as you leave the back door not only unlocked but open.

NAWM encourages the final Rule 1 to include in regulatory text a definition of “tributary” consistent with these principles. While it is helpful for the preamble to discuss the Agencies’ interpretation of tributary, including the interpretation in actual rule text provides considerably more clarity and predictability. Because of the extensive discussion about such an interpretation of tributary in the Rule 1 Proposal preamble and Technical Support Document, the public has had an opportunity to comment on the interpretation. As a result, inclusion of the interpretation in rule text should not create a “logical outgrowth” legal vulnerability.

**ii. When Tributaries are WOTUS.** The Proposal’s preamble discusses the functions that tributaries serve and the impacts they have on foundational waters. The proposal summarizes the 2015 Connectivity Report’s discussion regarding tributaries, which concluded that all tributary streams, regardless of flow regime, are chemically, physically, and biologically connected to larger downstream waters, and have an important effect on the integrity of those downstream waters. The 2015 Clean Water Rule concluded this scientific evidence supported assertion of jurisdiction as WOTUS over all tributaries categorically. The Proposed Rule’s Technical Support Document provides updates of more recent literature while confirming the continued validity of the 2015 Connectivity Report’s conclusions. However, the Rule 1 Proposal does not assert jurisdiction over tributaries categorically based on available scientific literature, but instead calls for a site-specific evaluation of whether a tributary meets either the relatively permanent or significant nexus standard.

**NAWM supports the Rule 1 Proposal’s definition of WOTUS that considers tributaries to be jurisdictional where the water meets either the significant nexus or relatively permanent standard.** The final Rule 1 preamble and associated technical guidance should recognize that relatively permanent flow includes perennial and intermittent (base) flow, and that neither need be present during drought periods. The final Rule 1 also should recognize the importance of ephemeral waters, nationwide but particularly in the more arid areas of the United States. Such waters should be regulated as tributaries with appropriate regional considerations through field guidance and general permits.

**NAWM also recommends that where peer-reviewed scientific literature documents an important effect that tributaries have on the integrity of foundational waters, constituting a significant nexus either individually or in combination, the agencies consider establishing tributaries as a category of per se jurisdictional waters as they finalize Rule 1.** As discussed in the “other” waters” section above, while the Proposal does not explicitly propose this categorical approach to tributaries, one could argue the extensive discussion of effects tributaries have on foundational waters found in both the proposal preamble and Technical Support Document would help avoid a “logical outgrowth” problem. If the

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38 CWA 101§(a), 33 U.S.C. §1251(a).
agencies conclude tributaries are not appropriate as a per se categorical WOTUS in a final Rule 1, NAWM strongly suggests they be considered during Rule 2 development.

iii. When Ditches May Be Jurisdictional as Tributary. Ditches have historically been one of the most challenging issues when defining WOTUS. The concept of “ditch” remains vague and the term not well-defined, in part because naturally occurring streams often have been modified by humans, and from the scientific point of view, constructed ditches often function as tributaries with effects on the stream network similar to those of naturally occurring streams. The CWA and its legislative history do not resolve the jurisdictional issue for ditches, other than indicating some ditches are jurisdictional by providing statutory exemptions for certain activities discharging dredged or fill material in jurisdictional ditches.\textsuperscript{41} EPA and the Corps have considered various approaches to ditches prior to the 2015 CWR and 2020 NWPR, such as including as WOTUS all tidal ditches while excluding non-tidal ditches from WOTUS regardless of flow regime,\textsuperscript{42} generally excluding ditches excavated on dry land but evaluating specific ditches on a case-by-case basis,\textsuperscript{43} and excluding ditches (including roadside ditches) excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water.\textsuperscript{44}

Under the 2015 Clean Water Rule (CWR) ditches were considered WOTUS where they met the definition of “tributary” and were not expressly excluded.\textsuperscript{45} Examples of jurisdictional ditches under the CWR include ditches with perennial flow, ditches with intermittent flow that are excavated in or relocating a tributary or are draining wetlands, and ditches excavated in or relocating a tributary regardless of flow.\textsuperscript{46} The CWR expressly excluded ditches with ephemeral flow that are not excavated in or relocating a tributary, ditches with intermittent flow that are not excavated in or relocating a tributary and do not drain wetlands, and all ditches that do not flow into a traditional navigable water, interstate water, or territorial sea.\textsuperscript{47} Like the CWR, the 2020 Navigable Waters Protection Rule (NWPR) identified some ditches as jurisdictional tributaries and excluded others from jurisdiction, based in part on their flow regime. Under the NWPR, ditches constructed in or relocating a tributary were considered WOTUS, as were ditches constructed in adjacent wetlands, so long as they contribute perennial or intermittent flow in a typical year to a traditional navigable water.\textsuperscript{48} For the first time, the NWPR defined “ditch,” indicating “the term ‘ditch’ means a constructed or excavated channel used to convey water.”\textsuperscript{49}

All approaches have been subject to criticism, whether for jurisdictional purposes they focused on the natural versus man-made characteristics, on flow regime, on use for which the ditch was created, or on the effects of the ditch on the tributary system and its downstream traditional navigable waters.

NAWM agrees with the Agencies that clarity about the status of ditches is very important, and that ditch status must be consistent with the goals and agency authorities under the CWA and be capable of being implemented. This suggests at least three possible approaches: 1) focus on a ditch’s role in the tributary system, 2) focus on the purpose for which the ditch was created, and 3) a focus on

\textsuperscript{41} CWA §404(f), 33 U.S.C. §1344(f). Canons of statutory interpretation include the concept that Congress would not enact a nullity, suggesting that at least some ditches are WOTUS or certain activities would not need permit exemptions. See generally, e.g., Congressional Research Service, “Statutory Interpretation: Theories, Tools, and Trends” (April 5, 2018).

\textsuperscript{42} 40 Fed.Reg. 31320, 31321 (July 25, 1975).

\textsuperscript{43} 51 Fed.Reg. 41206, 41217 (November 13, 1986).

\textsuperscript{44} EPA and the 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,” 1, 12, (December 02, 2008)

\textsuperscript{45} 80 Fed.Reg. 37054, 37078 (June 29, 2015); 33 C.F.R. §328.3(c)(3).

\textsuperscript{46} Id.

\textsuperscript{47} Id. at 37097; 33 C.F.R. §328.3(b)(3).

\textsuperscript{48} 85 Fed.Reg. 22250, 22295 (April 21, 2020); 33 C.F.R. §328.3(c)(12).

\textsuperscript{49} 33 C.F.R. §328.3(c)(2).
both a ditch’s effects on the tributary system and whether it was created in upland or in waters. Each approach is explored in the discussion below.

Focus on Ditch’s Role: The primary goal of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters,”50 indicating that agency decisions interpreting key terms and implementing statutory programs should be done in a manner consistent with that goal and with results furthering that goal. This suggests an approach that regulates ditches functioning as tributaries with a significant nexus to the chemical, physical, or biological integrity of downstream waters, regardless of their origins or purpose. This approach would protect as WOTUS those ditches with a significant nexus, as well as tidal ditches and ditches that are excavated in or relocate tributaries. Ditches not connected to or otherwise impacting the tributary system would be excluded from jurisdiction under this approach. A challenge with this approach would be the number of ditches potentially jurisdictional and the associated administrative burden of applying CWA programs to those ditches, which would affect not only the number of jurisdictional determinations and discharge permits potentially required but also the number of waters in need of CWA water quality standards.

Focus on Ditch’s Purpose: An alternative approach to ditches would be not to focus on whether a ditch is functioning as tributary, but instead to consider the ditch’s origins and exclude specific categories of ditches from WOTUS based on the purpose for which the ditch was created, such as roadside drainage or agricultural water delivery. One challenge of this approach is that natural waterbodies may provide functions consistent with public safety or food security as they run alongside a road or agricultural area. It would be difficult as a matter of science and law to distinguish CWA protections for “natural” waterbodies but not for human-altered waterbodies (as discussed earlier, distinguishing among natural, human-altered, and human-made waters can be very difficult). This approach would be responsive to various stakeholders who have sought an exclusion for their ditches for various reasons, such as public safety, food security, or an aversion to regulation. However, roadside ditches can drain roads and efficiently intercept the runoff from adjacent hill slopes, rapidly carrying that water to streams. Along with that water, ditches can transport road salts, fertilizers, viable pathogens, and other pollutants. Agricultural ditches can have similar functions. As a result, this approach would not be sensitive to the “restore and maintain” goal of the CWA because it would not consider a ditch’s impact on the integrity of the tributary system and downstream waters and could result in channelized or relocated streams being excluded from jurisdiction. The approach also requires historic information about the ditch’s original construction and purpose, which can be challenging to locate. In addition, the approach raises questions about jurisdictional status if the use of the ditch has changed since its construction.

Consider Both Ditch’s Role & Purpose: A third possible approach to ditches is a blend, considering the ditch impacts on the tributary system as well as its origins and functions. As noted in the 2015 CWR preamble,

“[M]odified and constructed tributaries perform the same functions as natural tributaries, especially the conveyance of water that carries nutrients, pollutants, and other constituents, both good and bad, to traditional navigable waters, interstate waters, and the territorial seas. … [and] also provide corridors for movement of organisms …. The important effect—and thus the significant nexus—between a covered tributary and a traditional navigable water, interstate water, and the territorial sea is not broken where the covered tributary flows through a culvert or other structure. The scientific literature recognizes that features that convey water, whether they are natural, modified, or constructed, provide substantial connectivity between streams and downstream waters. For example, ditches that meet the definition of tributary and are not excluded quickly move water downstream to traditional navigable waters, interstate waters, and

50 CWA §101(a), 33 U.S.C. §1251(a).
the territorial seas due to their often straightened and channelized nature, transporting downstream sediment, nutrients, and other materials.”

Under this third approach, tidal ditches would continue to be considered WOTUS. Non-tidal ditches could only be WOTUS if they have a bed and banks and another indicator of flow, connect directly or indirectly through other tributaries to a traditional navigable water or interstate water, and have at least one of the following four characteristics: (1) the ditch is a natural stream that has been altered, such as channelized, straightened, or relocated; (2) the ditch has been excavated at least partially in WOTUS including wetlands; (3) the ditch has at least intermittent flow or standing water, or (4) the ditch connects two or more jurisdictional WOTUS. This third approach likely is not as expansive as the first approach or scientifically problematic as the second approach. It would exclude ditches excavated only in uplands that drain only uplands or non-jurisdictional waters and have no more than ephemeral flow. As a result, most roadside and agricultural ditches would be excluded where they are excavated in uplands and have only ephemeral flow. It also would exclude ditches not connected to the tributary system. This approach to ditches is familiar and capable of being implemented because it is consistent with the Rapanos Guidance in effect from 2007 to 2015. This approach strikes a balance, including as WOTUS ditches with characteristics more likely to result in impacts to the stream network being evaluated as tributary, while ditches lacking those characteristics are identified as not tributary.

NAWM recommends this blended approach as described above -- that a revised definition of WOTUS consider ditches to be jurisdictional where they have the physical characteristics of a tributary, are relatively permanent or have a significant nexus to a foundational water and provide flow to a foundational water. While NAWM would prefer to protect all ditches functioning as tributary regardless of whether they are excavated in upland or in waters and regardless of their flow regime, we recognize that longstanding policy interpretation and implementation practice may preclude such a broad protection of ditches and so are recommending a blended approach.

Some project proponents may believe if a ditch is not a WOTUS it is not regulated. However, where a ditch is not considered tributary or another category of WOTUS, the ditch would be regulated under CWA section 402 as a “point source” if it were discharging a pollutant into a WOTUS. NAWM believes it would reduce misunderstandings if the final Rule 1 Preamble briefly discussed these regulatory implications for non-jurisdictional ditches.

f. Territorial Seas

The Rule 1 Proposal considers the territorial seas to be categorically WOTUS. This is fully consistent with the statutory definition of “navigable waters” – waters of the United States including the territorial seas. It also is the approach adopted by the 1986 definition of WOTUS, the 2015 Clean Water Rule, and the 2020 Navigable Waters Protection Rule.

The Rule 1 proposal asks for public comment on whether “territorial seas” should remain a category separate from traditional navigable waters (TNWs). As discussed above under TNWs, NAWM supports combining TNWs and the territorial seas into a single category, in part because we are unfamiliar with a territorial sea that would not be subject to the ebb and flow of the tide and therefore also a TNW.

g. Adjacent Wetlands

The Rule 1 Proposal retains the definition of “adjacent” unchanged from the 1986 regulations, which defined “adjacent” as meaning “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

52 86 Fed.Reg. 69372, 69422 (December 7, 2021)
53 33 U.S.C §1362(7), CWA §502(7).
are adjacent wetlands.” The definition of WOTUS has included adjacent wetlands as a categorically jurisdictional water since the mid-1970s.

The 2015 CWR kept the longstanding definition of “adjacent” but applied the concept not only to wetlands but to other waters as well, providing that wetlands, ponds, lakes, oxbows, impoundments, and similar water features could all be adjacent waters and therefore categorically WOTUS. The CWR based this interpretation on a scientific conclusion that non-wetland waters that were physically proximate to jurisdictional waters had a similarly important effect on the integrity of downstream waters. The CWR defined “neighboring” for the first time based on distance from jurisdictional waters or presence on a floodplain. The CWR also indicated that “adjacent” waters did not include waters that were subject to established normal farming, silviculture, and ranching activities as those terms are used in CWA section 404(f), although such waters could be determined to be WOTUS on a case-by-case basis.

The 2020 NWPR also established that wetlands adjacent to a WOTUS are themselves categorically WOTUS. The NWPR redefined “adjacent wetlands” as including wetlands (1) that abut a WOTUS, (2) that are inundated by flooding from a WOTUS, (3) are physically separated from a WOTUS only by a natural feature such as a dune or bank, or (4) are physically separated by an artificial dike or other barrier so long as the structure allows for a direct hydrologic surface connection to a WOTUS in a typical year such as through a culvert or other artificial feature.

i. Definition of “Adjacent”. The longstanding definition of “adjacent” has important ambiguities that have led to inconsistent interpretations in the past. Key terms in the definition of “adjacent” remain undefined. States and tribes report having major difficulties with the implementation of the “adjacency” definition, both the 1986 version and particularly as it was defined in the 2020 NWPR. These issues have included problems such as understanding what wetlands should be considered “neighboring” under the 1986 approach, and under the 2020 NWPR distinguishing between natural and artificial barriers in the context of adjacent wetlands. States and tribes need regulatory certainty. The NWPR’s narrow definition of adjacency left many states and tribes with extensive wetlands within their boundaries no longer federally protected even though states and tribes had limited abilities and authorities to protect those wetlands under state or tribal laws. This has been a particular problem in the arid West. Legal challenges to decisions regarding adjacency create additional work and cost for all parties. NAWM supports the Rule 1 Proposal’s return to the pre-2015 definition of adjacency but strongly recommends the use of best available science to inform interpretation of the term and how it should be implemented.

NAWM supports the return of “bordering, contiguous, or neighboring” in the definition of “adjacent.” We similarly support the inclusion of wetlands separated from other “waters of the United States” by man-made dikes or barriers, natural river berms, beach dunes and the like as “adjacent wetlands.” We also support adopting the approach towards adjacency in the Rapanos Guidance. In that guidance, the Agencies considered wetlands “adjacent” if one of following three criteria is satisfied:

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54 33 U.S.C. §328.3(c)
59 Id.
60 Id. at 37080.
There is an unbroken surface or shallow subsurface connection to jurisdictional waters and this hydrologic connection maybe intermittent;

- Wetlands are physically separated from jurisdictional waters by man-made dikes or barriers, or natural breaks (e.g., river berms, beach dunes); or
- A wetlands’ 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.

NAWM suggests accepting physical, observed, monitored, or modelled evidence of surface connections, for example through flooding or presence within the 100-year floodplain to be hydrologically connected to the associated waterway.

NAWM strongly recommends it be made clear that shallow subsurface connections between wetlands and other WOTUS meet standards of adjacency, despite references to “continuous surface connections.” The language in the preamble is contradictory in highlighting “surface” connections in sections, but also then noting the importance of “subsurface” connections while seeming to disqualify them as a linkage for maintaining the chemical, physical, and biological integrity of traditional navigable waters. If not recognized as a continuous surface connection, then shallow subsurface connections should be recognized as meeting the test as significantly affecting the chemical, physical, and biological integrity of traditional navigable waters.

NAWM does not support a requirement found in the NWPR that an adjacent wetland cannot be separated from the relatively permanent, non-navigable tributary by uplands, a berm, dike, or other similar feature. These features alone do not prohibit inundation from overbank flooding from stream to wetland, nor do they eliminate the occurrence of shallow subsurface connections.

NAWM recommends that the final Rule 1 provide additional discussion of the proper interpretation of “adjacent” in its preamble, focusing on key terms such as “neighboring.” The Rule 1 Proposal discusses at length the values and functions provided by adjacent wetlands but does not propose changes to the definition of “adjacent.” As a result, it may be necessary to wait and redefine the term “adjacent” in Rule 2 regulatory text in order to avoid a logical outgrowth challenge. As a result, NAWM recommends that the Agencies revise the definition of “adjacent” in Rule 2, defining in rule text terms including “neighboring,” building off discussions in the foundational final Rule 1.

The pre-proposal Notice of Public Meetings quotes Executive Order 13990 signed by President Biden on his inauguration day that provides “[i]t is … the policy of my Administration to listen to the science; to improve public health and protect our environment…” This indicates a revised definition of WOTUS should establish the scope of adjacent waters informed by peer-reviewed aquatic resource science. As was noted in the NWPR preamble, “agencies recognize that science cannot dictate where to draw the line between Federal and State or tribal waters, as those are legal distinctions that have been established within the overall framework and construct of the CWA.” However, within the authorities and goals under the CWA, science plays an essential role in helping to determine characteristics of waters that should be protected if the integrity of the nation’s waters is indeed to be restored and maintained.

Peer-reviewed science indicates that the geographic proximity of an “adjacent” wetland or water to a WOTUS helps indicate the relationship between the two waters and the implications for the integrity of downstream traditional navigable waters and interstate waters. Particularly important elements of that relationship involve the movement of materials and energy between the waters. However, when reviewing the proposed CWR, the SAB noted, “the available science supports defining adjacency or

determination of adjacency on the basis of functional relationships,” rather than “solely on the basis of geographical proximity or distance to jurisdictional waters.”64 This strongly suggests that a scientifically informed definition of “adjacent” should focus on functional relationships, informed by proximity, but not be based on distance alone.

The 2015 CWR and the regulatory definition of WOTUS that preceded the CWR both used “bordering, contiguous, and neighboring” in their definitions of “adjacent.” The pre-2015 definition of WOTUS did not provide specific distance limits. The CWR did provide specific distance limits, providing that waters within 100 feet of a WOTUS were jurisdictional as adjacent, as were waters in a floodplain up to 1,500 feet from the WOTUS, based on a conclusion that such waters have a significant nexus either individually or in combination with similarly situated waters.65 The NWPR did not reflect any distance limits but instead focused on presence of a surface water connection present in a typical year, which the NWPR preamble described as more aligned with the plurality’s “relatively permanent” standard in Rapanos.66

The CWR’s definition of “adjacent” was based on peer-reviewed scientific literature showing that wetlands and open waters in riparian areas and floodplains are chemically, physically, and biologically integrated with rivers via functions that improve downstream water quality, such as the temporary storage and deposition of channel-forming sediment and woody debris, temporary storage of local groundwater that supports baseflow in rivers, and transformation and transport of stored organic matter. Riparian/floodplain wetlands and open waters improve water quality through the assimilation, transformation, and sequestration of pollutants, including excess nutrients and chemical contaminants such as pesticides and metals that can degrade downstream water integrity.67 The preamble indicates the distance limits in the CWR were informed by functional relationships such as these.

In contrast, the 2020 NWPR seemed to ignore prior findings and the comprehensive, peer-reviewed synthesis of current scientific understanding in the Connectivity Report.68 The SAB issued a commentary on the proposed NWPR, stating the NWPR “does not fully incorporate the body of science on connectivity of waters reviewed previously by the SAB and found to represent a scientific justification for including functional connectivity in rule making.” With respect to adjacent wetlands specifically, the SAB noted the exclusion of wetlands that do not abut or have a direct hydrologic surface connection to other WOTUS “is inconsistent with previous SAB review which justified scientifically the inclusion of these wetlands. No new body of peer reviewed scientific evidence has been presented to support an alternative conclusion.”69

The NWPR’s narrow definition of adjacency as wetlands with a surface water connection to WOTUS in typical years ignored not only peer-reviewed science but also the unchanged regulatory definition of “wetland” incorporated into the NWPR: “wetlands means 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 for life in saturated soil conditions.”70 (emphasis or added).

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68 This point also was made in Calif, et.al. v. Wheeler, Case No. 3:20-cv-03005 (D.C. N. Ca), Complaint for Declaratory and Injunctive Relief, filed May 1, 2020, at 14-15.
69 Id.
70 33 C.F.R. §328.3(c)(16).
In other words, shallow subsurface flows are sufficient to determine an area is a “wetland” but such subsurface flows under the NWPR are an inadequate basis for protecting that wetland.

Documents used by the Agencies to support the NWPR analysis of potential impacts estimated that the 2020 Rule will leave as much as 51 percent of wetlands across the country without federal protection.\(^{71}\) Wetlands that were previously protected as “adjacent” under the 2015 CWR and the regulatory definition of WOTUS that preceded it, but were no longer protected under the NWPR included: (1) wetlands with a shallow sub-surface, rather than surface, connection to jurisdictional waters; (2) wetlands physically separated from jurisdictional waters by human-made dikes or barriers, and lacking a direct hydrologic surface connection in “a typical year”; and (3) neighboring wetlands sufficiently close to a jurisdictional water so as to have a functional ecological connection with such water, but without a surface connection.

NAWM recommends that the final Rule 1 explanation of the definition of “adjacency” focus on functional relationships, including both surface and shallow subsurface connections, informed by proximity, but not based on distance alone. Such an interpretation would be consistent with the longstanding rule text defining “adjacent,” be scientifically informed, within the authorities available under the CWA, and consistent with statutory goals. The explanation in the final Rule 1 should not reflect the NWPR approach requiring a surface hydrologic connection for a wetland or water to be considered “adjacent.” Similarly, a revised explanation of WOTUS should not adopt the CWR’s distance limits for adjacency unless accompanied by a scientific analysis including recent relevant literature on functionality.

NAWM also notes that functional relationships between an adjacent water and a WOTUS likely vary in different areas of the country, and as a result the definition of “adjacent” offers an opportunity for the definition of WOTUS to reflect regional variations. When redefining “adjacent” in Rule 2, NAWM encourages the Agencies to reinforce these principles.

ii. When Adjacent Wetlands are WOTUS. The Rule 1 Proposal indicates that adjacent wetlands are considered WOTUS where they either (1) are relatively permanent and have a continuous surface connection to a relatively permanent water, or (2) have a significant nexus to a foundational water. Wetlands adjacent to a traditional navigable water, an interstate water, or a territorial sea are considered WOTUS without the need for further analysis.\(^{72}\)

NAWM supports the Rule 1 Proposal’s definition of WOTUS that considers wetlands adjacent to foundational waters to be jurisdictional without the need for further analysis. Similarly, NAWM supports the Rule 1 approach providing that adjacent wetlands are jurisdictional where the water meets either the significant nexus or relatively permanent standard. The relatively permanent standard is often less analytically burdensome than a significant nexus analysis, and as a result a rule that incorporates both standards helps reduce implementation burden when finding a wetland to be jurisdictional can be based on the relatively permanent standard. The final Rule 1 preamble and associated technical guidance should recognize that a wetland’s “continuous surface connection” need not be flowing all the time in order to satisfy the relatively permanent standard, particularly during drought periods. Such an interpretation would be consistent with the plurality’s opinion in \textit{Rapanos}, and reflective of peer-reviewed aquatic resource science.

NAWM recommends that where peer-reviewed scientific literature documents an important effect that tributaries have on the integrity of foundational waters, constituting a significant nexus either individually or in combination, the Agencies consider establishing tributaries as a category of per se jurisdictional waters as they finalize Rule 1. As discussed in regard to “other” waters and “tributaries”, while the Proposal does not explicitly propose this approach to adjacent wetlands, one could argue the extensive discussion of effects adjacent wetlands have on foundational waters found in both the proposal

\(^{71}\) Army Corps of Engineers internal communication, “Breakdown of Flow Regimes in NHD Streams Nationwide,” September 4-5, available at \url{http://222.eenews.net/stories/1060109323}.

\(^{72}\) 33 C.F.R. §328.37.
preamble and Technical Support Document would help avoid a “logical outgrowth” problem. **If the agencies conclude adjacent wetlands are not appropriate as a per se categorical WOTUS in a final Rule 1**, NAWM strongly suggests they be considered during Rule 2 development.

iii. Extending Adjacency to Include Open Waters Peer-reviewed scientific literature clearly documents the important relationships between jurisdictional waters and nearby wetlands and open waters. EPA’s Connectivity Report, for example, concluded that both wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers through functions that improve downstream water quality.\(^{73}\) Despite scientific literature indicating that open waters have similar important effects on the integrity of downstream waters as do wetlands, prior to the 2015 CWR the concept of adjacency applied only to wetlands and not to open waters. A jurisdictional determination for an oxbow lake, for example, would consider if the lake had a wetland fringe sufficient to make it “adjacent” and thus jurisdictional, but if it lacked wetlands, it would be considered non-jurisdictional unless it fell into another category of WOTUS. This makes no scientific or policy sense if the policy goal is to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. By applying the concept of adjacency to both wetlands and open waters, the 2015 CWR took a policy step that was not only fully consistent with the goal of the CWA but also was firmly based in aquatic science. Unfortunately, the 2020 NWPR decided to not include non-wetland waters as “adjacent.”\(^{74}\) NAWM **recommends that the final Rule 1 preamble and technical support document discussion include a discussion of scientific literature regarding both wetlands and open waters when discussing the concept of adjacency, providing a strong foundation for proposing “adjacent waters” in Rule 2.** Such an approach would closely reflect peer-reviewed aquatic resource science as well as the goals of the CWA and thus support the Agencies’ goal of creating a “durable” final rule.

h. Exclusions

The Rule 1 Proposal excludes two longstanding exclusions from WOTUS, for prior converted cropland (PCC) and for waste treatment systems. In addition, the Agencies expect to implement the proposed rule consistent with longstanding practice, where they generally have not asserted jurisdiction over certain waters and features discussed in 1986 and 1988 Federal Register preambles.\(^{75}\)

The Rule 1 Proposal does not incorporate the more extensive lists of excluded features found in the 2015 CWR and 2020 NWPR. The CWR for the first time in regulation excluded certain ditches and added to regulations seven exclusions from WOTUS reflecting longstanding practice laid out in the 1986 and 1988 Federal Register preambles for waters and features such as lakes and ponds artificially constructed in dry land, ephemeral features not meeting the definition of “tributary,” and groundwater. The CWR also added two new exclusions from WOTUS addressing stormwater control features created on dry land and wastewater recycling structures created on dry land. The 2020 NWPR took a very similar approach to exclusions, retaining the exclusions for PCC and waste treatment systems, the seven exclusions from longstanding agency practice as expressed in Federal Register preambles, and the exclusions for stormwater control features and wastewater recycling and groundwater recharge. The NWPR also redefined PCC with a particular focus on what constituted an “agricultural purpose.” The Rule 1 Proposal preamble indicates omitting the longer list of exclusions established by the NWPR and the 2015 CWR is

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\(^{74}\) The NWPR did establish a category of WOTUS for lakes and ponds and impoundments of jurisdictional waters, where such waters could be jurisdictional if they contribute surface water flow to a traditional navigable water in a typical year. 33 C.F.R. 328.3(c)(6).

“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.”76

The comments below will focus primarily on issues raised by the relationship of exclusions to science, and the new definition of PCC.

i. Science and Exclusions from the Definition of WOTUS. The independent EPA Science Advisory Board (SAB) stated that these exclusions from WOTUS are not justified by science.77 The SAB observed that there is, for example, a lack of scientific knowledge to determine whether ditches should be categorically excluded, particularly in light of their potential to carry pollutants downstream.78 Similarly, although ephemeral erosional features are excluded under both the CWR and NWPR, the SAB notes such features can be important conduits for moving water between jurisdictional features. These exclusions also are not directly authorized by the CWA, although an argument might be made that they are necessary for implementing the statute’s programs and therefore EPA as the federal agency charged with implementation of the CWA is authorized to develop exclusions as part of its efforts. However, exclusions from the definition of WOTUS that increase the potential for unregulated pollutants to enter waters can delay or prevent achieving the CWA goal of restoring and maintaining the chemical, physical, and biological integrity of the nation’s waters.

It seems likely that many stakeholder groups will encourage EPA and the Corps to adopt the list of exclusions from the CWR and NWPR. It also seems likely stakeholders will request additional new exclusions tailored to their own circumstances, arguing such exclusions are necessary for clarity and transparency. NAWM believes that the first exclusion listed in the NWPR, “all water features that are not identified [as WOTUS in paragraph (a)]” could provide sufficient definitional clarity -- if a water is not listed as WOTUS then it is excluded from WOTUS.

NAWM recommends inclusion of exemptions for PCC and stormwater and wastewater treatment, but requests that a revised definition of WOTUS avoid expanding the list of exclusions beyond these exclusions, despite likely pressures to do so, because exclusions do not have a basis in science and can be inconsistent with accomplishing CWA goals. The agencies can attain the desirable clarity in the definition by stating in the exclusion section that if a water feature is not listed as WOTUS then it is excluded from WOTUS. That said, it is important to define precisely those terms associated with exclusions.

ii. Prior Converted Cropland. U.S. Department of Agriculture’s Food Security Act Manual defines “Prior Converted Cropland” (PCC) as “wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent they no longer exhibit important wetland values.”79 The CWA does not define or authorize PCC explicitly or provide for its exclusion from WOTUS. However, since 1993 the Agencies’ regulations have excluded PCC from WOTUS, unless the PCC has been abandoned and reverted to wetlands.80 The 1993 rule preamble indicated PCC that “now meets wetland criteria is considered to be abandoned unless: for one in every five years the area 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

78 Id.
commodity in a commonly used rotation with aquaculture, grasses, legumes, or pasture production.”

Although EPA and the Corps included the PCC definition and abandonment discussion in the 1993 preamble, they were not included in the regulations themselves.

Both the 2015 CWR\textsuperscript{82} and the 2020 NWPR\textsuperscript{83} retained without change the existing exclusion for PCC. However, the NWPR made some significant changes to the PCC exclusion and how it would be implemented. In particular, the NWPR indicated PCC would be considered abandoned and no longer excluded if the area “is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years” and has reverted to wetlands.\textsuperscript{84} The NWPR preamble described the term “agricultural purposes” quite broadly as land use that makes production of an agricultural product possible, including but not limited to grazing and haying, pollinator habitat, idling land for conservation uses, irrigation tailwater storage, crawfish farming, cranberry bogs, nutrient retention, and idling land for soil recovery following natural disasters.\textsuperscript{85}

The PCC exemption from WOTUS was greatly broadened under the NWPR. The NWPR shifts to the term “agricultural purposes,” thereby changing the PCC definition from land that produces an agricultural commodity to land that supports agriculture. Under the abandonment criteria in the 1993 rule’s preamble, an area was required to be used for the \textit{production} of an agricultural commodity once within a five-year period. Under the NWPR’s approach to PCC, the exclusion no longer required actual production. Additionally, the pre-NWPR requirement for the land to be used at least once in five years was essentially eliminated by the NWPR through its use of the very broadly defined term “agricultural purposes.” The NWPR considered “cropland that is left idle or fallow for conservation or agricultural purposes for any period or duration of time remains in agricultural use.”\textsuperscript{86} As a result, under the NWPR almost any land that was manipulated prior to December 1985 and remains undeveloped could have been excluded from WOTUS protections as PCC.

In addition to being broader, the PCC exclusion under the NWPR was unclear. It remained uncertain, for example, if a single cow grazing in a large field, or even if a farmer is preparing the field for a single cow, would have been sufficient to ensure the area remained exempt as PCC. Any field with wildflowers could have been considered pollinator habitat and therefore sufficient for an area to remain exempt as PCC.

In short, the NWPR’s approach to the PCC exclusion is ambiguous, subject to misinterpretation, and is potentially so broad that it interferes with attaining the CWA’s goal of restoring and maintaining the nation’s waters.

\textbf{NAWM strongly recommends that a revised WOTUS definition indicate that PCC stops being PCC and therefore loses its exclusion if abandoned (that is, not used for the production of an agricultural commodity in the preceding five years and has reverted to wetlands) or if there has been a change in land use from agriculture and the area would otherwise qualify as WOTUS.}

\textbf{NAWM also recommends that the final Rule 1 preamble should expressly state the new rule shifts from the NWPR’s approach of focusing on “agricultural purposes” back to the earlier focus on “production of an agricultural commodity.”} Otherwise, the apparent confusion both at federal agencies, state and tribal co-regulators, and stakeholders may continue.

An article in the Environmental Law Reporter (ELR) quotes a Corps staffer as saying the NWPR change to the PCC definition could have removed federal jurisdiction from “two-thirds, but more like three-

\textsuperscript{81} Id.
\textsuperscript{82} 80 Fed.Reg. 37054, 37097 (June 29, 2015).
\textsuperscript{83} 33 U.S.C. §328.3(c)(8).
\textsuperscript{84} 85 Fed.Reg. 22250, 22320 (April 21, 2020).
\textsuperscript{85} Id.
quarters” of the entire state of Texas. The ELR article quotes another Corps staffer who indicates “word is getting out” that grazing makes land qualify as PCC under the NWPR, as the Corps saw a significant increase in requests for jurisdictional determinations as exempt PCC. The NWPR PCC approach has been invalidated by the courts. However, Corps staff have informally indicated that they may continue to implement the PCC exclusion consistent with both the NWPR and the CWR – which take radically different approaches – which suggests considerable confusion. As a result, NAWM recommends the final Rule 1 should discuss at length the scope of the PCC exclusion and how agencies and field staff anticipate implementing the exclusion.

7. WOTUS Implementation: Tools and Issues

The following section outlines NAWM’s understanding of state and tribal considerations around implementation tools and issues as they relate to the Proposed Rule 1. Input for the comments included in this section has been gathered through discussion with NAWM’s national workgroups, project teams, feedback during webinars, workshops and conferences, as well as anecdotal feedback and individual communications. It is possible that not all state or tribal opinions are represented by the following key themes shared herein. Additional considerations specific to one or a few states are not the focus of the content shared below. NAWM strongly encourages the Corps and EPA to engage with individual states and tribes to gather their direct input on implementation challenges and recommendations.

a. Incorporation of Relatively Permanent and Significant Nexus Standards

The Rule 1 Proposal includes the combined use of the relatively permanent standard and significant nexus test as implementation tools. Relatively permanent waters are defined in this rule as “waters that are relatively permanent, standing or continuously flowing and waters with a continuous surface connection to such waters.” Waters with a significant nexus refer to waters that either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical or biological integrity of traditionally navigable waters, interstate waters or territorial seas (the “foundational waters”). Importantly, WOTUS jurisdictional determinations include both consideration of connectivity and the absence of connectivity. While states and tribes do not view the combined “relatively permanent” standard and “significant nexus” test as a perfect solution to making jurisdictional determinations in more complex circumstances, states and tribes report that it is far preferable to the uncertainty that was created by the NWPR approach. The significant nexus test is well-supported legally, scientifically, and in practice has been shown to be implementable albeit resource-intensive. States and tribes are familiar with the process, how to implement it and how to explain the process and its outcomes to the regulated community. The test is well-supported in court cases and can better withstand the rigorous legal challenges that accompany all changes in WOTUS rules. While the use of these two tests is effective, the need for more categories of per se jurisdictional waters is much needed to improve regulatory efficiency and resource protection. The development of these categories of per se wetlands should be based on sound science and reflect findings in the scientific literature that show clearly predictable significant nexus relationships with foundational waters. NAWM supports the return to the combined “relatively permanent” standard and “significant nexus” test as a way to increase implementation clarity and legal defensibility. Moving forward with Rule 2, NAWM encourages the use of sound science to establish categories of per se rules.

87 Groves, David, “How the Trump Administration Eased Destruction of the Nation’s Wetlands and Streams,” 51 ELR 10194, 10196 (March 2021).
88 Id.
jurisdictional WOTUS, that is, WOTUS without the need for additional analyses based on science showing they have, either individually or in combination, a significant nexus and thus are categorically WOTUS.

The preamble in the Rule 1 Proposal indicates that factors for consideration when undertaking a significant nexus analysis are limited to those involving effects (that is, a “nexus”) on the downstream foundational waters.\(^\text{92}\) The preamble provides examples of considerations that do not involve impacts to the integrity downstream foundational waters, such as carbon sequestration benefits, habitat for non-aquatic species, and recreational uses. As the preamble indicates, ecosystem services such as these are important societal benefits but are not factors in a significant nexus analysis because they are not ecosystem functions and do not illustrate effects of the water in question on downstream foundational waters.\(^\text{93}\) However, the ecosystem functions provided by aquatic systems on the landscape that provide these important ecosystem services are an integral consideration for the definition of WOTUS as those health of these systems and their ecological functions impact downstream water quality.

NAWM is concerned that the preamble discussion may incorrectly suggest that these important ecosystem services are not relevant to CWA programs as a whole. This would raise problems because, for example, such services are frequently cited as the “designated uses” to be protected by water quality standards established by states and tribes under CWA section 303. To avoid confusion, NAWM recommends the final Rule 1 preamble clarify that the considerations described as inappropriate for a significant nexus analysis may be appropriate considerations and benchmarks when implementing a CWA program. When finalizing Rule 1, NAWM recommends the agencies examine closely what are discussed as appropriate and inappropriate considerations for a significant nexus, in order to avoid erroneously suggesting relevant factors should not be taken into account.

b. NWPR’s “Typical Year” Implementation Challenges

NAWM supports removal of the highly problematic “typical year” metric, which was fundamental to many of the NWPR’s definitions. NAWM found that states and tribes had difficulties applying the “precipitation normalcy” concept. Taking into consideration the vast range of waters and conditions across the United States, the “normal year” metric is not applicable universally. NAWM confirms that states and tribes have expressed concerns around the limits of documenting one-time conditions at the time of observation, accelerated changes in climate, and the need for extensive additional work using hydrologic modelling tools and advanced statistical analyses to conduct analysis in these complex conditions. For example, using a full year of data would normalize what otherwise may be drought conditions during part of the year when a delineation is being conducted. Additionally, states and tribes report a marked lack of data, aerial photography and access to other investments required to support the use of these tools in many locations, including (and perhaps especially) those in underserved/under-resourced communities. NAWM recommends that Rule 1 should not use the “typical year” metric, reflecting state and tribal on-the-ground implementation experience.

c. Support for a Number of Long-standing and Emerging Tools

NAWM supports the use of many of the long-standing tools identified in the agencies’ December 2021 Technical Document in Support of the Proposed “Revised Definition of Waters of the United States” Rule\(^\text{94}\). Many of those tools referenced in the Technical Document have been successfully used by states and tribes for years (e.g., remote sensing, use of USGS and topographical maps, aerial photography, gage data, satellite imagery, watershed studies, modeling tools (including hydrologic models), scientific

\(^{94}\) EPA-HQ-OW-2021-0602-0081_content.pdf
literature, and more). NAWM is pleased to see the Rule identifying the advancements in tools and models, including more effective aerial and satellite imagery LIDAR, and other tools, like the Antecedent Precipitation Tool (APT) and stream duration models (SDAMS), which we provide additional comment on in the following section.

Of critical importance is the Rule’s acknowledgement that none of these techniques alone can provide the complete information required for a jurisdictional determination, instead requiring analysis of a combination of information sources and analysis. Additionally, the role of visual observations and on-site confirmation is often necessary to ensure the appropriate interpretation of the gathered information. The role of modeling is critical, but can be, as the rule states, “misleading if performed or applied improperly.” Consequently, the proper implementation of the tools themselves is integral to the effective implementation of the WOTUS Rule. Consistent, high quality training on all aspects of implementation, including in different regions and contexts is fundamental to the effective implementation of any WOTUS rule.

Among the newer approaches that states and tribes would like to see included and on which they would like the agencies to provide high quality, consistent, regionally-specific training include:

i. Regional Streamflow Duration Methods

States and tribes have identified significant interest in Regional Streamflow Duration Methods (SDAMs). SDAMs are rapid field assessment methods that use hydrological, geomorphological, and/or biological indicators, observable in a single site visit, to classify streamflow duration as perennial, intermittent, or ephemeral at the reach scale. Regulators and water resource managers can use rapid, reach-scale methods to determine streamflow duration classifications (i.e., perennial, intermittent, ephemeral) and to help implement many federal, state and local programs. SDAMs could be especially useful where ephemeral streams are treated differently from intermittent and perennial streams (e.g., Oregon’s methods). NAWM agrees with EPA that “regionally specific SDAMs account for important differences and geographical variation in climate, geology, biogeography, and topography that can influence the relationships between field indicators and streamflow duration.” To be more reliable and accurate, it is necessary to tailor the methods to regional conditions.

ii. Regional Stream Function Assessment Methods

Regional Stream Function Assessment Methods (SFAMs) can be useful in determining mitigation credits (mitigation site gains) and debits (impact assessment). An example of these methods can be found in Oregon, where their Stream Function Assessment Method (SFAM) was developed to provide a standardized, rapid, more function-based method for assessing stream function statewide. This method is intended to further federal and state regulatory objectives by informing mitigation planning.

iii. WETS Tables

Additionally, states and tribes encourage consideration of WETS Tables. Scientific research shows climate plays an important role in the genesis and identification of wetlands. In order to identify the physical characteristics of wetlands adequately, the NRCS Climate Analysis for Wetlands Tables, also known as WETS Tables, were developed. According to NRCS, the WETS Tables define the normal range for monthly precipitation and growing season required to assess the climatic characteristics for a

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96 Learn about Streamflow Duration Assessment Methods (SDAMs) | US EPA
97 Learn about Streamflow Duration Assessment Methods (SDAMs) | US EPA
99 Wetlands Climate Tables (usda.gov)
geographic area over a representative period of time\textsuperscript{100}. The Tables gives a month-by-month summary and probability analysis of temperature and precipitation.

iv. Antecedent Precipitation Tool

States and tribes also support the inclusion of the new Antecedent Precipitation Tool (APT) with training for state and tribal staff. The APT is a desktop tool developed by the Army Corps of Engineers (ACOE). The APT facilitates the comparison of antecedent or recent rainfall conditions for a given location to the range of normal rainfall conditions that occurred during the preceding 30 years. The tool is commonly used by the Agencies to support decisions as to whether field data collection and other site-specific observations occurred under normal climatic conditions.

v. Use of ACOE Regulatory Guidance Letters for New Regulatory Elements

States and tribes indicate that Regulatory Guidance Letters (RGLs) have been important under some circumstances for clarity in how the ACOE will implement applicable regulations. RGLs are used only to interpret or clarify existing Regulatory Program policy but do provide mandatory guidance to the ACOE district offices\textsuperscript{101}. The establishment of specific RGLs on jurisdictional status of specific waters can also be useful. For example, a RGL on the jurisdictional status of interdunal wetlands was helpful in Washington State\textsuperscript{102} as a tool to help protect those systems and identify the need for an ACOE permit. However, NAWM strongly advocates for the development of any RGLs addressing the scope of WOTUS in coordination with EPA, as guidance developed in a vacuum without the EPA is likely to create confusion, conflicts and related delays. RGLs also have expiration dates that must be taken into consideration when assessing their timing and usefulness.

NAWM supports the continuing development of these above-listed methods, guidance and associated training as part of efforts to support effective implementation of the WOTUS Rule.

d. Essential Need for Front-line Training and Guidance

In comments to the agencies on the NWPR, states and local governments stressed the need for guidance, training, and tools early in the process\textsuperscript{103} to help with implementing any revised definition of WOTUS. The development of training not only for staff within the Agencies, but also robust training and guidance for state and tribal regulatory staff who are on the front lines of WOTUS implementation is essential for any new rule. While this did not take place in support of the NWPR, NAWM hopes that the Agencies will deliver the rule in synch with these essential supports. NAWM strongly recommends investments by the agencies in trainings for states and tribes and a commitment to coordinating trainings with the Corps. These trainings should be before and during the rollout of the new rule and include all relevant parties.

e. Ongoing Coordination with the ACOE

Coordination between states and tribes and the ACOE for both joint training and development of mitigation policies is important to states and tribes for consistency (e.g., on delineation, regional supplements). Participation by ACOE District staff with state and tribal staff in joint trainings has proven to be valuable for some states and tribes, increasing understanding and consistency between the regulating agencies. When there is inconsistency, among ACOE project managers because of lack of training, states and tribes can end up with conflicting approaches to regulation. Trainings can also assist in understanding and coming to agreement on a common understanding of a wetland’s “value.”

\textsuperscript{100} Wetlands Climate Tables (usda.gov)
\textsuperscript{101} Regulatory Guidance Letters (army.mil)
\textsuperscript{102} NAWM Communication with Washington State Department of Ecology January 6, 2021
\textsuperscript{103} 86 Fed.Reg. 69372, 69384 (December 7, 2021).
planning and development of state/tribal mitigation policies can increase consistency in requirements. The practice of joint site visits has also been identified by states and tribes as an approach that increases consistency and helps streamline permitting processes. **NAWM encourages the EPA and the ACOE to design and develop training and policy efforts collaboratively to ensure consistent and effective implementation of the new rule.**

8. Considerations for Rule 2

While this letter focuses primarily on policies and approaches discussed in the Rule 1 Proposal, the Agencies discuss Rule 1 as “foundational” to a future Rule 2. As a result, broad considerations for Rule 2 seem within the appropriate scope of a letter commenting on Rule 1.

- **NAWM strongly recommends that the Agencies develop the Rule 2 proposal and final rule based on collaborative discussions with state and tribal co-regulators.** As discussed earlier in this letter, cooperative federalism requires an ongoing collaborative process between co-regulators. States and tribes must be included as instrumental partners with the federal agencies in the crafting of the Rule 2 preamble and the final rule. Ongoing discussions and engagement, opportunities for input and feedback are essential to achieve a durable, clear, and defensible rule that achieves the goals of the CWA.

- **NAWM believes it is essential that the Agencies propose and finalize Rule 2, with sufficient time for training staff at federal, state, and tribal agencies, and the general public.** One of the greatest barriers to implementation of the 2015 CWR and the 2020 NWPR was the lack of state and tribal access to comprehensive training and guidance to better understand WOTUS determinations that can be difficult under specific regional circumstances. Training for these two rules focused almost exclusively on federal agency staff at headquarters, regional and district levels. Lack of training was a source of substantial frustration for states and tribes. Planning for Rule 2 rollout and implementation must include training that assists states and tribes in delivery of effective and consistent on-the-ground implementation of the new WOTUS definition from day one.

- **NAWM encourages the Agencies in Rule 2 to increase the number of water types that are categorically WOTUS, jurisdictional without the need for further analyses.** As discussed extensively in the Rule 1 Proposal and Technical Support Document, peer-reviewed science exists to do determine that tributaries, adjacent wetlands and water, and some types of “other” waters have a significant nexus, either individually or in combination, and may be considered WOTUS. Implementation of a new WOTUS definition will be less resource intensive if the definition identifies additional waters that are categorically WOTUS. Additional categories would mean fewer significant nexus analyses are necessary, the regulated community and regulatory staff would have greater regulatory certainty, and the nation’s waters would have consistent protection. As the Agencies develop the Rule 2 Proposal, **NAWM recommends that they include a careful examination of peer-reviewed scientific literature to evaluate if some categories of waters could be deemed to be WOTUS based on presence of a significant nexus, consistent with both the CWA and aquatic resource science.**

- **NAWM encourages the agencies to consider extending the definition of “adjacency” to encompass open waters with a similar ecological relationship with nearby WOTUS seen with adjacent wetlands.** As discussed earlier in this letter, such an approach would be consistent with peer-reviewed science.
9. Closing

Thank you for the opportunity to submit comments on the Agencies’ proposed Rule 1 definition of waters of the United States. We hope the information, analysis, and policy recommendations provide support for the Agencies’ efforts to develop a revised definition of WOTUS protected under the Clean Water Act. NAWM strongly supports the objective of developing a revised definition that is fully consistent with Clean Water Act goals and authorities while being informed by aquatic resource science. Although these comments have been prepared by NAWM with input from the NAWM Board of Directors, they do not necessarily represent the individual views of all states and tribes. We encourage your full consideration of the comments of individual states and tribes, and other state and tribal associations.

Sincerely,

[Signature]

Marla J. Stelk
Executive Director

Cc:
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