

**Revised Definition of “Waters of the United States”  
Response to Comments Document  
SECTION 12 – SIGNIFICANT NEXUS**

*See the Introduction to this Response to Comments Document for a discussion of the U.S. Environmental Protection Agency and the U.S. Department of the Army’s (hereinafter, the agencies’) comment response process and organization of the eighteen sections.*

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## 12 SIGNIFICANT NEXUS

### 12.1 Case-Specific vs. Categorical Jurisdiction

#### 12.1.1 Case-specific approach

Multiple commenters expressed concern that assessing the jurisdictional status of waters on a case-specific basis is problematic or burdensome, suggesting that a case-specific approach is time-consuming, expensive, subjective, not easily understood or completed by the regulated community, and likely to be legally challenged. Several commenters stated that the agencies' technical and scientific judgement in evaluating jurisdiction on a case-specific basis would be unpredictable and inconsistent.

Another commenter suggested that a case-by-case approach to assessing jurisdiction has the potential to obfuscate potentially adverse cumulative impacts to interconnected waters and asserted that case-specific analyses encourage permit applicants to minimize the significance of streams and wetlands in an area. This commenter further stated that a case-specific approach makes it more challenging for citizens and professionals to participate in or contribute to the jurisdictional determination process.

Several commenters stated that the agencies should rely on the results from case-specific significant nexus determinations in comparable areas to avoid the need for conducting additional case-specific analyses. Another commenter similarly suggested that the agencies undertake significant nexus evaluations of national or regional categories of waters such as floodplain wetlands or certain intermittent or ephemeral drainages as a way to reduce case-specific assessments.

Other commenters expressed support for relying on a case-specific approach to assessing jurisdiction, either generally or for specific types of waters, such as lakes, ponds, and ditches. Several commenters suggested that a case-specific approach to the significant nexus standard is appropriate for assessing jurisdiction over ephemeral and intermittent streams. One of these commenters asserted that many intermittent and ephemeral waters in the arid West would not meet the relatively permanent standard and that the significant nexus standard would thus be important for the West, particularly given the risk of water scarcity due to climate change impacts. Some commenters suggested that reliance on case-specific analyses would be more protective of wetlands. Another commenter stated that case-specific analyses should be used where the subject water's connection to a traditional navigable water is not "obvious," or if the feature is constructed and removable.

Additionally, some commenters suggested that a case-specific approach is preferable because it allows for flexibility in assessing jurisdiction based on local conditions, as well as flexibility to incorporate new scientific information as it becomes available. Another commenter stated that case-specific analyses better facilitate the agencies' consideration of tribal treaty rights and the federal trust responsibility.

**Agencies' Response: The agencies acknowledge that the need for case-specific analyses will continue under the final rule for certain jurisdictional determinations and that some commenters expressed concerns about this approach. As discussed in Final Rule Preamble Section IV.A.3, the agencies find that fact-based standards for determining Clean Water Act jurisdiction are appropriate and are not unusual under the Clean Water Act. Indeed,**

the agencies have the discretion to consider defining waters as jurisdictional on a categorical basis where scientifically and legally justified (for example in this rule, paragraph (a)(1) waters and their adjacent wetlands) or on a case-specific, fact-based approach (for example, in this rule, tributaries and their adjacent wetlands that meet the significant nexus standard or relatively permanent standard). While the latter does not necessarily provide the same certainty as defining waters as jurisdictional by category, case-specific determinations of the scope of Clean Water Act jurisdiction are not unusual—in fact, they are the norm. For a more comprehensive discussion of this issue, see Final Rule Preamble Section IV.A.3.a.iii.

The agencies have concluded that the significant nexus standard as established in the final rule is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. The relatively permanent standard is included in the rule because it provides important efficiencies and additional clarity for regulators and the public by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. Thus, the agencies have determined that this rule gives effect to the Clean Water Act’s broad terms and environmentally protective aim as well as its limitations.

Through this rulemaking process, the agencies have considered all timely public comments on the proposed rule, including changes that improve the clarity, implementability, and durability of the definition. The agencies have provided more clarity in this rule by: adding limitations to the scope of the definition to the rule text; adding a definition of “significantly affect” that identifies the functions and factors to be evaluated as part of a significant nexus analysis; adding exclusions to the rule; restructuring and streamlining the 1986 regulations; and drawing on more than a decade of post-*Rapanos*<sup>1</sup> implementation experience to provide additional implementation guidance and resources. These improvements, taken together, substantially reduce any inefficiencies that may be presented by the final rule’s case-specific approach. The agencies also find that the clarifications in the final rule, including the addition of exclusions that codify longstanding practice and review of the advancements in implementation resources, tools, and scientific support address many of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under the Clean Water Act. See Final Rule Preamble Section IV.G for information about implementation data, tools, and methods that are relevant to jurisdictional determinations under the final rule. Regarding some commenters’ concerns that a case-specific approach may be too subjective, see the discussion of “significantly affect” in Section IV.C.9 of the Final Rule Preamble.

Additionally, as discussed in Final Rule Preamble Section IV.A.4, the agencies have determined that the final rule is both familiar and implementable. All definitions of “waters of the United States,” including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 Navigable Waters Protection Rule (2020 NWPR) have required some level of

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<sup>1</sup> *Rapanos v. United States*, 547 U.S. 715 (2006) (“*Rapanos*”)

case-specific analysis. Consistent implementation of the final rule will be aided by improved and increased scientific and technical information and tools that both the agencies and the public can use to determine whether waters are “waters of the United States.”

The agencies acknowledge that there are indirect costs—both monetary and temporal—associated with implementation of the final rule. Indeed, there are indirect costs associated with implementation of all prior rules defining “waters of the United States.” As the final rule is very similar in scope to that of pre-2015 practice, there will be *de minimis* new indirect costs associated with the implementation of the final rule. Potential costs and benefits would only be incurred as a result of actions taken under existing Clean Water Act programs relying on the definition of “waters of the United States” (*i.e.*, sections 303, 311, 401, 402, and 404). Entities currently are, and will continue to be, regulated under these programs that protect “waters of the United States” from pollution and destruction. Each of these programs may subsequently impose costs as a result of implementation of their specific regulations. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. *See* 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). For additional discussion of these issues, see the agencies’ response to comments in Section 1.4, Section 1.5, and Section 17. See also Economic Analysis for the Final Rule. The agencies recognize that some commenters expressed concern that a case-specific approach makes it more difficult for the public to assess the jurisdictional status of waters; however, see Final Rule Preamble Section IV.C.10, which provides guidance to landowners on how to determine when a Clean Water Act permit is required.

The agencies disagree with the suggestion that the final rule’s case-specific approach to the significant nexus standard does not account for cumulative impacts to interconnected waters. Under the significant nexus standard in the final rule, waters will be assessed either alone or in combination with similarly situated waters in the region. Assessing waters in combination allows the agencies to consider the cumulative effects of such waters on paragraph (a)(1) waters, consistent with the science demonstrating how upstream waters affect downstream waters. See Final Rule Preamble Section IV.C.9.b.ii for additional discussion.

With respect to commenters’ suggestions that the agencies reduce the need for a case-specific significant nexus assessment by relying on significant nexus analyses for comparable locations or features, the agencies note that jurisdictional determinations can rely on information from many sources and may in some cases include studies of the same type of water or similarly situated waters that apply to the water being evaluated. The determination of jurisdiction applies only to the subject waters located in the area of interest and is a case-specific determination based on current conditions (except in the case of a potential enforcement action). Any similarly situated waters that are part of the significant nexus analysis but that are not in the area of interest are not subject to the jurisdictional decision (and so would not automatically be deemed jurisdictional or non-jurisdictional). For example, where the subject water is a portion of a tributary reach, the significant nexus analysis would encompass the entire tributary reach of the same order,

**any tributaries within the catchment of that reach, and any wetlands adjacent to those tributaries. However, the jurisdictional determination would only apply to the portion of the tributary reach that is subject to the determination. In other words, determinations of jurisdiction at one geographic location cannot be used to avoid case-specific assessments at nearby geographic locations. See Final Rule Preamble Section IV.C.9 for additional discussion of implementation of the significant nexus standard under the final rule.**

**The agencies agree that case-specific analyses allow for assessment of local conditions and scientific literature and references from studies pertinent to the parameters being reviewed. See Final Rule Preamble Section IV.C.9.c.iii for a more comprehensive discussion of tools and sources of information used in significant nexus analyses. See also the agencies' response to comments in Section 2.4 (addressing comments on tribal treaty rights and the federal trust responsibility).**

**Regarding implementation of the significant nexus standard with respect to specific types of waters, see the agencies' response to comments in Section 12.3.2.**

### 12.1.2 Categorical approach

Numerous commenters expressed support for establishing more categorically jurisdictional types of waters in the rule, with some commenters suggesting that categories of waters that are jurisdictional *per se* (i.e., without the need for additional assessment) would reduce the need for as many case-specific analyses and provide greater clarity and regulatory certainty. Some commenters suggested that a categorical approach to jurisdiction would increase transparency and predictability for permit applicants and stakeholders. One commenter stated that the significant nexus standard “makes sense to apply in the short term,” but that it should eventually be replaced with categorical definitions, such as those that were included in the 2015 Clean Water Rule.

Some commenters suggested that the proposed rule's reliance on the significant nexus standard and the relatively permanent standard is inappropriate because certain types of waters should be categorically jurisdictional under the Clean Water Act, including features such as adjacent wetlands, tributaries, and “other waters.” Many of these commenters asserted that a categorical approach should be used where science demonstrates that certain types of waters always have a significant effect on traditional navigable waters, with several commenters referencing riparian and floodplain features in particular. Another commenter quoted EPA's Science Report<sup>2</sup> regarding the biological integration of riparian areas and floodplains with rivers and stated that these features should be grouped into subclasses for categorical jurisdictional protection, suggesting that these features always satisfy the significant nexus standard. Another commenter asserted that tributary networks within a watershed should be categorically protected because they collectively affect downstream paragraph (a)(1) waters.

Several commenters stated that the agencies should identify types of categorically jurisdictional features and assert jurisdiction over all waters within those categories even if some of the waters do not

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<sup>2</sup> U.S. Environmental Protection Agency. 2015. Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence (Final Report). EPA/600/R-14/475F. U.S. Environmental Protection Agency, Washington, D.C. (“Science Report”).

significantly affect traditional navigable waters, including ephemeral features and non-adjacent wetlands. Another commenter stated support for categorical jurisdiction for “any wetland, impoundment, tributary, or other water that has a hydrologic connection to traditional navigable waters.” A different commenter expressed support for characterizing all ephemeral and headwater streams that drain or discharge to critical habitat for species listed under the Endangered Species Act as meeting the significant nexus standard.

**Agencies’ Response:** The agencies acknowledge that the need for case-specific analyses will continue under the final rule for certain jurisdictional determinations and that some commenters expressly requested that the rule include more types of categorically jurisdictional features as a means of potentially providing greater clarity or regulatory certainty. As discussed in Final Rule Preamble Section IV.A.3, however, the agencies find that fact-based standards for determining Clean Water Act jurisdiction are appropriate. Indeed, agencies may choose to proceed via rulemaking or adjudication. *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294 (1974) (“[T]he choice between rulemaking and adjudication lies in the first instance within the [agency’s] discretion.”). With respect to the significant nexus standard in particular, Justice Kennedy also stated that the agencies could proceed to determine tributaries and their adjacent wetlands jurisdictional through regulations or adjudication. *See* 547 U.S. at 780-81. The agencies thus have the discretion to consider defining waters as jurisdictional on a categorical basis where scientifically and legally justified, but also have discretion to adopt a case-specific, fact-based approach.

In the final rule, the agencies have concluded that it is appropriate in this rule to adjudicate which tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) are within the Clean Water Act’s protections through case-specific application of the significant nexus standard or the relatively permanent standard under the final rule. *See* Final Rule Preamble Section IV.A.3.a and the agencies’ response to comments in Section 12.1.1 for additional discussion of the final rule’s case-specific approach to assessing jurisdiction for certain types of waters. For implementation of the significant nexus standard with respect to specific types of waters, see the agencies’ response to comments in Section 12.3.2.

The agencies acknowledge that a categorical approach to jurisdiction may provide more certainty than case-specific assessments. Yet, as the Supreme Court itself has recognized, the scope of Clean Water Act jurisdiction does not easily lend itself to bright lines. *See Maui*,<sup>3</sup> 140 S. Ct. at 1477 (“In sum, we recognize that a more absolute position . . . may be easier to administer. But, as we have said, those positions have consequences that are inconsistent with major congressional objectives, as revealed by the statute’s language, structure, and purposes.”).

Nonetheless, the agencies find that the clarifications in the final rule, including the addition of exclusions that codify longstanding practice and review of the advancements in implementation resources, tools, and scientific support address many of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under the Clean Water Act. *See* Final Rule Preamble Section IV.G for information about

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<sup>3</sup> *Maui and National Association of Manufacturers v. U.S. Department of Defense*, 138 S. Ct. 617 (2018)

**implementation data, tools, and methods that are relevant to jurisdictional determinations under the final rule. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. See 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). See also Final Rule Preamble Section IV.C.10 (providing additional clarity to landowners on how to know when a Clean Water Act permit is required). The agencies may consider further refinements in a future rule to address implementation or other issues that may arise.**

**Regarding comments suggesting that certain types of waters should be categorically jurisdictional where science demonstrates that such waters always have a significant nexus to paragraph (a)(1) waters, the agencies note that for purposes of the final rule, the agencies have not made a categorical determination that all tributaries, adjacent wetlands, and paragraph (a)(5) waters significantly affect paragraph (a)(1) waters. Further, the agencies find that while a hydrologic connection to a traditional navigable water may be relevant to assessing jurisdiction under the final rule’s significant nexus standard or relatively permanent standard, the agencies are not categorically asserting jurisdiction over features that have a hydrologic connection to a traditional navigable water.**

**See also the agencies’ response to comments in Section 5.14 (addressing the Endangered Species Act).**

## **12.2 “Significantly Affect”**

### **12.2.1 General comments**

Many commenters expressed concern regarding the proposed definition of “significantly affect,” including the terms “more than speculative,” “insubstantial,” and “substantial.” A few commenters expressed that the significant nexus is circular because of these terms and questioned the implementation of these terms. One commenter stated “significant” should be clearly defined, consistently interpreted, and applied throughout the nation, and be consistent with Supreme Court decisions. Several commenters indicated that “significant” may be interpreted as “important,” which is not how the agencies proposed to define “significant.” A few commenters from the regulated community indicated that the lack of guidance regarding the definition of “significantly affect” would allow for inconsistency and may affect project funding and development. One commenter requested the clarification of “significantly affect” to avoid case-specific analyses.

One commenter stated concern that the agencies are seeking public comment on contentious topics, such as whether to define the term “significantly affect.” One commenter expressed that the definition of “significantly affect” is open to interpretation. Another commenter stated that the proposed rule hinges on the definition of “significantly affect,” but stated that not defining “significant nexus” would cause confusion. One commenter stated that “significant nexus,” “adjacent to,” and “similarly situated” are subjective and suggested the agencies establish clear definitions. Another commenter requested that the requirements to meet “significantly affect” not be burdensome.

A commenter indicated that the approach of the proposed rule would lead to increased federal jurisdiction by combining waters in a broad region (*e.g.*, large watersheds) to assess their cumulative effects, as well by applying the relatively permanent standard and the significant nexus standard to “other waters.” Another commenter indicated that the proposed definition of “significantly affect” would provide jurisdiction to waters with minimal effects on downstream waters, such as ephemeral drainages in the arid Southwest. One commenter highlighted the potential for “similarly situated” waters with minimal effect on downstream foundational<sup>4</sup> waters to be considered jurisdictional with jurisdictional impoundments, tributaries, wetlands, and “other waters” that meet either the relatively permanent standard or the significant nexus standard. Another commenter stated that waters determined jurisdictional due to aggregation may include waters with minor effects on downstream waters.

Another commenter suggested that the term “navigable” should be given importance in that only waters with a “substantial connection” to traditional navigable waters should be determined jurisdictional.

Several commenters stated that the definition of “significantly affect” does not provide quantifiable thresholds for factors or functions. One commenter questioned the threshold for “significant,” and another commenter questioned the thresholds of “significantly affects.” One commenter suggested avoiding qualitative terms like “significantly affect” entirely, in favor of specific standards.

A few commenters discussed the spectrum of effects that they asserted was proposed by Justice Kennedy, with “more than speculative or insubstantial” on one end and “significant” on the other, and these commenters asserted that the agencies inappropriately applied the spectrum in the proposed rule. A few commenters concluded that the concept of a “connectivity gradient” does not appear to be a factor in determining what waters are jurisdictional, as even the lack of connection is linked to functions significantly affecting downstream jurisdictional waters. One commenter emphasized that a connection may negatively affect a water feature, for example by carrying pollutants.

Several commenters expressed support for the proposed rule’s approach to the significant nexus standard, suggesting that its science-based approach will protect important resources and further the Clean Water Act’s statutory objective. Another commenter stated that the definition of “significantly affect” is consistent with Justice Kennedy’s opinion in *Rapanos*. Another commenter also expressed support for the proposed rule’s definition of “significantly affect.” This commenter expressed that the agencies must consider how water resources function together and gave the example that if there is a wetland adjacent to a stream, the agencies must also consider the wetland, and the commenter did not believe the proposed rule was clear on this point.

**Agencies’ Response: The agencies acknowledge commenters who expressed concern with the terminology in the proposed definition of “significantly affect,” the clarity and consistency provided by the definition, and the potential effects of the definition on the scope of jurisdiction. The agencies have provided guidance on how to implement the**

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<sup>4</sup> In the proposed rule, the term “foundational waters” was used to refer to traditional navigable waters, the territorial seas, and interstate waters. In this response to comments, the agencies will preserve the use of the term “foundational waters” as used by commenters; however, responses will use “traditional navigable waters, the territorial seas, and interstate waters” or “paragraph (a)(1) waters,” as the final rule does not use the term “foundational waters.”

definition of “significantly affect” in Final Rule Preamble Section IV.C.9. Additionally, after considering public comments, the agencies have revised the definition of this term in the final rule for purposes of determining whether a water meets the significant nexus standard to mean “a material influence on the chemical, physical, or biological integrity of” a paragraph (a)(1) water. As described in Final Rule Preamble Section IV.C.9, the significant nexus standard cannot be met by merely speculative or insubstantial effects on paragraph (a)(1) waters, but rather requires the demonstration of a “material influence,” supported by the factual record, relevant scientific data and information, and available tools. The final rule’s definition of “significantly affect” is derived from the objective of the Clean Water Act and is informed by and consistent with Supreme Court case law. It is also informed by the agencies’ technical and scientific judgment and supported by the best available science regarding the functions provided by upstream waters to paragraph (a)(1) waters relevant to achieving the Clean Water Act’s objective. To be clear, in this rule the agencies are exercising the authority granted to them by Congress to construe and implement the Clean Water Act and to interpret an ambiguous term and its statutory definition. While the agencies’ interpretation of the statute is informed by Supreme Court decisions, including *Rapanos*, it is not an interpretation of the multiple opinions in *Rapanos*. See Final Rule Preamble Section IV.A.1. In any case, as further described in Final Rule Preamble Section IV.C.9.b, the agencies disagree with commenters who suggested that the final rule misinterprets Justice Kennedy’s language describing the significant nexus standard.

The agencies acknowledge commenters who stated that “significant nexus,” “adjacent to,” and “similarly situated” are undefined or subjectively defined. However, the agencies disagree that the implementation of these terms in the rule is unclear. The agencies explain throughout the Final Rule Preamble that the “significant nexus standard” means waters that either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters. As noted above, the final rule includes a definition of the term “significantly affect” to clarify implementation of the significant nexus standard, and the Final Rule Preamble clarifies the agencies’ implementation of “similarly situated” in Sections IV.C.9 and IV.C.6. Furthermore, the agencies have retained their longstanding definition of “adjacent” in the final rule. “Adjacent” is defined as “bordering, contiguous, or neighboring. Wetlands separated from other ‘waters of the United States’ by man-made dikes or barriers, natural river berms, beach dunes and the like are ‘adjacent wetlands.’” This is a longstanding and familiar definition that is supported by the text of the statute, Supreme Court case law, and science. See Final Rule Preamble Sections IV.A and IV.C.8.b.

The agencies acknowledge commenters who expressed concern that the final rule will lead to increased federal jurisdiction, including commenters who specifically referenced the effect of combining waters in a broad region and/or the effect of applying the relatively permanent and significant nexus standards to waters assessed under paragraph (a)(5). As discussed in Final Rule Preamble Section IV.A., the agencies are finalizing a definition of “waters of the United States” that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are

consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. See Section 12.3.4 of this document for the agencies' response to comments on the spatial extent of the "region" considered in significant nexus evaluations and Section 12.3.2 for the agencies' general rationale for aggregating waters as part of a significant nexus evaluation. See Final Rule Preamble Section IV.C.5 for a summary of the agencies' rationale for including the relatively permanent standard and significant nexus standard as jurisdictional criteria in paragraph (a)(5) of the final rule. The agencies expect that there will be a slight and unquantifiable increase in certain resources being found to be jurisdictional under the final rule in comparison to the pre-2015 regulatory regime. These increases are related to changes in some respects to the manner of implementing the relatively permanent standard and the significant nexus standard. As these increases are *de minimis* and cannot be quantified, this rule is not economically significant relative to the primary baseline. See the Economic Analysis for the Final Rule, Executive Summary.

The agencies disagree with commenters who suggested that only waters with a substantial connection to traditional navigable waters should be determined jurisdictional. The final rule includes five types of jurisdictional waters, including certain waters that can be jurisdictional if they meet either the relatively permanent standard or the significant nexus standard. See Final Rule Preamble Section IV.A for additional discussion on the basis for these final rule categories. The final rule defines "significantly affect" to require a "material influence"; see Final Rule Preamble Section IV.C.9 for the agencies' rationale. Waters meet the significant nexus standard if they significantly affect traditional navigable waters, the territorial seas, or interstate waters. See Final Rule Preamble Section IV.C.2 for additional discussion on paragraph (a)(1) waters.

The agencies agree with commenters who asserted that a connection can negatively affect a water feature, as reflected in the agencies' discussion of significant nexus evaluations and the potential effects of upstream waters on downstream paragraph (a)(1) waters in Final Rule Preamble Section IV.C.9. Furthermore, the agencies have determined that the final rule gives appropriate consideration to how waters like adjacent wetlands and tributaries function together, as described further in Final Rule Preamble Section IV.C.9.

The agencies acknowledge commenters who expressed concern that "similarly situated" waters with minimal effects on downstream traditional navigable waters, territorial seas, or interstate waters could be considered jurisdictional. However, the agencies are not reaching any conclusions, categorical or otherwise, about which tributaries, adjacent wetlands (other than those adjacent to paragraph (a)(1) waters), or waters assessed under paragraph (a)(5) are "waters of the United States." Instead, the final rule enables the agencies to make science-informed determinations on a case-specific basis as to whether or not a water that falls within these categories meets either the relatively permanent or significant nexus standard and is therefore a "water of the United States."

As further described in the Final Rule Preamble Section IV.C.9, the agencies disagree with commenters who asserted that a quantitative or statistical threshold should be required to

determine significance. The agencies have provided guidance on how to implement the definition of “significantly affect” in Final Rule Preamble Section IV.C.9.

The agencies disagree with commenters who concluded that the agencies did not consider the “connectivity gradient” when determining which waters are jurisdictional under the proposed rule. Both the preamble to the proposed rule and the accompanying Technical Support Document (TSD) reference and discuss connectivity gradients, as detailed in the Science Report, and this discussion is repeated in the preamble and the TSD for the final rule. By requiring under the final rule that certain categories of waters meet either the relatively permanent standard or the significant nexus standard, the agencies are recognizing gradients of connectivity exist and will assert jurisdiction under the significant nexus standard only when the waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of paragraph (a)(1) waters. The agencies conclude that their approach to “significantly affect” in the final rule acknowledges that connectivity exists on a gradient. The agencies recognize that connections with low values of one or more descriptors (*e.g.*, low-frequency, low-duration stream flows caused by flash floods) can have important downstream effects when considered in the context of other descriptors (*e.g.*, large volume or magnitude of water contribution). The final rule, however, does not equate the existence of *any* connection to the significant nexus standard as interpreted by the agencies in this regulation.

The agencies agree with commenters who asserted that the proposed rule’s science-based approach will protect key resources and help the United States achieve the goals of the Clean Water Act. The Final Rule Preamble Section IV.A describes the agencies’ determination that the final rule advances the Clean Water Act’s statutory objective as it is informed by the best available science concerning the functions provided by upstream tributaries, adjacent wetlands, as well as intrastate lakes and ponds, streams, and wetlands that do not fall within the other jurisdictional categories to restore and maintain the water quality of downstream traditional navigable waters, the territorial seas, and interstate waters.

#### 12.2.1.1 “More than Speculative or Insubstantial” vs. “Significant”

A few commenters provided a discussion of the plain meaning of the key terms “speculative,” “insubstantial,” and “substantial” and expressed that the plain meaning is different than the agencies’ interpretation. These commenters requested clarification of the terms in the context of the proposed rule. One commenter stated that “more than speculative or insubstantial” is not equivalent to “significant.” This commenter also stated that Justice Kennedy’s concurring opinion in *Rapanos* does not allow the agencies to regulate everything except features with only a speculative or insubstantial nexus. Another commenter suggested that “significant” and “speculative or insubstantial” are two extremes with a large area in between within the gradient spectrum. One commenter asserted “...the agencies have failed to articulate the distinction between any nexus and significant nexus.” Another commenter suggested using the phrase “measurable and significant” in replacement of “more than speculative or insubstantial.” Another commenter suggested using the phrase “likely to have an effect.”

**Agencies' Response:** The agencies acknowledge commenters' concerns regarding the proposed definition of the term "significantly affect" which included the phrase "more than speculative or insubstantial." After considering public comments and to increase clarity in the final rule, the agencies have revised the definition of the term "significantly affect" in the final rule to mean "a material influence on the chemical, physical, or biological integrity of" a paragraph (a)(1) water. As described in Final Rule Preamble Section IV.C.9, the significant nexus standard cannot be met by merely speculative or insubstantial effects on paragraph (a)(1) waters, but rather requires the demonstration of a "material influence," supported by the factual record, relevant scientific data and information, and available tools. The phrase "material influence" establishes that the agencies will be assessing the influence of the waters either alone or in combination on the chemical, physical, or biological integrity of a paragraph (a)(1) water and will provide qualitative and/or quantitative information and articulate a reasoned basis for determining that the waters being assessed significantly affect a paragraph (a)(1) water.

#### 12.2.1.2 Chemical, physical "OR" biological integrity vs. "AND"

Many commenters provided feedback regarding the use of "or" instead of "and" within the phrase "chemical, physical, or biological integrity" in the context of the definition of "significantly affect" in the proposed rule [emphasis added]. Several commenters indicated that allowing the compromise of any factor (chemical, physical, biological) goes against the intention of Congress and the objectives in the Clean Water Act.

However, many commenters criticized the agencies' proposed use of "or," which the commenters stated is different than Justice Kennedy's use of "and" and creates a broader test than anticipated by Justice Kennedy. One commenter stated that Justice Kennedy argued that wetlands should be considered "waters of the United States" if they significantly affect all three types of integrity. This commenter further argued that this concept was not applied to desert dry washes. A few commenters indicated that using "or" improperly extends the scope of "waters of the United States." One commenter explicitly recommended changing the proposed rule language from "or" to "and."

Many commenters indicated that the agencies should not adopt new limits that are not supported by science or law when returning to the pre-2015 regulatory regime. One commenter indicated that the proposed rule differs from the pre-2015 regulatory regime by changing the significant nexus standard to consider non-wetland waters, as well as changing "and" to "or" in specifying the effect on "chemical, physical, or biological integrity."

**Agencies' Response:** Consistent with the proposal, in the final rule a water may constitute "waters of the United States" when it significantly affects any one form of chemical, physical, or biological integrity of a paragraph (a)(1) water. The agencies disagree that the proposed approach would expand the scope of jurisdiction because it is consistent with the pre-2015 regulatory regime and longstanding practice. The agencies acknowledge that Justice Kennedy used the conjunction "and" when concluding that wetlands possess the requisite significant nexus if the wetlands "either alone or in combination with similarly

situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’” 547 U.S. at 780. However, the agencies disagree that the use of the word “and” in this context represents a holding by Justice Kennedy that only a water that alone or combination significantly affects every single aspect of integrity is jurisdictional. See Final Rule Preamble Section IV.C.9.b for additional discussion. Moreover, Congress intended the Clean Water Act to “restore and maintain” all three forms of “integrity” (section 101(a)), so if any one of them is compromised, then the statute’s stated objective would be contravened. It would be contrary to the plain language of the statute and subvert the law’s objective if the Clean Water Act only protected paragraph (a)(1) waters upon a showing that there were effects on every attribute of their integrity. As the agencies stated in the *Rapanos* Guidance: “Consistent with Justice Kennedy’s instruction, EPA and the Corps will apply the significant nexus standard in a manner that restores and maintains any of these three attributes of traditional navigable waters.” *Rapanos* Guidance at 10 & n.35.<sup>5</sup>

The agencies have concluded that the final rule’s significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. See Final Rule Preamble Section IV.A.3. While the agencies disagree that this rule’s significant nexus standard is inconsistent with Justice Kennedy’s concurring opinion in *Rapanos* as suggested by some commenters, this rule represents the agencies’ interpretation of the statute, not an interpretation of *Rapanos*.

See also Section 12.3 of this document for additional responses to comments regarding implementation of the significant nexus standard.

## 12.2.2 Factors to consider

### 12.2.2.1 *General comments*

Many commenters responded to agencies’ request for feedback regarding factors to consider under the significant nexus standard, expressing a range of opinions regarding the five factors proposed by the agencies. Many commenters stated support for including all five factors in the final rule. One commenter stated that the listed factors are highly relevant to determining the strength of the connection between a given waterbody and downstream jurisdictional waters. Another commenter asserted that the listed factors provide measurable indicators and readily understood criteria, and use of these factors is supported by the scientific literature. One commenter stated support for the addition of the list of factors to the definition of “significantly affect,” and the commenter suggested including mechanisms for an adaptive process that would allow for advances in science or knowledge. Another commenter asserted that all the factors listed would be logical and appropriate for determining jurisdiction when implemented with historical context. One commenter asserted that the factors must be codified within the regulatory text for clarity, consistency, legality and durability, adding that preamble language can be helpful to understand the

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<sup>5</sup> U.S. EPA and U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States* and *Carabell v. United States* (June 5, 2007).

meaning of an uncertain regulatory term or provision, but it is not a substitute for regulatory text, and should not be relied upon in lieu of codification.

Other commenters agreed that a list of factors should be included in the rule text but expressed concerns about the list of factors as proposed. Some commenters asserted that the list was incomplete. One commenter stated that they do not support the list as proposed because it is limited to distance measurements, climatological variables, and hydrologic flow. This commenter asserted the list fails to align with well-established science, including the EPA's Connectivity Report, and conflicts with Clean Water Act section 101(a) which requires regulation of all waters that are chemically, physically, and biologically connected. Another commenter stated that the proposed definition for "significantly affect" indicates that chemical, physical, and biological effects will be considered, but the specific factors listed in the definition are almost exclusively physical criteria and it is not clear how these factors will assess a significant chemical, physical, or biological effect. This commenter added that this approach may limit federal jurisdiction, particularly in urban watersheds where wetlands have been artificially disconnected from adjacent waterways. One commenter asserted that the proposed list largely only relates to the physical integrity of the nation's waters and suggested that the agencies add many more factors to the definition of "significantly affect." Another commenter requested that the final rule make clear that the list of factors is incomplete, and merely examples of factors that may be considered in this analysis.

A few commenters indicated that the first two of the proposed factors (distance from a "water of the United States" and distance from a traditional navigable water, territorial sea, or interstate water) appear to be redundant.

Many commenters requested additional information regarding the factors and indicated a need for more clarity and detail on how factors and functions influence the significant nexus standard. Several commenters expressed concerns the proposed rule had not provided sufficient detail about the factors for the public to evaluate. One commenter asserted that the factors provide the regulated community a general sense of what sort of information the agencies may look at it in determining jurisdiction, but no guidance whatsoever as to how the agencies will evaluate that information. This commenter also asserted that some of the factors are open-ended which adds uncertainty about the evaluation. Another commenter also expressed that some of the factors are open-ended, stating concerns about factor three (which they asserted comprises hydrological factors "including," but presumably not limited to, subsurface flow) and factor five (which they asserted provides three examples of "climatological variables" but infers other unnamed variables will also be considered). This commenter also noted that the list may not be complete because the agencies are inviting comment on even more factors to consider.

Several commenters expressed concern that the lack of detail in the proposed factors would lead to unpredictable and inconsistent determinations of jurisdiction. One commenter asserted that the approach is "utterly opaque," adding that the agencies offer no guidance whatsoever on how they might assess the significance of any of the factors, or any assurance that any such evaluation will be performed in a consistent fashion. Another commenter asserted that the absence of guidance creates a risk that the factors will be implemented inconsistently and in a way that does not align with the case law and past Agency practice. One commenter stated that because there is limited discussion of these factors in the preamble to the proposed rule, the relevance or intended application of some of these factors is not clear. Another commenter noted that the factors that would be considered in the case-specific "significant nexus"

analysis are not well defined, and the methods that the Agencies would use in the field to apply the test are even less certain. One commenter stated that the definitions, thresholds, and procedures used to conduct a “significant nexus” analysis must be clearly defined and standardized in the rule to ensure consistent implementation and clarify the boundaries of federal jurisdiction. One commenter indicated that the determination of jurisdiction informed by the agencies’ technical and scientific judgement is not equivalent to a scientific conclusion, and therefore the outcome would be unpredictable, inconsistent, and subject to improper political interference.

A number of commenters requested that the agencies provide metrics or thresholds for determining significance as well as additional detail regarding procedures for assessing the factors. One commenter stated that the final rule or subsequent guidance needs to clearly state how the factors listed will be applied to determine not only the potential strength of a connection, but also which factors will be used to determine the magnitude of the effect on a downstream water. Another commenter asserted that the proposed rule’s lack of any objective, measurable criteria would not provide landowners any reasonable basis for discerning which waters are subject to federal jurisdiction and regulation.

A few commenters raised questions including how the factors would be weighted, how many factors a water needs to meet to determine significance, who is responsible for evaluating factors, and if there is a threshold of significance for each factor.

Some commenters stated that the absence of specific quantitative thresholds was appropriate. One commenter expressed support for the use of narrative criteria and recommended avoiding attempts to quantify a precise numerical valuation of nexus. This commenter also suggested including principle environmental factors that affect connectivity, examples of observable features for each factor, and a system to weigh factors and indicators. Another commenter noted that assigning numeric standards would be a policy decision guided by science, because science does not have a bright line for jurisdiction. One commenter stated that the significant nexus analysis is intended to be a “flexible ecological inquiry,” and should be so applied in the final rule.

A commenter recommended that factors to be assessed for the significant nexus standard should account for the regional variability present across the country and for the changes that will occur due to climate change. The commenter noted that the regional variability in factors such as climate, soils, and topography may contribute to connectivity. Another commenter stated that addressing regional variability in the tests of “significant nexus” will appropriately incorporate the complete range of available science in support of the regulatory process. One commenter stated that such factors are best calibrated on a regional basis to determine significance of effect. This commenter gave the example of Washington state, explaining that significant ecological differences exist between the temperate western side of the state and the arid eastern side. This commenter suggested that the agencies should consider assigning regionally calibrated narrative thresholds explaining these criteria to guide consistent determinations of significance.

One commenter emphasized that low values of factors and functions considered in the “significantly affect” definition do not indicate low connectivity as the TSD indicated that few studies were available regarding the connections between non-floodplain wetlands and river networks. One commenter suggested including principle environmental factors that affect connectivity, examples of observable features for each factor, and a system to weigh factors and indicators.

A few commenters expressed that the following factors should not be included in the significant nexus standard:

- Climate change;
- Distance;
- Shallow subsurface connections;
- Size, density, and number of waters that are similarly situated;
- Groundwater;
- Sheet flow; and
- Jurisdiction-by-isolation.

**Agencies' Response:** The agencies agree with commenters who expressed support for including the proposed list of factors to consider under the significant nexus standard, and the agencies have retained a list of factors in the final rule regulatory text. The factors considered in this rule are readily understood criteria that influence the types and strength of chemical, physical, or biological connections and associated effects on paragraph (a)(1) waters.

The agencies acknowledge commenters who requested that certain factors not be included in the final rule, but the agencies disagree with some of the specific recommendations, as reflected in the list of factors included in the final rule. The agencies also disagree with commenters who asserted that the factors listed in the proposed rule were broad, subjective, and unclear. However, the agencies have modified the factors in response to public comments and to increase clarity in this rule. The agencies agree with commenters who asserted that distance from a “water of the United States” is not necessary to include in light of the other factors, such as distance from a paragraph (a)(1) water and landscape position and geomorphology, and have not included the factor in this rule. The agencies have also modified the factors to respond to public comments requesting additional detail on how the factors will be applied, as described further in Final Rule Preamble Section IV.C.9.

The agencies disagree with commenters who expressed concern that the proposed factors were mainly physical factors or related primarily to physical integrity. As further described in Final Rule Preamble Section IV.C.9.b, the factors in this rule influence the types and strength of chemical, physical, or biological connections and associated effects that streams, wetlands, and open waters have on paragraph (a)(1) waters.

The agencies acknowledge commenters who requested more clarity and additional information regarding the factors, including how the factors will be used in implementing the significant nexus standard. The agencies disagree with commenters who stated the factors are unclear, open-ended, or challenging for the regulated public to apply. The agencies also disagree with commenters who asserted that implementation of the factors would be unpredictable when applying the significant nexus standard. The agencies have established a definition of “significantly affect” in this rule, provided additional guidance on applying the significant nexus standard, and identified implementation tools and resources

that will work together to provide clarity and further consistency in implementing the significant nexus standard. The agencies have concluded that these actions, along with the agencies' experience making determinations under the significant nexus standard, will increase the clarity and consistency of determinations of jurisdiction.

The agencies sought comment on the list of factors in the proposed rule and, as described in Final Rule Preamble Section IV.C.9, the agencies have modified the factors in the final rule to increase clarity. The factors in the final rule are readily understood criteria that influence the types and strength of chemical, physical, or biological connections and associated effects on paragraph (a)(1) waters. Section IV.C.9.c of the Final Rule Preamble provides the agencies' general approach to implementing the definition of "significantly affect" for purposes of the significant nexus standard, including evaluation of the functions and factors. See Sections IV.C.4, IV.C.5, IV.C.6 of the Final Rule Preamble for additional information on how the agencies will implement the significant nexus standard for specific categories of waters.

Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. *See* 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). Final Rule Preamble Section IV.C.10 also provides guidance to landowners on how to determine when a Clean Water Act permit is required.

The agencies disagree that the factors will be subject to political interference, as they are codified in the final rule text and further explained through implementation guidance in the preamble to the final rule.

The agencies acknowledge commenters who asked how the factors would be weighted and how many factors a water needs to meet to determine significance. As described in Section IV.C.9.c of the Final Rule Preamble, the agencies will consider the factors in the final rule to analyze the strength of the influence of the functions on paragraph (a)(1) waters. In general, functions associated with stronger factors increase the likelihood of demonstrating a material influence on paragraph (a)(1) waters. If a water, either alone or in combination with similarly situated waters in a region, performs one function that has a material influence on the integrity of a paragraph (a)(1) water, that water would have a significant nexus. The agencies further explained in the preamble that the first two factors identified in the regulatory definition are key to a significant nexus determination: distance and hydrology.

The agencies also acknowledge commenters who stated that the factors considered under the significant nexus standard should account for regional variability across the country. The agencies recognize that there are appropriate levels of regional variation in implementation of the regulations; however, the agencies strive for national consistency. The agencies will work to facilitate effective, consistent, and efficient implementation of the final rule once it becomes effective. The clarity and certainty provided in the final rule will result in further consistency, while still allowing for regional variation in implementation

**that may be necessary based on regional differences in aquatic resources; for example, the ordinary high water mark regional manuals, the regional supplements to the wetland delineation manual, or the regional streamflow duration assessment methods, all of which are outside the scope of this rulemaking but are related resources. In addition, because jurisdictional decisions are made on a case-specific basis, site-specific circumstances such as regional conditions will be considered as appropriate. See also the agencies' response to comments in Section 18.3.**

**See Section 12.2.1 in this document for the agencies' response to comments concerning the gradient of connectivity.**

#### *12.2.2.2 Physical and/or hydrologic factors*

Many commenters expressed general support for the inclusion of the factors listed in the proposed rule, which some characterized as physical and hydrologic factors. One commenter stated that all the listed factors may indicate evidence of preferential flow paths and connection to stream base flow. One commenter recommended that the agencies should emphasize the evaluation of hydrologic factors as the first step in determining jurisdiction, stating that the primary way which pollutants travel from upstream to downstream waters is through surface water connections.

Several commenters expressed concern regarding the application and use of specific proposed factors. One commenter requested clarification regarding the distance thresholds for jurisdictional waters and the first two factors in the proposed rule (*i.e.*, (1), “the distance from a water of the United States” and (2) “the distance from a water identified in paragraph (a)(1), (a)(2), or (a)(6)”). Another commenter expressed opposition to the use of distance as a factor, stating that distance is not directly relevant but rather represents a likelihood of a significant effect. The commenter recommended that a better measure of physical connectivity would be consideration of stream order. Some commenters expressed concern about the hydrologic factors listed, stating that some of the data sources listed (*e.g.*, historic flow records, flood predictions, gage data) may be limited for non-relatively permanent waters.

Many commenters discussed the inclusion of sub-surface flow as a hydrologic factor. Several commenters requested that the agencies remove “shallow subsurface flow” from the list of factors. Some commenters questioned the meaning of “shallow subsurface flow” and several commenters requested clarification on the difference between subsurface flow and groundwater. One commenter noted that because the subsurface flow is not defined, it is not clear how it can be distinguished from groundwater flow, how those connections should be assessed and under what conditions. Another commenter stated that the use of subsurface flow in significant nexus determinations is not well understood, does not have clear measurement techniques without use of additional monitoring equipment, and is likely to introduce new confusion.

A few commenters asserted that there is contradictory language in the proposed rule and stated confusion over the fact that the proposed rule reaffirms the agencies' “longstanding interpretation” that groundwater is not a “water of the United States,” but that shallow subsurface flow and groundwater connections could be used to determine jurisdiction. One commenter stated that asserting jurisdiction based on shallow subsurface or groundwater connections raises substantial concerns, including lack of clarity and

consistency in the jurisdictional determinations. Another commenter requested that the agencies clarify that the determination of significant nexus does not mean that the shallow subsurface flow itself is a jurisdictional water, but rather only a conveyance of flow for the purpose of establishing jurisdiction of the connected waters.

Conversely, a number of comments discussed the importance of sub-surface flow as a factor. One commenter asserted that there is always a correlation between surface water and groundwater. Several commenters gave examples of resources which are primarily connected through groundwater or sub-surface flow. One commenter discussed river floodplains and asserted that floodplains operate to store water during flood stages and then slowly release their water to the stream channel post-flooding, thereby maintaining beneficial flows in the stream, even though there may be no direct surface connection. Another commenter discussed the coastal ponds in Rhode Island which may not have a direct surface connection to the ocean but are connected hydrologically through barrier beaches via groundwater. This commenter noted that the barrier beaches are often breached during storm events, providing temporary surface connections between the ocean and the coastal ponds.

One commenter argued that “shallow subsurface connections should be recognized as meeting the test for significantly affecting the chemical, physical, and biological integrity of traditional navigable waters.” Another commenter stated that the natural connectivity of the water cycle, including the recharge of streams from groundwater and surface waters, should assist in determining jurisdiction when applying the significant nexus standard. The commenter asserted that, if there is to be variability with determining significant nexus, it should not be economically driven but rather driven by natural connectivity of the water cycle dynamic.

Several commenters suggested additional physical or hydrologic factors to be included by the agencies. One commenter recommended adding a sixth physical factor which would incorporate soil type, composition, and transmissivity. This commenter asserted that waters will be significantly affected at greater distances and have more subsurface connections in soils with greater transmissivity, such as sandy soils or unconsolidated alluvium, compared to soils with lower transmissivity, such as highly compacted clays. Another commenter recommended adding a sixth factor that would take into consideration the size of the drainage (watershed) and the dominant land uses in that drainage. This commenter added that those characteristics play a large role on the volume and quality of the water that a particular tributary adds to the downstream waters which directly affects the chemical, physical, and biological integrity of downstream waters

A number of commenters suggested other physical and/or hydrologic factors for addition to the final rule including:

- Flow stage, rate, speed, and frequency in rivers and streams;
- Water currents;
- Water stage, source duration, and retention time in wetlands;
- Stream order as a measure of physical connectivity;
- Scour and deposition in streams;
- Turbidity levels;
- Watershed position; and
- Abundance, size, and distribution of waters in a watershed area.

**Agencies' Response:** The agencies acknowledge commenters who expressed support for the inclusion of the proposed factors in the definition of “significantly affect.” Section IV.C.9.a of the Final Rule Preamble describes the factors in the final rule that will be considered when determining whether the functions provided by the water being evaluated, either alone or in combination, have a material influence on the integrity of a traditional navigable water, the territorial seas, or an interstate water. Those factors include the distance from a paragraph (a)(1) water; hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow; the size, density, or number of waters that have been determined to be similarly situated; landscape position and geomorphology; and climatological variables such as temperature, rainfall, and snowpack.

The agencies acknowledge and appreciate commenters who suggested additional physical or hydrologic factors to be included for consideration under the significant nexus standard. As described in Final Rule Preamble Section IV.C.9.a, the agencies have determined that the factors in the final rule are readily understood criteria that influence the types and strength of chemical, physical, or biological connections and associated effects on downstream paragraph (a)(1) waters.

The agencies disagree with commenters who opposed including “distance from a paragraph (a)(1) water” as a factor to be considered during a significant nexus evaluation. The agencies have concluded that when evaluating functions and factors, the likelihood of a material influence is generally greater with decreasing distance from a paragraph (a)(1) water. See TSD Section III.E.iv for additional discussion.

The agencies added a new factor on “landscape position and geomorphology” in response to public comments requesting that the agencies consider watershed and soil characteristics. Landscape position and geomorphology capture characteristics like topography, slope, and soil porosity which may, for example, affect the strength of the hydrologic or biological connections between the subject waters and a paragraph (a)(1) water.

The agencies agree with commenters who supported the inclusion of shallow subsurface flow as a factor to be considered during significant nexus evaluations. See Section III.B.ii of the TSD for additional information on shallow subsurface hydrologic connections.

The agencies acknowledge commenters who requested additional clarification regarding the difference between subsurface flow and groundwater. The Final Rule Preamble Section IV.C.5.c describes that a shallow subsurface hydrologic connection is predominantly lateral water flow through a shallow subsurface layer. Shallow subsurface connections can also be maintained as water moves through karst topography, and through confined human-made subsurface conveyance systems such as drain tiles and storm sewers. See TSD section III.B.ii for additional information on shallow subsurface hydrologic connections. Final Rule Preamble Section IV.C.5.c also discusses tools and methods that can be used to identify the presence of a shallow subsurface connection.

**The agencies disagree with commenters who characterized as contradictory the proposed rule’s assertion that groundwater is not jurisdictional, but that shallow subsurface flow could be used to determine jurisdiction. The agencies acknowledge commenters who requested clarification that neither groundwater nor shallow subsurface flow itself is jurisdictional. Final Rule Preamble Section IV.C.5 states clearly that neither shallow subsurface connections nor any type of groundwater, shallow or deep, are themselves “waters of the United States.” Groundwater that is not jurisdictional includes both shallow and deep groundwater, even where such shallow subsurface water serves as a hydrologic connection that is assessed in determining if another water is jurisdictional. See also Final Rule Preamble Section IV.C.7.**

**The agencies disagree with commenters who stated that evaluating shallow subsurface connections will lead to a lack clarity and consistency in jurisdictional determinations. As described in the Final Rule Preamble Section IV.C.5.b, the agencies have considered public comments on shallow subsurface connections and provided clarity regarding implementation of this concept. See Final Rule Preamble Sections IV.C.3.c, IV.C.4.c, and IV.C.5.c.**

**The agencies acknowledge commenters who stated that some of the data sources listed in the proposed rule may be limited for certain types of water. As discussed in the Final Rule Preamble Section IV.G, the agencies have identified a variety of implementation guidance, tools, and methods available for use to determine whether a water, either individually or in combination with similarly situated waters in the region, satisfies the significant nexus standard. The agencies are not mandating specific data or tools to implement the final rule. The agencies will assess jurisdiction based on the most applicable methods and best available sources of information for the specific site under evaluation. As with any final regulation, the agencies will consider developing additional tools to promote consistent implementation of the final rule’s approach. Nevertheless, the agencies conclude that the final rule, together with the preamble and existing tools, provides sufficient clarity to allow consistent implementation of the final rule.**

### *12.2.2.3 Chemical and/or biological factors*

Many commenters expressed concern that the proposed list of factors overemphasizes physical and hydrologic factors and does not include adequate chemical/biological factors. One commenter stated that the proposed list of factors mostly focused on the physical integrity of waters and asserted that the agencies should add additional factors reflecting the consideration of chemical and biological connections. Another commenter expressed concern that the agencies had omitted biological and chemical metrics necessary to determine the presence of a significant nexus. One commenter stated concern that focus on physical and chemical connections in the list of factors goes against the TSD for the proposed rule and would limit determinations of jurisdiction. One commenter asserted that hydrologic connections seem to take priority within the rule compared to other functional connections. This commenter suggested that the agencies should clarify that hydrologic connections are only one type of

factor or function to be considered and that connectivity descriptors should also be applied to other types of functions.

One commenter suggested that the agencies add chemical and biological factors to the definition of “significantly affect.” This commenter recommended that the agencies address chemical factors by accounting for the disproportionate effects that distance, low-flow streams, and small wetlands can have on downstream jurisdictional waters. This commenter expressed that the agencies may benefit and strengthen their consideration of chemical factors by consulting with relevant state water quality agencies. In addition, this commenter suggested that the agencies review a state’s 303(d) list of impaired waters and 305(b) reports as well as the total maximum daily load reports.

Several commenters suggested additional chemical factors for the agencies to consider, including:

- Signs of retention, release, or transformation of nutrients or pollutants;
- Changes in pH or other water quality parameters;
- Transport of chemicals;
- Pollutant loads in surface waters, particularly those that mix with different flows;
- Comparisons between headwater, tributary, and receiving water body chemistries;
- Presence of chemical processes such as mercury conversion to methyl mercury; and
- Changes in the trophic state of lake systems.

One commenter stated that in considering the influential factors used to determine the type and strength of the chemical, physical, or biological connections and effects on downstream waters, the proposed rule leaves out biological factors. This commenter recommended that the rule consider the quantity and diversity of species in a particular area and their degree of reliance on multiple water resource types or other appropriate biological indicators. Another commenter recommended inserting an additional factor such as “whether the waterbody being evaluated provides aquatic habitat for a species migrating to a traditional navigable water.”

A few commenters suggested that the agencies might consult with state fish and wildlife agencies to determine appropriate measures of biologic connections. One commenter suggested seeking state fish and wildlife agency feedback regarding the consideration of habitat for aquatic, non-aquatic, endemic, or migratory species that rely on foundational or upstream waters.

Other commenters suggested additional biological factors such as:

- Provision of habitat for aquatic species that also live in foundational waters (*e.g.*, for refuge, feeding, nesting, spawning, or rearing young);
- Status of aquatic biota, invertebrates, plants, fish, and amphibians;
- Characteristics of habitats reflective of the species using them;
- Quantity and diversity of species in a particular area and their degree of reliance on multiple water resource types;
- Provision and export of food resources for aquatic species located in foundational waters;
- Provision of aquatic habitat for species migrating to a traditional navigable water;
- Spatial distribution patterns;
- Biological connectivity of hyporheos in hyporheic zone to other hyporheos and as a food source to organisms;

- Changes to the biologic environment from the background that would be expected to cause injury or death to an organism;
- Dominant land uses within drainage area; and
- Number, area, and spatial distribution of habitats.

Some commenters expressed concern regarding the consideration of biological integrity in the proposed rule factors. One commenter expressed that waters should not be jurisdictional based on only biological factors, as that is what was rejected by the *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers* 531 U.S. 159 (2001) (“SWANCC”).<sup>6</sup> Another commenter expressed that asserting jurisdiction based on biological connections is similar to asserting jurisdiction under the Migratory Bird Rule, which is problematic due to the court’s finding under *SWANCC*. One commenter stated that it is difficult to determine the effect of biological factors, specifically referencing how the complexity of food webs across ecosystems makes it difficult to determine the lack of biological connectivity. Another commenter indicated that the agencies’ reasoning for considering biological functions is circular because, as the commenter interpreted, “a body of water may have a significant nexus because it affects the biological integrity of a foundational water, but only if the biological functions significantly affect downstream foundational waters.” This commenter expressed confusion regarding whether the listed biological factors must be present or may be present for the significant nexus standard.

**Agencies’ Response: The agencies acknowledge commenters who requested that the agencies add additional factors related to chemical and/or biological integrity. The agencies disagree with commenters who asserted that the proposed factors are only related to physical integrity, and the agencies disagree with commenters who stated that the proposed rule overemphasized hydrologic connections at the expense of other types of connections. The factors in this rule influence the types and strength of chemical, physical, or biological connections and associated effects that streams, wetlands, and open waters have on paragraph (a)(1) waters. As described further in Final Rule Preamble Section IV.C.9.c, in general, identified functions coupled with stronger factors increase the likelihood of demonstrating a significant nexus. For example, similarly situated waters that have the capacity to trap or transform pollutants are more likely to affect the chemical integrity of a paragraph (a)(1) water if the similarly situated waters are closer to the paragraph (a)(1) water, or if there is a larger number or higher density of those similarly situated waters. See Section IV.C.9 of the Final Rule Preamble; see also Sections 12.2.2.1, 12.2.2, and 12.2.3 of this document for discussions about the factors and functions in the final rule.**

**The agencies also acknowledge commenters who stated that the presence of biological factors alone should not lead to an affirmative jurisdictional decision under the significant nexus standard. As described in the Final Rule Preamble Section IV.C.9.b, consideration of biological functions such as provision of habitat is relevant for purposes of significant nexus determinations under this rule only to the extent that the functions provided by tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) significantly affect the biological integrity of a downstream paragraph (a)(1) water. While the agencies recognize**

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<sup>6</sup> *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (“SWANCC”)

**that clean water and associated wetland and aquatic resource habitats are critical resources for birds and humans, the agencies also acknowledge the Supreme Court’s decision in *SWANCC* finding that the use of “isolated” non-navigable intrastate ponds by migratory birds was not by itself a sufficient basis for the exercise of federal authority under the Clean Water Act. In this rule, the agencies are not protecting tributaries, adjacent wetlands, or paragraph (a)(5) waters based solely on their potential use as habitat for migratory birds. Rather, this rule includes as jurisdictional tributaries, adjacent wetlands, and paragraph (a)(5) waters on a case-specific basis based on their importance to the integrity of traditional navigable waters, the territorial seas, and interstate waters where such waters meet either the relatively permanent standard or the significant nexus standard. As such, under the final rule, consideration of biological functions does not constitute an assertion of jurisdiction over a water based solely on its use by migratory birds. Rather, the agencies consider biological functions for purposes of significant nexus determinations under this rule only to the extent that the functions provided by tributaries, adjacent wetlands, and paragraph (a)(5) waters significantly affect the biological integrity of the downstream traditional navigable waters, the territorial seas, or interstate waters, consistent with the objective of the Act.**

### 12.2.3 Functions to consider

#### 12.2.3.1 *General comments*

Many commenters expressed support for adding a list of functions to the definition of “significantly affect.” Several commenters recommended using the specific list of functions identified in the *Rapanos* Guidance. One commenter recommended that the final rule text for the definition include those functions identified in the *Rapanos* Guidance and other functions justified by the best available science. Another commenter stated that including the functions from the *Rapanos* Guidance would provide clarity regarding which functions would be considered during the analysis.

Some commenters recommended that the regulatory definition include a specific and exclusive list of functions of upstream waters to assess when making a significant nexus determination. One commenter stated that the agencies should include a list of functions in the regulatory text for making a significant nexus determination and asserted that the list should be short, specific, and unambiguous. One commenter asserted that leaving the significant nexus standard open-ended will result in inconsistent and subjective implementation. The same commenter also recommended that any functions relied on as a basis for a significant nexus determination should be definite, specific to the waterbody in question, and limited to currently existing conditions of the waterbody.

Other commenters recommended that agencies include an open-ended list of functions. One commenter suggested that the agencies should clarify that any list of functions is not exclusive, and that field staff should consider all functions recognized by the current, best available science to have a nexus with the chemical, physical, or biological integrity of downstream waters. One commenter recommended that the functions be listed in a guidance document but asserted that it is not essential to include a list of functions in the rule text.

A few commenters made suggestions regarding the number of functions to be assessed. One commenter recommended that the agencies confirm in the final rule that a water does not need to perform all listed functions to have a significant nexus. This commenter asserted that if the waterbody, alone or in combination, performs “even just one” of the functions that affects the chemical, physical, or biological integrity, then the effect may be significant and the significant nexus standard is satisfied. Another commenter asserted that requiring one function sets a low standard that may not be repeatable and lacks consistency. This commenter recommended that the agencies change the rule to state that “more than one function” is required to have more than speculative or insubstantial impact on a downstream traditional navigable water, the territorial seas, or interstate waters to meet the significant nexus standard. Several commenters requested more detail about the functions to be considered. One commenter expressed concern that the functions are so broadly defined that the list would result in large numbers of potentially very disparate waters being considered similarly situated. One commenter suggested that the agencies propose regulatory definitions fully describing each function that may be considered when applying the “significant nexus” test, and the agencies should not rely on the test to assert jurisdiction until those proposed definitions have undergone notice-and-comment rulemaking.

One commenter recommended that the agencies limit the functions to those associated with connected waters and avoid functions that are provided more prominently by adjacent land use controls. Another commenter specifically suggested avoiding functions that are provided more prominently by adjacent land uses than they are by small stream channels. This commenter asserted that although small stream channels do provide some functions like trapping/filtering of sediments and pollutants, those functions are easily and effectively replaced by adjacent forested or prairie land uses or by low impact development practices like bioswales, filter strips, or naturally vegetated detention ponds.

One commenter discussed how the agencies might use the expertise of state fish and wildlife staff to better assess biological functions of aquatic habitat. That same commenter asserted that better protections for waters found jurisdictional via the significant nexus standard would benefit state-managed fish and wildlife including species of greatest conservation need.

**Agencies’ Response: In the proposed rule, the agencies sought comment on adding a list of functions to the definition of “significantly affect.” The agencies provided detailed examples of functions in the proposed rule. As described in Final Rule Preamble Section IV.C.9, the agencies have considered public comments on adding a list of functions to the definition of “significantly affect,” as well as public comments on the specific functions that should be listed. The agencies agree with commenters who stated that including a list of functions in the final rule would promote clarity and implementation consistency, and the agencies have added a list of functions to the final rule. The agencies disagree with commenters who suggested that the list of functions should include solely those functions referenced in the *Rapanos* Guidance. As described in Final Rule Preamble Section IV.C.9.b, the list of functions included in the final rule were selected by the agencies based on the functions from the *Rapanos* Guidance discussed in the preamble to the proposed rule, the agencies’ experience implementing the significant nexus standard, public comments on that list of functions, and consideration of the best available science.**

The agencies acknowledge commenters who recommended that the regulatory definition of “significantly affect” include an exclusive list of functions, as well those commenters who recommended that the agencies clarify that any list of functions is not exhaustive. As described in Final Rule Preamble Section IV.C.9.b, the significant nexus standard in the final rule is limited to an assessment of only those functions identified in the final rule that have a nexus to the chemical, physical, or biological integrity of paragraph (a)(1) waters. Thus, there are some important functions provided by wetlands, tributaries, and waters evaluated under paragraph (a)(5) that will not be considered by the agencies when making jurisdictional decisions under this rule.

The agencies acknowledge commenters who requested more detail about the functions to be assessed in a significant nexus determination. The agencies also acknowledge commenters who provided recommendations regarding specific sources of information for assessing functions, such as the expertise of other state and federal agencies. Final Rule Preamble Section IV.C.9.c describes the functions to be assessed in more detail and the agencies’ approach for evaluating the functions and factors in implementing the significant nexus standard.

Under the final rule, if a water, either alone or in combination with similarly situated waters in a region, performs one function that has a material influence on the integrity of a paragraph (a)(1) water, that water would have a significant nexus. The agencies disagree with commenters who asserted that a water must perform all of the listed functions to meet the significant nexus standard. See Final Rule Preamble Section IV.C.9.c for additional discussion and rationale.

The agencies disagree with commenters who asserted that the final rule should not include functions provided by a lack of hydrologic connection. See Section 12.2.3.2 of this document for the agencies’ response to comments on this topic.

The agencies disagree with commenters who asserted that a significant nexus analysis should be limited to the consideration of a specific water body in question. Under the final rule, waters, including wetlands, are evaluated either alone or in combination with other similarly situated waters in the region, based on the functions the evaluated waters perform. See Sections 12.3.3 and 12.3.4 of this document for the agencies’ response to comments on aggregating tributaries and adjacent wetlands as part of the significant nexus analysis.

While uplands may perform some of the same functions as do aquatic resources, the agencies find that wetlands and other aquatic resources are fundamentally different from uplands and generally provide more of these functions and provide these functions more efficiently and effectively than do uplands. The conditions in wetlands and other aquatic resources are different than that in uplands, and it is those conditions that allow for wetlands and other aquatic resources to efficiently perform myriad functions. The agencies conclude that the science is clear that uplands do not perform all of the functions that wetlands and other aquatic resources provide.

### 12.2.3.2 *Specific functions to include/exclude*

Many commenters made recommendations regarding specific functions that should be assessed when making a significant nexus determination. One commenter asserted that functions should be included that relate to the Clean Water Act's statutory objective to protect and restore the chemical, physical, and biological integrity of the nation's waters.

Several commenters recommended including the following functions that they asserted were listed in the *Rapanos* Guidance:

- retention and attenuation of floodwaters;
- runoff storage;
- recharge of river baseflow and contribution of flow;
- erosion control;
- sediment trapping and transport;
- temperature regulation;
- nutrient retention, recycling, and transport; and
- pollutant trapping, sequestration, transformation, filtering, and transport.

One commenter recommended including the following additional hydrologic functions:

- **Groundwater discharge:** The commenter asserted that the discharge of groundwater in wetlands that eventually flows to streams should be considered, and that often, groundwater discharge occurs in broad seepage zones and pools that are not immediately recognizable as surface waters and may be overlooked. The commenter stated that these discharge areas contribute flow to downstream waters.
- **Groundwater recharge:** The commenter asserted that groundwater recharge occurs in some wetlands, in various landscape settings, and can contribute to surface water flow elsewhere in the watershed. The commenter stated that this is of particular concern for wetlands that may otherwise appear to be geographically isolated.

One commenter recommended that the agencies specifically add the chemical, physical, and biological functions performed by riparian corridors adjacent to tributaries and headwater, ephemeral, intermittent, and perennial streams. This commenter added that numerous studies have identified the critical role played by forested riparian corridors in attenuating surface water pollution—especially phosphorus, nitrogen, and sediments—that contribute to the reduction of hypoxic conditions of downstream tributaries and interstate waters.

Several commenters addressed the inclusion of ecological functions of upstream waters. One commenter expressed concern that the functions mentioned in the preamble reflect the agencies' expansive view of the ecological ties necessary to establish federal jurisdiction over otherwise non-jurisdictional waters. Other commenters expressed support for assessing ecological functions mentioned in the preamble, including:

- provision of habitat for aquatic and semiaquatic species;
- provision and export of food resources;
- provision of habitat for life-cycle dependent functions (such as foraging, feeding, nesting, breeding, spawning, use as a nursery area) for species located in foundational waters;

- provision of drinking water for humans and wildlife; and
- export of organic matter.

Several commenters expressed concern regarding the agencies' exclusion of ecosystem services from the assessment of significant nexus. One commenter expressed that ecosystem services may be important considerations for implementing a Clean Water Act program and recommended that the agencies review appropriate ecosystem services to include in the final rule. One commenter asserted that there is no reasonable basis for the agencies' exclusion of habitat and other functions that translate into ecosystem services from "significant nexus" evaluations. This commenter stated that these functions are directly relevant to the chemical, physical, and biological integrity of the nation's waters and these uses are precisely the type of uses intended to be protected under the Clean Water Act. Another commenter requested clarity regarding the inclusion of upstream habitat or ecological services in the significant nexus standard, and the commenter asserted that such services may result in greater economic benefits from enhanced natural resources and fish-and-wildlife based recreation.

One commenter stated that they do not agree with the assumption that recreation and other ecosystem services do not contribute to the chemical, physical, or biological integrity of the nation's waters. This same commenter also expressed disagreement with the exclusion of habitat for non-aquatic species (*e.g.*, waterfowl) and endemic aquatic life, quoting the Clean Water Act (33 U.S.C. 1251(a)(2)): "[I]t is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved." This commenter added that species which depend on wetland habitat may utilize other habitats as well as waters for part of their life cycle.

A commenter disagreed that recreation should not be a function considered in the significant nexus analysis. The commenter asserted that many people enjoy water-based recreational activities and partake in them for their well-being, not to support the economy, and added that the intent of the Clean Water Act is also to benefit human well-being. The commenter requested that the agencies include consideration of how a change in chemical, physical, or biological integrity could affect waterborne recreational activity (*e.g.*, recreational fishing, boating, swimming, or rafting) as part of the significant nexus analysis.

Some commenters addressed the question of whether the absence of a hydrologic connection between two waters should be considered evidence of a significant nexus. One commenter indicated that the TSD notes that many of the functions performed by non-floodplain wetlands and open waters significantly affect downstream waters not only through their connections, but also through their lack of connections. The commenter expressed concern with the idea that a lack of a connection might contribute to a finding of a significant nexus. The commenter stated that this view is difficult to reconcile with *SWANCC*, in which the commenter asserted that the lack of a hydrologic connection was central to the holding that isolated ponds are not "waters of the United States." Another commenter, citing Justice Kennedy's opinion in the *Rapanos* case, asserted that the proposed rule cannot use a weak hydrological connection, let alone a lack of hydrological connections, as the basis for finding jurisdiction. One commenter stated that a lack of hydrologic connection is not an appropriate factor to consider as contributing to a significant nexus between a water feature and a downstream traditional navigable water, in particular as applied to ephemeral drainages in the arid Southwest. The commenter added that the suggestion that a lack of

hydrologic connection can be evidence of a significant nexus between a water feature and a downstream traditional navigable water renders the agencies' proposal arbitrary, capricious, and unlawful.

**Agencies' Response:** The agencies acknowledge commenters who provided input on the functions that should be assessed as part of the significant nexus analysis. The agencies have considered these recommendations and as described in Final Rule Preamble Section IV.C.9.b, the list of functions included in the final rule were selected by the agencies based on the functions identified in the *Rapanos* Guidance discussed in the preamble to the proposed rule, the agencies' experience implementing the significant nexus standard, public comments on that list of functions, and consideration of the best available science. The functions assessed are: contribution of flow; trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants); retention and attenuation of floodwaters and runoff; modulation of temperature in paragraph (a)(1) waters; or provision of habitat and food resources for aquatic species located in paragraph (a)(1) waters. See also the agencies' response to comments in Section 2.1 explaining the agencies' legal authority to rely on a single function—including a biological or ecological function, such as the provision of habitat and food resources for aquatic species located in paragraph (a)(1) waters—in making a finding of significant nexus, and including why this approach does not run afoul of the Supreme Court's decision in *SWANCC*.

The agencies acknowledge commenter concerns regarding the relationship between ecosystem services and functions that are included as part of the significant nexus analysis. However, the agencies note that the significant nexus standard is limited to an assessment of only those functions identified in the final rule that have a nexus to the chemical, physical, or biological integrity of paragraph (a)(1) waters. Thus, there are some important functions provided by wetlands, tributaries, and waters evaluated under paragraph (a)(5) that will not be assessed by the agencies when making jurisdictional decisions under this rule. The agencies disagree with commenters who asserted that personal recreation, for example, is a function that has a nexus to the chemical, physical, or biological integrity of paragraph (a)(1) waters. See Final Rule Preamble Section IV.C.9 for additional discussion.

The agencies disagree with the commenter who recommended that the agencies include the physical, chemical, and biological functions performed by riparian corridors adjacent to jurisdictional waters in the significant nexus standard. While the agencies acknowledge the critical ecological role performed by riparian corridors, many riparian corridors are not themselves waters subject to the Clean Water Act. As described in Final Rule Preamble Section III.A.1, regulation of land use is beyond the purview of the final rule.

The agencies disagree with commenters who asserted that when functions such as flood storage and pollutant retention result from a lack of hydrologic connection, those functions should not be considered in a significant nexus analysis. See Final Rule Preamble Section IV.C.9; see also TSD at section III.D.1; see also 547 U.S. at 775 (Kennedy, J., concurring in the judgment) (“[I]t may be the absence of an interchange of waters prior to the dredge and fill activity that makes protection of the wetlands critical to the statutory scheme.”).

#### 12.2.4 Climatological factors and climate change considerations

Several commenters stated support for the consideration of climate change impacts (*e.g.*, increased frequency and intensity of storms, which cause increased runoff and flooding) in significant nexus analyses. One commenter stated that the significant nexus standard would allow the agencies to address the changing hydrologic cycle and its effects on water quality, thereby better fulfilling the objectives of the Clean Water Act in the context of climate change. Another commenter stated support for environmentally protective, science-based approaches that are adaptable to changing landscapes driven by climate change. One commenter recommended that the agencies consider temporal data, noting that scientists are observing shifts in seasonal flow, stream length, and surface flows due to climate change.

A few commenters stated support for the significant nexus standard because it would allow the agencies to consider climate change impacts at the regional level, with one commenter stating support for environmental justice considerations as well. One commenter highlighted the climate change driven extreme weather patterns occurring in Nevada and other states in the arid Southwest. This commenter stated that extended periods of drought, decreases in mountain snowpacks, low soil moisture, and higher temperatures have contributed to lower lake and reservoir levels and lower flows in rivers, streams, springs, and wetlands. This commenter also noted that on the Pyramid Lake Indian Reservation, formerly perennial streams are now intermittent and intermittent streams are becoming ephemeral. Another commenter also mentioned the importance of considering climate change in the arid Southwest and stated that climate change may affect the chemical, physical, and biological integrity of the nation's waters through increasing acidity and temperature, reduced surface water volume, and reduced surface water inflows from diminishing snowpack, which will in turn affect aquatic habitat diversity and water supply for irrigation, livestock, and human consumption. One commenter stated support for climate change impacts and resiliency considerations in significant nexus analyses of "other waters."

Some commenters expressed opposition to the consideration of climate change as part of a significant nexus analysis. One commenter stated that climate change should not be a component of the evaluation, because the requisite nexus should be determined solely based on existing conditions, not potential future conditions. One commenter expressed concern that tools which would allow for reliable site-specific evaluations of climate change impacts do not yet exist, meaning that jurisdiction would be based on speculation. Another commenter also asserted that consideration of climate change is speculative and stated that the agencies have neither special expertise in this area nor statutory authority to make decisions regarding climatological variables. One commenter suggested that more research needs to be done as to whether including climate change as a component of jurisdiction is the best approach to managing climate change impacts on water resources.

Several commenters addressed the inclusion of climate-related factors in the definition of "significantly affect." One commenter stated that climate related factors such as climate change, snowpack, rainfall, and temperature are conditions that vary from year to year. This commenter stated that including those variables in the significant nexus standard is unprecedented and speculative.

One commenter asserted that the proposal incorrectly conflates weather and climate, thereby allowing the agencies to attribute discrete weather events and patterns to overall climate change. This commenter requested that the agencies clarify how climatological factors can influence the agencies' consideration of

the effects of subject waters on downstream foundational waters within a given region. Another commenter stated that climatological variables such as temperature, rainfall, and snowpack are inherently too open-ended and only provide the regulated community with a general sense of what sort of information the agencies may look at it in determining jurisdiction.

One commenter posed a number of questions related to climatological factors:

- How are rainfall thresholds to be considered (average or episodic?) and over what periods of time (long enough to accurately represent climate, not meteorology)?
- Which temperature measurements are to be applied—water or air temperatures—and how do they relate to the nexus of a water either considered alone or in combination with similarly situated waters in the region?
- How would decreases in rainfall, rather than increases, affect significant nexus determinations for ephemeral waters?

A few commenters addressed the question of whether carbon sequestration should be included as a function in the definition of “significantly affect.” One commenter expressed confusion as to whether carbon sequestration might be considered an aquatic resource function component of the significant nexus standard and requested that the agencies clarify the answer. The commenter requested that the regulated community have an opportunity to comment in response before the rule is finalized. Another commenter expressed concern that the agencies might not consider carbon sequestration under the significant nexus standard. This commenter asserted that there is evidence that the reduction of carbon due to carbon sequestration in wetlands directly impacts downstream waters and the oceans into which they flow, thus creating a “significant nexus” with the chemical, physical, or biological integrity of “waters of the United States.” This commenter also asserted that the agencies should include any carbon not sequestered in the quantification of impacts to population groups of concern. One commenter encouraged the agencies to include the carbon storage and sequestration potential of wetlands in the significant nexus analyses of impacts on foundational waters. This commenter added that wetlands serve as significant carbon banks at national and global scales and thereby reduce climate change impacts to the nation’s waters. Another commenter stated that wetland conversion, such as drainage, causes much of the stored carbon to be released back into the atmosphere, further contributing to the climate crisis and degradation of water quality. This commenter asserted that consideration of wetland carbon sequestration and storage potential is crucial to maintaining the quality of foundational waters.

**Agencies’ Response: The agencies acknowledge commenters who supported, as well as commenters who opposed, considering climate change as part of the significant nexus analysis. The agencies also acknowledge commenters who stated that a significant nexus should be identified solely based on existing conditions, not potential future conditions. The agencies considered comments on the proposed rule discussing climate change. There are ways the agencies can consider a changing climate under the significant nexus standard, but only to the extent it is relevant to the evaluation of whether the subject waters significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters.**

**The agencies further acknowledge commenters who specifically provided recommendations on including factors and functions related to climate change in the definition of “significantly affect.” The agencies recognize and agree that climate change will impact**

waters, including wetlands. See Section II.C of the TSD. When the agencies assess whether or not a water is a “water of the United States,” consistent with longstanding practice, they do not assess future conditions based on potential climatic changes. See Final Rule Preamble Section IV.C.9.c.ii for a discussion of how the agencies can consider a changing climate under the significant nexus standard consistent with the best available science.

The agencies acknowledge commenters who raised specific questions about the application of factors related to climate change during an evaluation of significant nexus.

Climatological factors like temperature, rainfall, and snowpack in a given region can influence the strength of the functions provided by the subject waters to paragraph (a)(1) waters by affecting the frequency, duration, magnitude, timing, and rate of hydrological connections. See Final Rule Preamble Sections IV.C.4.c, IV.C.5.c, and IV.C.6.c for additional information on tools that are available to complete significant nexus determinations for tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5), including tools that can be used to measure climatological factors.

The agencies also acknowledge commenters who requested additional clarity regarding how carbon sequestration will be considered as part of a significant nexus analysis. The agencies acknowledge commenters who supported, as well as commenters who opposed, assessing carbon sequestration as a function provided by upstream waters to paragraph (a)(1) waters. As described in Final Rule Preamble Section IV.C.9.b, the significant nexus standard is limited to an assessment of only those functions identified in the final rule that have a nexus to the chemical, physical, or biological integrity of paragraph (a)(1) waters. The agencies recognize that there are climate benefits that streams, wetlands, and open waters provide that are not related to restoring or maintaining the integrity of paragraph (a)(1) waters, such as carbon sequestration. Those functions are not considered under the final rule, because they are not directly related to the chemical, physical, or biological integrity of paragraph (a)(1) waters and therefore are not relevant to Clean Water Act jurisdiction.

## 12.3 Significant Nexus Standard

### 12.3.1 Relationship to relatively permanent standard

One commenter indicated that the proposed rule creates uncertainty by establishing two standards (the significant nexus standard and the relatively permanent standard) which will lead to inconsistent regulatory decision-making. Another commenter stated that the relatively permanent and the significant nexus standards are not well defined. One commenter stated that the proposed rule provides ambiguous definitions for the significant nexus standard and relatively permanent standard, as well as for foundational waters, and does not give methods to apply the standards to “waters of the United States.” A few commenters expressed that the option to use either the relatively permanent or significant nexus standards, the unclear definitions, and the absence of a defined flow duration contribute to the agencies’ overreach. One commenter stated objection to the significant nexus standard and the relatively permanent standard as both extend federal jurisdiction on water resources. This commenter expressed a lack of support for both the relatively permanent standard and the significant nexus standard as proposed and advocated for wider stakeholder consultation.

A commenter expressed confusion about determining jurisdictional waters using both the significant nexus standard and the relatively permanent standard. One commenter stated that the complexity of using either or both standards with wetlands will lead to inconsistent decisions, resulting in delayed projects and increased costs. This commenter stated objection to the significant nexus standard when applied to tributaries and asserted that only the relatively permanent standard should be used. Another commenter expressed that applying jurisdiction to adjacent wetlands via the relatively permanent standard or the significant nexus standard is problematic as it does not apply the *Rapanos* Guidance correctly or clearly define factors.

One commenter stated that any water that satisfies the significant nexus standard must be considered jurisdictional, even if it does not satisfy the relatively permanent standard.

Some commenters stated that the proposed rule does not provide methods to apply the relatively permanent and significant nexus standards to “waters of the United States.” A commenter stated that the agencies need to reduce uncertainty by providing clear definitions, thresholds, and methods for the significant nexus standard as well as the relatively permanent standard. Another commenter also requested clear definitions and thresholds for the significant nexus standard and relatively permanent standard; otherwise, the commenter cautioned that the rule would be subject to inconsistent application and uncertainty. A commenter urged the agencies to provide clear guidance on the significant nexus standard and relatively permanent standard that is consistent with the *Rapanos* decision and evaluates downstream impacts on navigable waters in a manner consistent with the best available science. A commenter questioned in what order the standards are applied to determine jurisdiction and opined that based on their interpretation of the proposal, the relatively permanent standard is applied first, in which case, the significant nexus standard would not be necessary, eliminating the need for expensive investigations to determine a significant nexus.

Some commenters supported including both the relatively permanent and significant nexus standards in the rule, with some commenters indicating that the significant nexus standard and the relatively permanent standard together would increase clarity and legal defensibility. One of these commenters stated that the *Rapanos* Guidance is currently applicable and being implemented, and the state agency’s familiarity with the pre-2015 regulatory regime will ensure a smooth transition when the rule is implemented.

Several commenters stated support for both the significant nexus standard and the relatively permanent standard when applied to wetlands, and a few commenters stated support for using the significant nexus standard and the relatively permanent standard when applied to tributaries. A few commenters stated support for both the significant nexus standard and the relatively permanent standard when applied to “other waters,” including isolated wetlands, if they significantly affect nearby and downstream water quality. One commenter stated support for using both standards in an approach similar to the *Rapanos* Guidance to find jurisdiction over all categories of waters, including “other waters” and tributaries. One commenter stated that applying the relatively permanent standard and the significant nexus standard as well as expanding language of the pre-2015 regulatory regime will further protect adjacent wetlands.

One commenter stated that the relatively permanent standard should only be used to support the significant nexus standard. One commenter stated that the relatively permanent standard alone is inadequate to identify upstream jurisdictional waters that significantly affect downstream waters. Another commenter stated that relying only on the relatively permanent standard allows wetlands and streams to become vulnerable, so they encouraged the agencies to include the significant nexus standard as an alternate assessment.

**Agencies' Response:** The agencies disagree with commenters who asserted that including both the relatively permanent and significant nexus standards in the rule would create uncertainty that will lead to inconsistent regulatory decision-making. The agencies' have been implementing the *Rapanos* Guidance for nearly 15 years and it provides for the assertion of jurisdiction under either standard without creating uncertainty. The agencies have included both standards in the final rule. In this rule, the agencies are exercising their authority to construe "waters of the United States" to mean the waters defined by the familiar 1986 regulations with amendments to reflect the agencies' interpretation of the statutory limits on the scope of the "waters of the United States" informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining "waters of the United States." This rule's limitations are based on the agencies' conclusion that the significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. The agencies have also determined that the relatively permanent standard should be included in the rule because, while it identifies only a subset of the "waters of the United States," it provides important efficiencies and additional clarity for regulators and the public. See Final Rule Preamble Section IV.A.3.

The agencies disagree with commenters who expressed concern that using the relatively permanent and/or significant nexus standard will lead to inconsistent decisions, resulting in delayed projects and increased costs. The agencies find that the clarifications in this rule, including the addition of exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime, and the intervening advancements in implementation resources, tools, and scientific support address many of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under the Clean Water Act. See Final Rule Preamble Section IV.C.7 and IV.G.

In regard to commenters who stated that the relatively permanent and significant nexus standards are not well defined, or that methods to apply the standards are not provided, the agencies' approach to implementation of the relatively permanent and significant nexus standards is broadly consistent with the pre-2015 regulatory regime, but the agencies have clarified and refined both the regulatory text and the guidance on how the agencies intend to implement these standards in order to promote consistent Clean Water Act protections for waters. See Final Rule Preamble Section IV.C.

The agencies disagree with commenters who asserted that the relatively permanent standard should only be used to support the significant nexus standard. As described above, the agencies have determined that the relatively permanent standard provides important efficiencies and additional clarity for regulators and the public as it more readily identifies a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. However, on its own, the standard is inconsistent with the text of the statute and Supreme Court precedent and is insufficient to advance the objective of the Clean Water Act.

The agencies disagree with commenters who suggested the agencies should develop threshold values for the relatively permanent and significant nexus standards. As described in Final Rule Preamble Section IV.C.9.b, First, the statute contains no text suggesting that the scope of the “waters of the United States” must be identified based on a quantitative or statistical threshold, nor is a quantitative or statistical assessment necessary to meet the statutory objective the definition is designed to achieve. Additionally, such an approach would be unworkable given the extensive regional differences in water systems and the variability of individual waterbodies across the nation. For this reason, the agencies have long established the practice of site-specific assessment. Third, the appellate courts have not held that the term “significant” for purposes of Clean Water Act jurisdictional requires statistical significance or quantitative measurement.

The agencies agree with commenters who indicated that the significant nexus and relatively permanent standards together increase clarity and that familiarity with the pre-2015 regulatory regime will enhance implementation of the final rule. As described in the Final Rule Preamble Section IV.A, the agencies are exercising their authority to interpret “waters of the United States” to mean the waters defined by the familiar 1986 regulations, with amendments to reflect the agencies’ determination of the statutory limits on the scope of the “waters of the United States” informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies’ experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining “waters of the United States.” The agencies have extensive experience implementing the pre-2015 regulatory regime, as described Final Rule Preamble Section IV.A.4, and this experience will assist the agencies in implementing this rule.

The agencies disagree with commenters who asserted that the significant nexus standard should not be applied to tributaries, adjacent wetlands, and/or waters assessed under paragraph (a)(5). While the agencies’ interpretation of the Clean Water Act is informed by relevant Supreme Court decisions, the agencies are exercising the authority granted to them by Congress to interpret the Act based on many other factors. Here, the agencies interpret “waters of the United States” to include waters that meet the significant nexus standard as codified in this rule because the agencies have determined, informed by the best available science and the text, structure, and history of the Clean Water Act, that this standard, including the aggregation of waters authorized by it, advances the objective of the Act. In particular, the significant nexus standard reflects and furthers the objective of the Clean Water Act by allowing for a scientific evaluation of the effect of wetlands, tributaries, and

**other types of waters on the paragraph (a)(1) waters. See Final Rule Preamble Section IV.A for further discussion of the legal and scientific rationale underpinning the final rule’s significant nexus standard.**

**Regarding commenters who advocated for wider stakeholder consultation, the agencies conducted extensive stakeholder outreach in developing the final rule, beginning with soliciting pre-proposal recommendations from members of the public for a 30-day period from August 4, 2021, to September 3, 2021. In July 2021, the agencies also announced a schedule for initial public meetings to hear from interested stakeholders on their perspectives on defining “waters of the United States.” 86 FR 41911 (August 4, 2021). In total, the agencies received over 32,000 recommendation letters from the public during the pre-proposal period and held six public meeting webinars between August and September 2021. During the proposed rule’s 60-day public comment period, the agencies proceeded to hold three virtual public hearings in January 2022, in addition to participating in a Small Business Environmental Roundtable hosted by the Office of Advocacy of the U.S. Small Business Administration and engaging in federalism and tribal consultation, among other activities. See Final Rule Preamble Section III.C. The agencies ultimately received over 114,000 comments on the proposed rule during the public comment period. The agencies greatly appreciate and thoroughly considered the feedback received in developing the final rule, made changes to the rule to address that feedback, and intend to continue to engage with stakeholders to facilitate implementation of the rule moving forward.**

### 12.3.2 General implementation

#### 12.3.2.1 *General comments*

Many commenters found the terms within the significant nexus standard unclear. A few commenters indicated that the significant nexus standard is “lengthy, flawed, and inconsistent” and asserted that it will hinder project development. A few commenters specifically requested definitions for “adjacent to,” “similarly situated,” “significance,” “region,” and “in the region.” One commenter expressed that the proposed terminology creates an ambiguous definition of “waters of the United States.” Another commenter stated that vague terms like “similarly situated” and “more than speculative or insubstantial” will leave regulated individuals, like farmers, questioning the jurisdictional status of features. A commenter expressed that implementing the significant nexus standard will lead to confusion and litigation. One commenter stated that the vague definitions in the proposed rule would lead to litigation, no gain in water quality, and lack of a clear understanding of “waters of the United States.” Another commenter emphasized challenges providing applicants for state permits with accurate information regarding significant nexus determinations under the *Rapanos* Guidance that would help applicants determine whether there may have been applicable federal permits necessary in addition to state permits. A commenter stated that consistent application of the jurisdictional standards requires clarity from the agencies, including the consideration of highly altered waters in urban areas. A few commenters requested clarification regarding whether there will be changes to the significant nexus standard.

Some commenters expressed that the significant nexus standard is confusing and will lead to different interpretations across the United States. Another commenter stated that the agencies have acknowledged

that climate change will impact certain regions differently, and the commenter recommended that the final rule not rely on the significant nexus test because they feel that it will lead to the loss of protection in waters in the Southwest.

A commenter expressed concern that non-jurisdictional waters may be determined jurisdictional due to the inconsistent interpretation of the significant nexus standard. The commenter recommended additional clarity regarding the significant nexus standard as well as the identification of non-jurisdictional waters. Another commenter indicated that without embedding clear definitions and standard methods in the regulatory text for applying the significant nexus standard and the relatively permanent standard, there would be inconsistent application, regulatory uncertainty, and risk of further prosecution.

Several commenters indicated that the significant nexus standard is too broad, allowing the agencies to have unlimited jurisdiction. One commenter stated that the proposed rule includes a bias towards regulatory authority. Another commenter expressed that the lack of clear definitions would create issues with implementation of the significant nexus standard and creates “favorable conditions” for the agencies. A commenter stated that leaving “similarly situated,” “in the region,” and “significantly affect” undefined would lead to an expansion of federal authority. Another commenter expressed that the agencies will use the significant nexus standard on all aggregated waters to determine jurisdiction, which is to the agencies’ advantage. A commenter stated that the proposed rule would allow districts and agency personnel to claim jurisdiction over “everything” due to the ability to aggregate wide latitudes of similarly situated waters and a vague “significantly affect” definition. One commenter expressed that the proposed rule would give the agencies flexibility to determine significance for every analysis.

One commenter requested that the agencies develop a rule that is practical and understandable to the general public, and the commenter asserted that the significant nexus standard in the proposed rule would impede the general public’s ability to identify a “water of the United States.” A commenter stated that the significant nexus standard is confusing and will lead to legal and regulatory litigation. Another commenter emphasized the lack of guidance and subjectivity of the significant nexus standard. This commenter stated the importance of including objective criteria within the significant nexus standard. A commenter stated that the agencies appear to acknowledge the uncertainty regarding the significant nexus standard as the proposal does not provide bright lines, leading to inconsistent interpretation and an assessment of factors that are unpredictable. A commenter asserted that the goal of the proposed rule should be to provide consistency for communities and regulators. A few commenters highlighted that the regulated community deserves a better regulation that provides clarity on jurisdictional waters. Another commenter recommended that the agencies provide clear and objective jurisdictional standards that the agencies are not able to freely manipulate.

One commenter urged the agencies to consider alternatives to the significant nexus standard that do not require substantial factual investigations and are not administratively burdensome but that are fully supported by science and described coherently.

One commenter recommended that the significant nexus determinations of smaller watersheds should be recorded and mapped by Corps districts so that they can be referenced for future determinations of like waters within the same or similar watersheds, which the commenter stated will avoid the need for Corps staff, applicants, and consultants to “start from scratch” for every location.

Many commenters expressed support for additional guidance to help clarify and/or implement provisions of the proposed rule or criticized the lack of existing guidance. A few commenters stated that an analysis of factors to determine if a water meets the significant nexus standard cannot easily be completed by the regulated public or agency personnel based on current guidance. A commenter indicated that the states and regulated public are challenged by the agencies' lack of guidance of where to draw the line of significance. A commenter expressed that the significant nexus standard lacks objective criteria. Another commenter stated that, in addition to the lack of thresholds, the significant nexus standard is unclear and provides factors that increase confusion. One commenter requested technical guidance and procedures to conduct the significant nexus standard, including "other waters" procedures. One commenter requested case studies for examples where floodplain waters would not meet the significant nexus standard.

Some commenters stated that the absence of specific quantitative thresholds was appropriate. One commenter expressed support for the use of narrative criteria and recommended avoiding avoid attempts to quantify a precise numerical valuation of nexus. Another commenter noted that assigning numeric standards would be a policy decision guided by science, because science does not have a bright line for jurisdiction. One commenter stated that the significant nexus analysis is intended to be a "flexible ecological inquiry," and should be so applied in the final rule.

A commenter indicated that significant nexus field assessments should use readily observable metrics, capable of being measured or observed during a single short site visit. Another commenter stated that field observations, recorded evidence, and historical evidence should be used to inform the significant nexus standard. This commenter stated that using field observations to connect the effects to downstream waters is supported by the *Rapanos* Guidance. One commenter stated that they appreciate that the agencies will provide additional guidance on the final rule based on public input.

A commenter expressed that there is uncertainty regarding the appropriate scale of analysis in the proposed rule. The commenter cited a variety of scales for time (*e.g.*, hydrology cycles) and geography (*e.g.*, ecoregions, watersheds, and individual wetlands) when considering the interconnectivity of wetlands, aggregation of wetland impacts, inundation periods, and climate change. This commenter stated that this uncertainty of scale will likely result in confusion within the regulated public and within the agencies, as anything may be determined to be significant if viewed from a person's desired scale.

Many commenters stated that "significant nexus" is a legal term that is not commonly used by scientists. These commenters stated that this is mentioned in the Science Report. Similarly, many commenters requested that "significant" be removed from the significant nexus standard, as they stated it is not a scientific term. One commenter stated that the scientific grounds in the proposed rule do not explain why the agencies have chosen the significant nexus standard and cited the agencies' acknowledgement that significant nexus is not purely scientific and requires legal, technical, and policy judgement. A commenter questioned whether references to scientific evidence mean that the significant nexus standard must show or support how the tributary affects downstream waters for it to be jurisdictional.

One commenter stated the significant nexus standard lacks clarity because the proposed rule lacks discussion of the three-parameter approach for delineating wetlands. The commenter indicated that overflow areas may provide brief overland connectivity to traditional navigable waters, supporting two of

the three wetland parameters. The commenter asserted that this overflow connection does not lead to federal jurisdiction. This commenter stated that there are similar circumstances with intermittent and permanent streams, which they asserted could cause confusion regarding jurisdiction. The commenter further expressed confusion about areas that do not meet all three wetland parameters, yet still provide biological functions. This commenter included the example of California red-legged frogs using pools for temporary habitat during seasonal movement, in cases where those pools do not satisfy the three-parameter approach. This commenter interpreted that these areas are not under federal jurisdiction but recommended that the agencies provide clarification.

Some commenters were generally supportive of the proposed rule's approach to the significant nexus standard and made general recommendations that the agencies include a scientific basis for defining the terms. One commenter stated that the significant nexus standard must be based on science and encouraged the agencies to continue using the Science Report to inform jurisdiction. Another commenter stated that the significant nexus standard provides science-based analyses and creates categories that increase clarity for determining jurisdiction. Another commenter stated support for the agencies' approach of using the significant nexus standard, and the commenter asserted the approach is consistent with Supreme Court decisions and is also informed by the factors and functions that affect foundational waters.

Many commenters explicitly stated support for the use of the significant nexus standard, including the agencies' proposed implementation of key terms. One commenter indicated that the significant nexus standard will prevent nutrient loading, preventing adverse impacts to communities that source drinking water from traditional navigable waters. Another commenter discussed the importance of traditional navigable waters, territorial seas, and interstate waters, and their adjacent wetlands and tributaries, along with impoundments and levees, and emphasized how this infrastructure could impact the significant nexus standard. Another commenter indicated that the proposed rule correctly states that the interconnections of waters affect the integrity of "waters of the United States." This commenter stated that the significant nexus standard recognizes the connections of tributaries and ephemeral streams with downstream waters.

One commenter stated that the significant nexus standard allows for regional differences, which is important for tribal nations. This commenter also expressed that within their tribal nation, there are five territories that fall within multiple EPA regions, which created challenges in the past for regulatory actions.

A few commenters stated support for using the *Rapanos* Guidance to implement the significant nexus standard, as they asserted it provides consistency and understanding in determining jurisdictional adjacent wetlands. One commenter indicated the agencies' use of the *Rapanos* Guidance for implementing the significant nexus standard resulted in successful, consistent application and determinations when applying the significant nexus standard, specifically in Environmental Protection Agency Region 10.

**Agencies' Response: The agencies acknowledge commenters who expressed concerns with the clarity of terminology in the proposed rule's description of the significant nexus standard. The agencies sought comment on options for interpreting many of the terms associated with the significant nexus standard, including "similarly situated" and "region," as well as the proposed factors to be considered in assessing the strength of chemical,**

physical, and biological connections and associated effects on downstream traditional navigable waters, the territorial seas, or interstate waters when making a significant nexus determination. The agencies also sought comment on whether to include a list of functions in the definition of “significantly affect.” As described in the Final Rule Preamble Section IV.C, the agencies have responded to public comments on these concepts and provide clarity in the final rule regarding how the agencies intend to implement the significant nexus standard. In addition, after considering public comments, the agencies have revised the definition of the term “significantly affect.” See Section 12.2 of this document for the agencies’ response to comments concerning the definition of “significantly affect.” In response to commenters who requested additional clarification on the identification of non-jurisdictional waters, see Final Rule Preamble Section IV.C.7.

The agencies disagree with commenters who stated that the significant nexus standard could lead to inconsistent application and uncertainty in jurisdictional determinations. As discussed further in Final Rule Preamble Section IV.A.4, the agencies have determined the final rule is both familiar and implementable. All definitions of “waters of the United States,” including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR have required some level of case-specific analysis. Consistent implementation of the final rule will be aided by improved and increased scientific and technical information and tools that both the agencies and the public can use to determine whether waters are “waters of the United States.” See Final Rule Preamble Section IV.G.

In response to commenters who provided input on implementing the significant nexus standard consistent with the *Rapanos* Guidance, the agencies note that the *Rapanos* Guidance is no longer in effect. Though the agencies are not relying on the *Rapanos* Guidance for purposes of implementing the final rule, many aspects of the final rule, including implementation-related issues, are consistent with or similar to the approaches taken in the *Rapanos* Guidance.

In regard to commenters who expressed concern that the significant nexus standard could cause confusion regarding the potential applicability of federal permits, the agencies note that public or any other interested party may contact the applicable permitting authority for guidance. Additionally, individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. See 33 CFR 325.1; RGL 16-01 (2016). In addition, Final Rule Preamble Section IV.C.10 provides guidance to landowners on how to determine when a Clean Water Act permit is required.

The agencies disagree with commenters who stated that the significant nexus standard will lead to inappropriately broad federal jurisdiction. As discussed in Final Rule Preamble Section IV.A, the agencies are finalizing a definition of “waters of the United States” that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. The agencies also note that historically, only approximately 12% of resources assessed in approved jurisdictional determinations using

the *Rapanos* Guidance required a significant nexus analysis. It is the agencies' expectation that the number of significant nexus analyses will increase under this rule due to the assessment of waters under paragraph (a)(5) pursuant to the significant nexus standard, but it is correspondingly expected that the percent of resources found to be jurisdictional under significant nexus analyses will decrease because generally waters will be assessed individually under paragraph (a)(5) to determine if they meet the significant nexus standard (see section I.B.3.6 of the Economic Analysis for the final rule). This approach reflects the agencies' consideration of public comments, as well as implementation considerations for waters assessed under paragraph (a)(5). While the agencies' regulations have long authorized the assertion of jurisdiction on a case-specific basis over waters that do not fall within the other jurisdictional provisions, since *SWANCC* and the issuance of the *SWANCC* Guidance<sup>7</sup> with its requirement of headquarters approval over determinations under that provision, the agencies have not in practice asserted jurisdiction over paragraph (a)(3) "other waters" under the pre-2015 regulatory regime. See Final Rule Preamble Section IV.C.9 for additional discussion.

The agencies acknowledge commenters who stated that the proposed rule did not include sufficient implementation guidance for the significant nexus standard, including commenters who stated that methods to apply the standard were not provided or that the appropriate scale of the analysis was unclear. The agencies' approach to implementation of the relatively permanent and significant nexus standards is broadly consistent with the pre-2015 regulatory regime, but the agencies have clarified and refined both the regulatory text and the guidance on how the agencies intend to implement these standards in order to promote consistent Clean Water Act protections for waters. See Final Rule Preamble Section IV.C. See also Sections 12.3.2, 12.3.3, and 12.3.4 of the agencies' response to comments in this document.

The agencies acknowledge commenters who supported, as well as commenters who opposed, applying quantitative thresholds to the significant nexus standard. See the agencies' response to comments in Section 12.3.1 above.

The agencies acknowledge commenters who requested the agencies consider regionalization in implementing the significant nexus standard, and the agencies agree with commenters who asserted that the significant nexus standard may allow the agencies to account for regional and/or local conditions. The agencies recognize that there are appropriate levels of regional variation in implementation of the regulations; however, the agencies strive for national consistency. The agencies will work to facilitate effective, consistent, and efficient implementation of the final rule once it becomes effective. The clarity and certainty provided in the final rule will result in further consistency, while still allowing for regional variation in implementation that may be necessary based on regional differences in aquatic resources; for example, the ordinary high water mark regional manuals, the regional supplements to the wetland delineation manual, or the regional streamflow duration assessment methods, all of which are outside the scope of this rulemaking but are related resources. In addition, because jurisdictional decisions are made on a case-specific basis,

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<sup>7</sup> 68 FR 1991, 1995 (January 15, 2003) ("*SWANCC* Guidance")

site-specific circumstances such as regional conditions will be considered as appropriate. See also the agencies' response to comments in Section 18.3.

**In response to a commenter who asserted that the proposed rule lacked a discussion of the three-parameter approach for delineating wetlands, the agencies note that like the proposed rule, the final rule does not reopen the definition of “wetlands” in the agencies’ regulations, as discussed in Final Rule Preamble Section IV.C.8.a. Rather, the final rule simply addresses which wetlands may be “waters of the United States.” The three parameter approach for delineating wetlands is distinct from the significant nexus standard.**

**The agencies acknowledge commenters who were generally supportive of the proposed rule’s approach to the significant nexus standard but made general recommendations to include a scientific basis for defining terms. The agencies disagree with commenters who asserted that the significant nexus standard does not have a scientific basis. Section III.A of the Final Rule Preamble provides a discussion of the origin of the significant nexus, and Section IV.A.2 of the Final Rule Preamble discusses the scientific and policy basis of the significant nexus standard in the final rule.**

#### *12.3.2.2 Application to tributaries*

A few commenters stated objection to the significant nexus standard when applied to tributaries, and a few commenters indicated that the significant nexus standard should only be applied to wetlands. One commenter expressed concern regarding the implementation of the significant nexus standard to tributaries as they asserted that it is not clearly defined in the proposed rule. Another commenter stated that the aggregation of impacts to tributaries will result in uncertainty and an “over-inclusive exercise of jurisdiction.” A commenter expressed that the approach ignores geographical features, such as volume and frequency of the stream. Another commenter requested clear standards to identify jurisdictional tributaries that do not expand the *Rapanos* Guidance.

A few commenters also expressed opposition to the use of the significant nexus standard with regard to ephemeral features, including a few commenters that expressed it would be inconsistent with Congress’s intent for the agencies to apply the significant nexus standard to ephemeral features. One commenter stated disagreement with using the term “significantly affect” to determine if the significant nexus standard is satisfied, specifically when it is applied to non-relatively permanent waters because of the unavailability of hydrologic information on non-relatively permanent waters. One commenter requested clarity regarding the application of the significant nexus standard to ephemeral streams. Another commenter expressed concern regarding how the agencies characterized ephemeral tributaries as “transitional areas” in the proposed rule as a means to justify potentially exerting jurisdiction over such tributaries using the significant nexus standard. One commenter highlighted that the agencies can assume that all ephemeral and intermittent streams have a significant nexus based on ecological characteristics, however these waters may not be affecting the chemical, physical, or biological connection to foundational waters.

A few commenters stated support for applying the significant nexus standard to intermittent and ephemeral waters, and some commenters were supportive of using the significant nexus standard to

evaluate ephemeral streams. One commenter specifically stated support for the phrase “low duration, but a high volume of flow can significantly affect downstream foundational waters by transporting large volumes of water, sediment, and woody debris that help maintain the integrity of those larger downstream waters” (86 FR 69372 (December 7, 2021)) as it applies to monsoons in the southwest. Another commenter expressed the importance of the significant nexus standard, as they asserted it provides for ephemeral washes to be considered for protection, which is important to their Southwestern city. Another commenter indicated that arroyos and ephemeral waters that satisfy the significant nexus standard and that drain from 12-digit Hydrologic Unit Code watersheds should be provided protections. One commenter stated that the significant nexus standard will better protect water quality in ephemeral streams and other waters on tribal reservations whose headwaters are upstream. One commenter requested that the rule explicitly state that an ephemeral tributary, either individually or in combination with similarly situated tributaries, must be included in “waters of the United States” if this tributary or regional group of tributaries affect the chemical, physical, or biological integrity of downstream waters.

Many commenters indicated that the term “significant” could lead to the removal of protections of upstream waters. One commenter expressed that streams that do not meet the tributary definition should be subject to case-specific analyses of the significant nexus standard as their effect on the chemical, physical, or biological integrity of downstream waters should be considered with similarly situated waters. Another commenter stated that defining as jurisdictional tributaries that meet the significant nexus standard ensures protection and maintenance of river systems, including headwaters that protect communities and infrastructure from flooding. This commenter further highlighted that once a tributary stream has been determined to meet the significant nexus standard, then all downstream waters may also be jurisdictional.

**Agencies’ Response: The agencies disagree with commenters who expressed objection to applying the significant nexus standard to tributaries or indicated that the significant nexus standard should only be applied to wetlands. While the agencies’ interpretation of the Clean Water Act is informed by relevant Supreme Court decisions, the agencies are exercising the authority granted to them by Congress to interpret the Act based on many other factors. Here, the agencies interpret “waters of the United States” to include waters that meet the significant nexus standard as codified in this rule because the agencies have determined, informed by the best available science and the text, structure, and history of the Clean Water Act, that this standard, including the aggregation of waters authorized by it, advances the objective of the Act. In particular, the significant nexus standard reflects and furthers the objective of the Clean Water Act by allowing for a scientific evaluation of the effect of wetlands, tributaries, and other types of waters on paragraph (a)(1) waters. See Final Rule Preamble Section IV.A for further discussion of the legal and scientific rationale underpinning the final rule’s significant nexus standard. In addition, Justice Kennedy concluded that “to constitute ‘navigable waters’ under the Act, a water or wetland must possess a ‘significant nexus’ to waters that are or were navigable in fact or that could reasonably be so made.” *Rapanos*, 547 U.S. at 759 (citing *SWANCC*, 531 U.S. at 167, 172) (emphasis added). Implementation of the significant nexus standard for tributaries is described in Final Rule Preamble Section IV.C.4.**

The agencies agree with commenters who expressed support for applying the significant nexus standard to intermittent and ephemeral waters, and disagree with commenters who asserted it would be inconsistent with Congress’s intent to apply the significant nexus standard to ephemeral features. The agencies are not categorically including or excluding streams as jurisdictional based on their flow regime in this rule. The agencies agree that streams can provide many important functions for paragraph (a)(1) waters. Streams that are tributaries, regardless of their flow regime, will be assessed under the relatively permanent or significant nexus standard per paragraph (a)(3) of this rule, and streams that are not tributaries will be assessed under the relatively permanent or significant nexus standard per paragraph (a)(5) of this rule. See Section III.A of the TSD for more information on the agencies’ rationale for the scope of tributaries covered by this rule. Section III.A of the Final Rule Preamble includes a discussion of the origin of the significant nexus standard, and Section IV.A.2 further discusses the scientific and policy basis of the significant nexus standard in the final rule.

The agencies acknowledge commenters who expressed concern regarding the lack of available hydrologic information for non-relatively permanent waters. Consistent with longstanding practice, the agencies will assess waters based on best professional judgment informed by the best available information. Final Rule Preamble Section IV.C.4.c provides additional information on implementation of the tributaries provision of the final rule, including tools available to determine the presence of a tributary (IV.C.4.c.i), tools available to determine whether a tributary meets the relatively permanent standard (IV.C.4.c.ii), and tools available to determine whether a tributary meets the significant nexus standard (IV.C.4.c.iii). See Section IV.G of the Final Rule Preamble for discussion regarding advancements in implementation data, tools, and methods.

The agencies acknowledge commenters who expressed concern that the agencies would assume that all ephemeral and intermittent streams have a significant nexus based on ecological characteristics. However, the agencies are not reaching any conclusions, categorical or otherwise, about which tributaries are “waters of the United States.” Instead, the final rule enables the agencies to make science-informed determinations on a case-specific basis of whether or not a tributary meets either the relatively permanent or significant nexus standard and is therefore a “water of the United States.”

The agencies disagree with commenters who asserted that a significant nexus analysis for a subject water would apply to all downstream waters as well. The determination of jurisdiction applies only to the subject waters located in the area of interest. See Final Rule Preamble Section IV.C.9 for additional discussion.

See Section 12.2 of this document for the agencies’ response to comments on the definition of “significantly affect.” See Sections 12.3.3 and 12.3.4 of this document for the agencies’ response to comments on aggregating waters as part of a significant nexus analysis.

### 12.3.2.3 Application to wetlands

Several commenters specifically discussed adjacency with regard to the significant nexus standard. Some commenters supported the proposed approach to wetland jurisdiction and adjacent wetlands under the significant nexus standard and presented arguments regarding consistency with legal precedent; other commenters opposed the proposed approach and presented arguments regarding inconsistency with legal precedent. One commenter indicated confusion with the significant nexus test when applied to adjacent wetlands and highlighted difficulty for the regulated community to determine a protected water. This commenter stated that the agencies caused confusion regarding the hydrologic gradient which may allow for small effects to be identified as significant. One commenter stated that the agencies should not aggregate wetlands for the significant nexus standard.

Many commenters stated that wetlands must be protected when satisfying the significant nexus standard. One commenter stated support for using the significant nexus standard to assess wetlands. A commenter stated support for determining jurisdiction of upstream tributaries and adjacent wetlands based on a significant nexus with foundational waters. This commenter emphasized that upstream waters and adjacent wetlands provide an array of benefits to foundational waters. The commenter expressed that, with the jurisdiction of these combined waters, the approach provides certainty, reduces costs, and is not overly restrictive. One commenter stated that all wetlands, including certain non-floodplain wetlands that meet the significant nexus standard, must be considered jurisdictional. Another commenter indicated that all wetlands that meet the significant nexus standard must be jurisdictional. This commenter recommended that the agencies ensure that a wetland is not protected under the adjacency definition before conducting case-specific analyses to determine whether it is protected as “other waters.” This commenter further indicated that wetlands that do not meet the definition of adjacent wetlands must still be protected as “other waters” if the significant nexus standard is met.

Some commenters stated that wetlands adjacent to “other waters” should be considered as “other waters” which they asserted should be highlighted in the final rule. These commenters stated that if the rule does not include this, wetlands adjacent to “other waters” should be considered with similarly situated waters.

A few commenters stated support for using the *Rapanos* Guidance to implement the significant nexus standard as they asserted it provides consistency and understanding in determining jurisdictional adjacent wetlands.

**Agencies’ Response: The agencies agree with commenters who expressed support for applying the significant nexus standard to adjacent wetlands. The scientific literature unequivocally demonstrates that wetlands and open waters in riparian areas and floodplains are chemically, physically, and biologically integrated with rivers via functions that improve water quality in paragraph (a)(1) waters, including: the temporary storage and deposition of channel-forming sediment and woody debris; temporary storage of local groundwater that supports baseflow in rivers; transformation and transport of stored organic matter; assimilation, transformation, or sequestration of pollutants; providing nursery habitat for breeding fish and amphibians; colonization opportunities for stream invertebrates and maturation habitat for stream insects; desynchronization of flood waters; and sequestration of pollutants. See TSD Sections I and III.B. In the final rule, the agencies**

have concluded that wetlands adjacent to traditional navigable waters, the territorial seas, and interstate waters are categorically “waters of the United States.” As further described in Final Rule Preamble Section IV.C.5, all other adjacent wetlands must meet either the relatively permanent or significant nexus standard to be considered a “water of the United States.” Wetlands that do not meet the jurisdictional criteria for paragraphs (a)(1) through (a)(4) of the final rule will be assessed under paragraph (a)(5), as described in Final Rule Preamble Section IV.C.6.

The agencies acknowledge commenters who expressed confusion regarding the implementation of the significant nexus standard for adjacent wetlands. As discussed in the Final Rule Preamble Section IV.A.4, the agencies are establishing a final rule that is both familiar and implementable. See Final Rule Preamble Section IV.C.9 for additional discussion on the definition of “significantly affect,” and see Final Rule Preamble Section IV.C.5 for additional information on how the significant nexus standard will be implemented for adjacent wetlands.

See Section 12.2 of this document for the agencies’ response to comments on the definition of “significantly affect.” See Sections 12.3.3 and 12.3.4 of this document for the agencies’ response to comments on aggregating waters, including adjacent wetlands, as part of a significant nexus analysis.

The agencies agree with commenters that wetlands adjacent to paragraph (a)(5) waters (“other waters”) should be assessed as paragraph (a)(5) waters and the rule is clear. See Final Rule Preamble Section IV.C.6 for further discussion of implementation of paragraph (a)(5) waters.

In response to commenters who provided input on implementing the significant nexus standard consistent with the *Rapanos* Guidance, the agencies note that the *Rapanos* Guidance is no longer in effect. Though the agencies are not relying on the *Rapanos* Guidance for purposes of implementing the final rule, many aspects of the final rule, including implementation-related issues, are consistent with or similar to the approaches taken in the *Rapanos* Guidance.

#### 12.3.2.4 *Application to waters assessed under paragraph (a)(5)*

A few commenters stated disagreement with applying the significant nexus standard to determine jurisdiction of paragraph (a)(3) “other waters” in the proposed rule. One commenter stated that applying the significant nexus standard will cause confusion for the public and inconsistent application as the agencies do not provide sufficient guidance or scientific support for implementing the standard for “other waters.” This commenter expressed that the “other waters” category exceeds authority due to the lack of information and scientific support when applying the significant nexus standard, and the commenter interpreted the proposed rule to mean that isolated features may be determined jurisdictional. Another commenter expressed that “other waters” that are located outside of the floodplain, lack a surface or shallow subsurface hydrological connection, or are outside of the distance guidance should not be included in the definition or determined to be jurisdictional.

A commenter asserted that the agencies would broaden their jurisdiction by aggregating “similarly situated” waters and extending determinations of jurisdiction to “other waters.” One commenter stated that application of the significant nexus standard to “other waters” is an expansion of federal jurisdiction. One commenter stated concern regarding “other waters” undergoing case-specific analyses in combination with similarly situated waters and asserted that the proposed rule would allow the agencies discretion for determining jurisdiction of “other waters.”

A few commenters stated that the application of the significant nexus standard to “other waters” goes against the *SWANCC* and *Rapanos* decisions. A commenter stated that the definitions in the proposed rule were overly broad and that applying the significant nexus standard to “other waters” goes beyond what was contemplated by Justice Kennedy in *Rapanos*. This commenter requested that the agencies define limitations as to which “other waters” may be considered jurisdictional.

A commenter similarly stated that expanding the scope of waters eligible for a “significant nexus” to include non-wetland waters would differ from the 2008 *Rapanos* Guidance, which the commenter stated did not include a provision for asserting jurisdiction over non-wetland waters that are not tributaries to other waters of the United States (*e.g.*, floodplain ponds that lack a surface connection to a receiving water of the United States) based on a “significant nexus.”

Another commenter expressed concern for how the significant nexus standard would be applied to such features as “ephemeral features, stormwater controls, water-filled depressions, and ditches.”

One commenter asserted that the proposal did not include a standard for identifying similarly situated “other waters” and questioned why the agencies are regulating “other waters.” A commenter requested additional guidance and examples of how to apply the significant nexus standard to “other waters.” Another commenter also requested clarification of the implementation of the significant nexus standard for waters adjacent to “other waters.”

A few commenters stated support for applying the significant nexus standard to “other waters.” One commenter indicated that isolated wetlands that satisfy the significant nexus standard should be regulated and protected from dredging and filling, as they could have a groundwater connection with river floodplains which assists in flood control. Another commenter emphasized the importance of isolated wetlands and highlighted the confusion regarding the biological factors meeting the significant nexus standard when applied to isolated wetlands. This commenter indicated that the significant nexus standard should be applied in the short term for isolated wetlands and ponds, as hydrological connections may be challenging to document.

Many commenters expressed that the agencies should not follow the *SWANCC* Guidance (68 FR 1991, 1995 (January 15, 2003)), which would require agency headquarters’ approval prior to protecting “other waters.” Instead, these commenters encouraged the agencies to apply the significant nexus standard to “other waters” just as they would to other categories of waters. One commenter stated objection to jurisdictional determinations that are solely determined by agency headquarters, as the process is time consuming for permit applicants.

**Agencies' Response:** The agencies agree with commenters who expressed support for applying the significant nexus standard to waters that do not fall within one of the more specific categories. The agencies disagree with commenters who opposed applying the significant nexus standard to paragraph (a)(3) “other waters” (a category that has been modified and codified in the final rule as paragraph (a)(5) waters), including waters located outside of the floodplain that lack a surface or shallow subsurface hydrological connection. The agencies also disagree with commenters who asserted that applying the significant nexus standard to such waters goes against the *SWANCC* and *Rapanos* decisions; is inconsistent with Justice Kennedy’s opinion in *Rapanos*; or is an expansion of federal jurisdiction. As discussed in Final Rule Preamble Section IV.A., the agencies are finalizing a definition of “waters of the United States” that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. The agencies have concluded that the final rule’s significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. See Final Rule Preamble Section IV.A.3. While the agencies disagree that this rule’s significant nexus standard is inconsistent with Justice Kennedy’s concurring opinion in *Rapanos* as suggested by some commenters, this rule represents the agencies’ interpretation of the statute, not an interpretation of *Rapanos*. Moreover, Justice Kennedy concluded that “to constitute ‘navigable waters’ under the Act, a water or wetland must possess a ‘significant nexus’ to waters that are or were navigable in fact or that could reasonably be so made.” *Rapanos*, 547 U.S. at 759 (citing *SWANCC*, 531 U.S. at 167, 172) (emphasis added). Section III.A of the Final Rule Preamble includes a discussion of the origin of the significant nexus standard, and Section IV.A.2 further discusses the scientific and policy basis of the significant nexus standard in the final rule.

The agencies disagree with commenters who expressed concern that applying the significant nexus standard to waters that do not fall within one of the more specific categories would cause confusion and inconsistent application due to insufficient guidance or scientific support. As discussed further in Final Rule Preamble Section IV.A.4, the agencies have determined the final rule is both familiar and implementable. All definitions of “waters of the United States,” including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR have required some level of case-specific analysis. Consistent implementation of the final rule will be aided by improved and increased scientific and technical information and tools that both the agencies and the public can use to determine whether waters are “waters of the United States.” See Final Rule Preamble Section IV.G. Waters assessed under paragraph (a)(5) include familiar types of waters like lakes and ponds, streams, and wetlands that have been the subject of significant nexus analysis under the tributaries and adjacent wetlands provisions of the pre-2015 regulations since the *Rapanos* Guidance was issued.

As with any final regulation, the agencies will consider developing new guidance to facilitate implementation of the final rule should questions arise in the field regarding

implementation of the significant nexus standard in the final rule. Nevertheless, the agencies conclude that the final rule, together with the preamble and existing tools, provides sufficient clarity to allow consistent implementation of the final rule.

In response to commenters who stated the significant nexus standard should not be applied to stormwater controls, water-filled depressions, or ditches, the agencies note that the final rule provides exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime, including waterfilled depressions created in dry land incidental to construction activity and ditches (including roadside ditches) excavated wholly in and draining only dry lands and that do not carry a relatively permanent flow of water. Regarding stormwater controls, additional exclusions proposed by commenters would not achieve the agencies' goals of maintaining consistency with the pre-2015 regulatory regime while continuing to advance the objective of the Clean Water Act as further described in Final Rule Preamble Section IV.C.7.

The agencies also acknowledge commenters who specifically expressed concerns about case-specific evaluations of ditches. In the final rule, ditches can be evaluated under the tributaries provision or under paragraph (a)(5) to determine if they meet the relatively permanent standard or significant nexus standard, provided the ditches are not excluded under paragraph (b). See Final Rule Preamble Section IV.C.4 for additional discussion on evaluating ditches as tributaries.

The agencies agree with commenters who indicated that applying the significant nexus standard to waters that do not fall within one of the more specific categories differs from the *Rapanos* Guidance. The agencies note the *Rapanos* Guidance is no longer in effect. In the final rule, the agencies are establishing a binding definition of the “waters of the United States” as discussed in Final Rule Preamble Section IV.A, that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. The agencies have concluded that the final rule’s significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. See Final Rule Preamble Section IV.A.3. The *Rapanos* Guidance was clearly guidance, as the agencies stated: “The CWA provisions and regulations described in this document contain legally binding requirements. This guidance does not substitute for those provisions or regulations, nor is it a regulation itself. It does not impose legally binding requirements on EPA, the Corps, or the regulated community, and may not apply to a particular situation depending on the circumstances. Any decisions regarding a particular water will be based on the applicable statutes, regulations, and case law. Therefore, interested persons are free to raise questions about the appropriateness of the application of this guidance to a particular situation, and EPA and/or the Corps will consider whether or not the recommendations or interpretations of this guidance are appropriate in that situation based on the statutes, regulations, and case law.” *Rapanos* Guidance at 4 n.16. Further, the agencies were clear that the guidance was an interim step

and that the agencies intended to proceed through rulemaking, as appropriate: “The agencies are issuing this memorandum in recognition of the fact that EPA regions and Corps districts need guidance to ensure that jurisdictional determinations, permitting actions, and other relevant actions are consistent with the decision and supported by the administrative record. Therefore, the agencies have evaluated the *Rapanos* opinions to identify those waters that are subject to CWA jurisdiction under the reasoning of a majority of the justices. This approach is appropriate for a guidance document. The agencies intend to more broadly consider jurisdictional issues, including clarification and definition of key terminology, through rulemaking or other appropriate policy process.” *Rapanos* Guidance at 3. The *Rapanos* Guidance was an internal guidance document that does not carry the “force and effect of law.” *Perez v. Mortgage Bankers Ass’n*, 135 S. Ct. 1199, 1204 (2015). As the Supreme Court in *Perez* makes clear, “the APA permit[s] agencies to promulgate freely [interpretive] rules -- whether or not they are consistent with earlier interpretations” of the agency’s regulations. *Id.* at 1207. And “[b]ecause an agency is not required to use notice-and-comment procedures to issue an initial interpretive rule, it is also not required to use those procedures when it amends or repeals that interpretive rule.” *Id.* at 1206. Thus, to the extent there are changes from the *Rapanos* Guidance, the agencies of course may proceed by rulemaking as they have in this final rule. The Supreme Court has held: “We find no basis in the Administrative Procedure Act or in our opinions for a requirement that all agency change be subjected to more searching review. The Act mentions no such heightened standard. And our opinion in *State Farm* neither held nor implied that every agency action representing a policy change must be justified by reasons more substantial than those required to adopt a policy in the first instance. That case, which involved the rescission of a prior regulation, said only that such action requires ‘a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance.’ 463 U. S., at 42 (emphasis added). . . . The statute makes no distinction, however, between initial agency action and subsequent agency action undoing or revising that action.” *FCC v. Fox*, 556 U.S. 502, 514- 15 (2009). The Supreme Court continued: “To be sure, the requirement that an agency provide reasoned explanation for its action would ordinarily demand that it display awareness that it is changing position. An agency may not, for example, depart from a prior policy sub silentio or simply disregard rules that are still on the books. See *United States v. Nixon*, 418 U. S. 683, 696 (1974). And of course the agency must show that there are good reasons for the new policy. But it need not demonstrate to a court’s satisfaction that the reasons for the new policy are better than the reasons for the old one; it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better, which the conscious change of course adequately indicates. This means that the agency need not always provide a more detailed justification than what would suffice for a new policy created on a blank slate.” *Id.* As noted above, the agencies are promulgating a rule that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. Any changes from previous guidance are not silent ones and the agencies have articulated good reasons for such changes. Final Rule Preamble

**Section IV.C.6, for example, provides the legal and scientific rationale for paragraph (a)(5) of the rule.**

**The agencies acknowledge commenters who addressed the aggregation of “similarly situated” “other waters” from paragraph (a)(3) of the proposed rule. In implementing the final rule, the agencies generally intend to analyze waters assessed under paragraph (a)(5) individually as part of the significant nexus analysis to determine if they significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water. See Section IV.C.6.c of the Final Rule Preamble for further discussion regarding implementation of the significant nexus standard for waters assessed under paragraph (a)(5).**

**The agencies acknowledge commenters who encouraged the agencies to apply the significant nexus standard to waters that do not fall within one of the more specific categories just as they would to other categories of waters. See the agencies’ response to comments above in this section and Final Rule Preamble Section IV.C.6.c for a discussion of implementation of the significant nexus standard for waters assessed under paragraph (a)(5).**

#### *12.3.2.5 Guidance, tools, and regional implementation*

Many commenters expressed concern regarding the absence of clear and detailed information on the application of the significant nexus standard for determining a “water of the United States.” These commenters frequently requested additional implementation guidance and information concerning technical details of the significant nexus standard. Several commenters requested guidance and/or case studies illustrating the line between jurisdictional and non-jurisdictional features.

One commenter asserted that the absence of clear guidance specifying the threshold of jurisdictional significance gives the regulators overly broad discretion and leads to inconsistent regulatory outcomes. Another commenter expressed concern that using the significant nexus standard introduces a complex method for defining jurisdictional waters, especially without criteria defining the standard beyond general factors. One commenter recommended that guidance be released concurrent with the final rule, and include detailed case studies, particularly examples of non-jurisdictional waters.

A number of commenters requested guidance on specific aspects of the significant nexus standard including:

- The scale of “in the region”;
- The identification of “similarly situated waters”;
- How to use of the listed factors to determine the strength of a connection and the effect on downstream waters;
- The relevance and assessment of each specific function when determining a significant nexus;
- The application of the significant nexus test to ephemeral streams;
- The use of the significant nexus test when making jurisdictional determinations of “other waters”;
- and
- The role of forested riparian corridors.

Several commenters recommended that regional variation be considered when developing guidance for the final rule with examples relevant to each individual geographic region. One commenter encouraged the agencies to develop a “definitive” approach for significant nexus determinations that accounts for regional differences in hydrology and climate and establishes quantitative evaluation criteria that could be reviewed during a public comment review to ensure transparency. This commenter also recommended that thresholds for hydrologic connectivity variables, such as frequency, duration, and magnitude of flow, be established at the regional level. Some commenters suggested that regional guidance should be developed in coordination with regional partners. One commenter specifically requested additional detail on determining significant nexus of ephemeral streams and recommended that the relevant guidance be region-specific and developed in cooperation with local stakeholders. Another commenter suggested that technical guidance could be established at a national level while operating procedures might be developed and applied at the Corps District level.

Some commenters stated general support for a regional approach to the significant nexus analysis. One commenter stated that accounting for regional variability allows state agencies to participate in the development and determination of what can be considered in the significant nexus standard. This commenter indicated it is not realistic to have one approach to apply to North America’s 15 broad-level ecological regions. Another commenter stated regional variability is apparent based on the prevalence of ephemeral waters in the arid West and Southwest, and the functions the waters serve in their watersheds. This commenter gave an example of the Little Colorado River which may have intermittent, perennial, and ephemeral segments of flow, stating that all the segments are chemically, physically, and biologically connected and have significant impacts on downstream waters.

A number of commenters addressed the topic of available data and tools as discussed in the preamble and the TSD for the proposed rule. One commenter stated that they found the provided information very helpful and requested that the agencies include this information in the final rule preamble or in future guidance. Another commenter noted that the updated list of tools and modeling approaches in the TSD is a useful resource but emphasized that the list does not explain how the tools will be used to determine a “water of the United States.” This commenter requested additional clarification as to how the tools and resources are to be incorporated into the significant nexus analysis to avoid uncertainty in “waters of the United States” determinations. In addition, the commenter expressed concern that efforts to develop new tools and ensure consistent use of existing tools will require extensive federal staff time.

A few commenters expressed concern that the suggested tools may be useful to agency staff but those tools create additional burden for the regulated community. One commenter asserted that some of the tools listed would be inaccessible to the general public without technical support. Another commenter referred to tools listed in the TSD and stated that the recommended data review is extensive, requiring permit applicants to hire consultants to review and analyze the water resources regardless of the size of the water. One commenter emphasized the limits on the available tools to determine jurisdiction in the arid West with regards to mapping, data sets, and field observations. This commenter indicated that some tools could determine inaccurate conclusions for the significant nexus standard. Another commenter indicated that the tools listed in the TSD help with obvious cases of jurisdiction, but that the agencies lack tools that identify waters that are non-jurisdictional. This commenter requested that the agencies identify data and tools necessary for analyses.

A few commenters requested clarification of how the tools will be used to identify a significant nexus, asking questions such as:

- How to use precipitation data to determine the presence or absence of a significant nexus?
- How to measure the degree of connectivity between a feature and downstream waters?
- What quantitative level of effect on downstream waters would result in a model or simulation showing the existence of a significant nexus?
- How to measure for significance of the effect?
- How many tools need to be utilized before a determination of no significant nexus?

One commenter questioned if the macroinvertebrates in museum databases can be used as evidence to establish a significant nexus. Another commenter questioned whether events like storms and suspended solids (*e.g.*, mud) significantly affect a water. The commenter stated that large storms affect the physical integrity of waters, as storms can provide more than 76 percent of the flow of a perennial stream in a dry desert wash. The commenter also stated that mud/suspended solids may be beneficial to downstream waters. This commenter additionally stated that the agencies should clarify if dry washes are considered “waters of the United States.” Another commenter indicated that the agencies have provided little guidance on the tools to evaluate biological factors that is consistent and repeatable.

A number of commenters discussed specific tools referenced in the TSD. One commenter highlighted that there is an array of tools available, such as the National Wetland Inventory and the rapid field-based stream duration assessment method, however these tools require fieldwork to confirm data and need additional effort to ensure consistency across the nation. This commenter indicated that the tools within the TSD can adequately evaluate biological factors, such as individuals or species within a water habitat. Another commenter stated that using tools to show an ecological effect on foundational waters should include “desktop research using records, gage data, field-observed indicators including [ordinary high water mark],” as well as those listed in the *Rapanos* Guidance. Another commenter stated that case-specific determinations can be supported by increasingly sophisticated and integrated stream and wetland mapping technology and referenced a state resource agency standard operating procedure as an example.

Other commenters suggested that the agencies develop new tools. One commenter recommended that the agencies create a checklist for the public to screen waters for potential jurisdiction based on the significant nexus standard. The commenter stated that waters that do not pass the initial screen could undergo case-specific analyses by the agencies. Another commenter recommended the creation of forms to assist in the determination of a significant nexus. This commenter suggested that the forms document the principle environmental factors present, give examples of the range of observable indicators that can be attributed to each factor, and use of a weight of evidence system for evaluation and documentation of a significant nexus determination. One commenter suggested that the U.S. Army Corps of Engineers develop a statistical probability test to determine if the flow and pollutant load of first-order tributaries would have a statistically significant effect on downstream waters. The commenter stated that tools like Streamstats and Model My Watershed allow for similar evaluations that make determinations easier for consultants and the U.S. Army Corps of Engineers. This same commenter also suggested the development of regional manuals for determining significant nexus of streams, similar to the regional supplements for wetlands delineation. Another commenter recommended establishing methods for determining regionally-specific flooding frequencies which lead to the development of wetland hydrology.

**Agencies' Response:** The agencies acknowledge commenters who requested additional implementation guidance for the significant nexus standard (including new tools, forms, checklists, etc.) and additional technical detail concerning the standard. As discussed in Final Rule Preamble Sections IV.C.9 and IV.G, the agencies have identified a variety of guidance, tools, and methods available for implementing the significant nexus standard. Discussion of the agencies' approach to implementation of the significant nexus standard for particular categories of waters can be found in applicable sections of the Final Rule Preamble addressing tributaries (Section IV.C.4.c), adjacent wetlands (Section IV.C.5.c), and waters assessed under paragraph (a)(5) (Section IV.C.6.c). The agencies are not mandating specific data or tools to implement the final rule. The agencies will assess jurisdiction based on the most applicable methods and best available sources of information for the specific site under evaluation. As with any final regulation, the agencies will consider developing additional tools to promote consistent implementation of the final rule's approach. Nevertheless, the agencies conclude that the final rule, together with the preamble and existing tools, provides sufficient clarity to allow consistent implementation of the final rule. Additionally, Section III.A of the Final Rule Preamble provides a discussion of the origin of the significant nexus standard, and Section IV.A.2 discusses the scientific and policy basis of the significant nexus standard in the final rule.

The agencies disagree with commenters who asserted that the significant nexus standard gives the regulators overly broad discretion or will lead to inconsistent regulatory outcomes. The agencies have established a definition of "significantly affect" in this rule, provided additional guidance on applying the significant nexus standard, and identified implementation tools and resources that will work together to provide clarity and further consistency in implementing the significant nexus standard. See Final Rule Preamble Section IV.C.9 and IV.G. The agencies have concluded that these actions, along with the agencies' experience making determinations under the significant nexus standard, will increase the clarity and consistency of determinations of jurisdiction.

The agencies also disagree with commenters who stated that the significant nexus standard is too complex without quantitative criteria, thresholds, or statistical probability tests. The regulations established in this rule are founded on the familiar framework of the 1986 regulations and are generally consistent with the pre-2015 regulatory regime. The agencies find that the final rule increases clarity and implementability by streamlining and restructuring the rule and providing implementation guidance informed by sound science, implementation tools, and other resources. Further, because this rule is founded upon a longstanding regulatory framework and reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, the agencies find that the final rule is generally familiar to the public and implementable. See Final Rule Preamble Section IV.A.4. See also the agencies' response to comments in Section 12.3.1 above for additional discussion on quantitative thresholds and metrics.

The agencies acknowledge commenters who recommended that regional variation be considered when developing guidance for the final rule and who stated that it was unrealistic to have one approach apply nationwide. The agencies recognize that there are

appropriate levels of regional variation in implementation of the regulations; however, the agencies strive for national consistency. The agencies will work to facilitate effective, consistent, and efficient implementation of the final rule once it becomes effective. The clarity and certainty provided in the final rule will result in further consistency, while still allowing for regional variation in implementation that may be necessary based on regional differences in aquatic resources; for example, the ordinary high water mark regional manuals, the regional supplements to the wetland delineation manual, or the regional streamflow duration assessment methods, all of which are outside the scope of this rulemaking but are related resources. In addition, because jurisdictional decisions are made on a case-specific basis, site-specific circumstances such as regional conditions will be considered as appropriate. See also the agencies' response to comments in Section 18.3.

The agencies further acknowledge commenters who indicated that regional guidance could be developed in cooperation with local stakeholders and would allow state agencies to participate in the development and determination of what can be considered in the significant nexus standard. The agencies conducted extensive stakeholder outreach in developing the final rule, beginning with soliciting pre-proposal recommendations from members of the public for a 30-day period from August 4, 2021, to September 3, 2021. In July 2021, the agencies also announced a schedule for initial public meetings to hear from interested stakeholders on their perspectives on defining "waters of the United States." 86 FR 41911 (August 4, 2021). Additionally, the agencies engaged state and local governments over a 60-day federalism consultation period during development of this rule, beginning with an initial federalism consultation meeting on August 5, 2021, and concluding on October 4, 2021. During the input period, the agencies convened several meetings with intergovernmental associations and their state or local government members to solicit feedback on the effort to revise the definition of "waters of the United States." The agencies also engaged with state and local governments during the public comment period, including through two virtual roundtables in January 2022. In total, the agencies received over 32,000 recommendation letters from the public during the pre-proposal period and held six public meeting webinars between August and September 2021. During the proposed rule's 60-day public comment period, the agencies proceeded to hold three virtual public hearings in January 2022, in addition to participating in a Small Business Environmental Roundtable hosted by the Office of Advocacy of the U.S. Small Business Administration and engaging in federalism and tribal consultation, among other activities. See Final Rule Preamble Section III.C. A summary report on the agencies' consultation efforts with state and local governments is available in the docket for this action. For more information on the agencies' federalism consultation for this rulemaking, see Final Rule Preamble Section VI.E and the agencies' response to comments in Section 5.5.

The agencies acknowledge commenters who found the information describing available data and tools in the preamble of the proposed rule and the proposed TSD to be helpful. The agencies agree with commenters who asserted that, while remote and desktop tools can be helpful for determinations of jurisdiction, field observations may often be required to inform the determinations. However, the final rule does not include a requirement for field observations as part of a significant nexus analysis. As noted above, discussion of the

agencies' approach to implementation of the significant nexus standard for particular categories of waters can be found in applicable sections of the Final Rule Preamble addressing tributaries (Section IV.C.4.c), adjacent wetlands (Section IV.C.5.c), and paragraph (a)(5) waters (IV.C.6.c).

The agencies disagree with commenters who indicated that, while the tools proposed to facilitate implementation of the significant nexus standard may be useful to agency staff, they create additional burden for the regulated community; that they would be inaccessible to the general public without technical support; or that permit applicants would be required to hire consultants to review and analyze the water resources regardless of the size of the water. The agencies find that the final rule increases clarity and implementability by streamlining and restructuring the 1986 regulations and providing implementation guidance informed by sound science, implementation tools, and other resources. Further, because this rule is founded upon a longstanding regulatory framework and reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, the agencies find that the final rule is generally familiar to the public and implementable. See Final Rule Preamble Section IV.A.4. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. See 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). In addition, Final Rule Preamble Section IV.C.10 provides guidance to landowners on how to determine when a Clean Water Act permit is required.

In response to commenters who requested clarification on the jurisdictional status of particular waters, such as dry washes, the agencies note that determinations regarding the jurisdictional status of any specific water are outside the scope of this rulemaking. The agencies will assess jurisdiction under the final rule on a case-specific basis. Similarly, in response to commenters who asked whether specific information sources would be sufficient to establish a significant nexus, the agencies note that the agencies will assess jurisdiction under the final rule on a case-specific basis.

### 12.3.3 Similarly situated

#### 12.3.3.1 *General comments*

Many commenters expressed concern about the agencies' overall approach to the terms "similarly situated" and "in the region" (including the term "relevant reach") as they pertain to the significant nexus standard. A few commenters also stated that the proposed rule's multiple potential approaches make it unclear how the rule will be implemented and/or constrains the ability to make informed comments. A commenter claimed that the agencies failed to clearly define the term "similarly situated" in the proposed rule, which they stated means that regulated entities have no guideposts for determining the agencies' intent. Another commenter stated they found it challenging to comment on the proposed rule's approach to "similarly situated" because it offers a broad range of options, rather than providing clear recommendations. A commenter similarly expressed that the lack of clarity in the proposed rule regarding

this approach does not provide opportunity for meaningful comment. One commenter stated that a failure to define the term “similarly situated” would confuse stakeholders and lower courts.

One commenter asserted that the agencies were unclear about how waterbodies would be aggregated within the same watershed as part of a significant nexus determination, and recommended further clarification regarding the regional scale at which waterbodies would be aggregated. Another commenter encouraged the agencies to develop objective quantifiable metrics to identify “similarly situated” waters rather than relying upon broad-based studies.

Several commenters provided recommendations on interpreting “similarly situated.” One commenter endorsed the agencies’ statement in the proposed rule that “the best available science supports evaluating the connectivity and effects of streams, wetlands, and open waters to downstream waters in a cumulative manner in context with other streams, wetlands, and open waters.” Some commenters stated that tributaries within a watershed collectively impact downstream waters, urging that cumulative effects must be evaluated to determine jurisdictional status.

Some commenters argued that waters should be deemed “similarly situated” based on scientific evidence and/or based on the functions they provide.

- One commenter recommended the development of a uniform definition of “similarly situated” that focuses on the same type of water features that perform similar functions for downstream waters.
- Another commenter suggested that “similarly situated” be defined as waters that “provide common, or similar functions for downstream waters such that it is reasonable to consider their effect together.”
- A commenter asserted that the agencies should be guided by best available scientific knowledge and should consider waterbodies “similarly situated” based on their function and impact on the integrity of downstream waters, and that the agencies should follow the recommendations from the EPA Science Advisory Board.
- One commenter indicated that waters considered “similarly situated” must function similarly and together to affect the chemical, physical, or biological integrity of downstream waters.
- A commenter supported the aggregation of waterbodies that provide similar functions for downstream waters because they stated that it allows the agencies to consider the cumulative effect of similar waterbodies on “waters of the United States.”
- Some commenters indicated that they support the consideration of functions and impacts on downstream waters “regardless of type of water, flow regime, or stream order” in the identification of “similarly situated” waters.
- Another commenter encouraged the agencies to define “similarly situated” to mean “those waters performing similar functions within the single point of entry region.” The commenter emphasized the importance of this standard to ephemeral wetlands in Wisconsin.
- One commenter encouraged the agencies to consider all wetlands performing similar functions as “similarly situated.”
- Some commenters stated that wetlands within the same hydrogeomorphic setting, such as wetlands within a dunal system on the Pacific Coast, should be considered “similarly situated” for the purposes of a significant nexus determination. One of these commenters also stated that such

wetlands occur in similar soils and have been demonstrated to be in hydrological continuity with the Pacific Ocean.

- When determining whether a wetland is “similarly situated,” one commenter urged the agencies to consider that “wetlands as far as 750 meters away from a water source have the ability to mitigate flood waters,” which the commenter asserted demonstrates the impact of those wetlands on downstream waters.

One commenter recommended that the agencies depart from the *Rapanos* Guidance’s “narrow” approach in determining “similarly situated” waterbodies, which recommends consideration of “a tributary and its adjacent wetlands.”

Some commenters were in favor of using the *Rapanos* Guidance approach to determine which waters are “similarly situated.” One commenter indicated that their organization prefers the *Rapanos* Guidance approach because it reflects long-standing practices. Another commenter urged the agencies to continue to apply the term “similarly situated” in a manner consistent with the pre-2015 rule. The commenter clarified that this would require that a tributary be considered alongside its adjacent land uses and wetlands. The commenter expressed concern that aggregating all similar tributaries in a watershed would expand jurisdiction to all streams within that watershed, regardless of flow or distance from navigable waters. The commenter asserted that this broadening of the definition of “similarly situated” waters “in the region” would be beyond the intent of the *Rapanos* decision.

One commenter stated that the *Rapanos* Guidance was focused specifically on wetlands, not on similarly situated waters in a broader landscape or watershed context. Another commenter expressed concern regarding the level of effort potentially involved in considering large numbers of “similarly situated” waters in a significant nexus determination, stating that the *Rapanos* Guidance interpreted “similarly situated” to mean all wetlands adjacent to the same tributary.

**Agencies’ Response: The agencies acknowledge commenters who expressed concern with the proposed rule’s approach to the terms “similarly situated,” “in the region,” and “relevant reach” as they pertain to the significant nexus standard. The agencies acknowledge commenters who expressed a lack of understanding about how waterbodies would be aggregated, as well as commenters who recommended further clarification regarding the regional scale at which waters would be aggregated for significant nexus determinations. The agencies also acknowledge commenters who stated that it was challenging to provide comment on the proposed rule because it offered a broad range of options rather than providing clear recommendations. The agencies sought comment on options for interpreting many of the terms associated with the significant nexus standard, including “similarly situated” and “in the region.” As described in the Final Rule Preamble Section IV.C, the agencies have responded to public comments on these concepts and provide clarity regarding how the agencies intend to implement the significant nexus standard. Final Rule Preamble Section IV.C.9.c provides the agencies’ general approach to implementation of the definition of “significantly affect,” including elements of the definition such as “similarly situated” and “in the region” for purposes of a significant nexus analysis. Discussion of the agencies’ approach to implementation of the significant nexus standard for particular categories of waters can be found in the sections of the final rule preamble addressing tributaries, adjacent wetlands, and paragraph (a)(5) waters. See section IV.C.4.c, IV.C.5.c, and IV.C.6.c of the Final Rule Preamble. The agencies consider**

tributaries and their adjacent wetlands to be “similarly situated” waters. The agencies consider similarly situated waters to be “in the region” when they lie within the catchment area of the tributary of interest. In implementing the significant nexus standard, the agencies generally intend to analyze waters under paragraph (a)(5) individually to determine if they significantly affect the chemical, physical, or biological integrity of a paragraph (a)(1) water.

The agencies disagree with commenters who stated that the agencies should develop quantifiable metrics to identify “similarly situated” waters. See the agencies’ response to comments in Section 12.3.1 above for discussion on quantitative thresholds and metrics.

The agencies acknowledge commenters who provided recommendations to further clarify the interpretation of “similarly situated” waters. The agencies also acknowledge commenters who advocated for a broader interpretation of “similarly situated” “guided by the best available scientific knowledge.” The agencies have concluded that the Final Rule’s approach to implementing similarly situated is reasonable and also consistent with the scientific support for the final rule as described in Final Rule Preamble Section IV.A. Further, the agencies have determined that the final rule’s approach for aggregating waters is clear and implementable.

The agencies acknowledge commenters who expressed support for using the *Rapanos* Guidance to identify “similarly situated” waters. The agencies note the *Rapanos* Guidance is no longer in effect. Though the agencies are not relying on the *Rapanos* Guidance for purposes of implementing the final rule, many aspects of the final rule, including implementation-related issues, are consistent with or similar to the approaches taken in the *Rapanos* Guidance. As described in Final Rule Preamble Section IV.C.9, under the significant nexus standard in this rule, the agencies must identify the waters that are “similarly situated” and the “region” for purposes of determining whether waters “significantly affect” paragraph (a)(1) waters. The agencies will interpret these terms for purposes of this rule in a similar, but not identical, manner to the approach to these terms in the *Rapanos* Guidance. The agencies’ approach in this rule is based on longstanding practice, the scientific support for this rule, and practical implementation considerations. The agencies’ approach is generally consistent with the approach in the *Rapanos* Guidance which concluded that assessing “a tributary and its adjacent wetlands collectively” has a “strong scientific foundation—that is, the integral ecological relationship between a tributary and its adjacent wetlands.” *Rapanos* Guidance at 10. The *Rapanos* Guidance also stated that “Interpreting the phrase ‘similarly situated’ to include all wetlands adjacent to the same tributary is reasonable because such wetlands are physically located in a like manner.” *Id.* In the final rule, the agencies build on those insights and conclude that tributaries and their adjacent wetlands do have such an integral ecological relationship that they should be assessed collectively for purposes of the significant nexus standard. The agencies further conclude that adjacent wetlands and their tributaries in a catchment are physically located in a like manner and that the catchment is a reasonable, scientifically-sound, and implementable “region” in which to assess a significant nexus. See Final Rule Preamble Section IV.C.9.

The agencies acknowledge commenters who expressed concern that aggregating waters across watersheds would expand jurisdiction. As discussed in Final Rule Preamble Section

**V, this rule will establish a regime that is generally comparable to current practice, and this rule would generate *de minimis* costs and benefits as compared to the pre-2015 regulatory regime that the agencies are currently implementing. The agencies note that the determination of jurisdiction applies only to the subject waters located in the area of interest. See Final Rule Preamble Section IV.C.9 for additional discussion.**

#### 12.3.3.2 *Advocacy for or against aggregation of waters*

Several commenters expressed concern that the agencies' proposed approach to aggregating waters would lead to expanded jurisdictional scope, including over waters that the commenters stated should not be jurisdictional. A few of these commenters gave examples of such waters including oxbow lakes; prairie potholes; farm ponds and ditches; waters that have minor water volumes, such as ephemeral drainages, storm sewers, culverts, tile drains and ditches, and arroyos; adjacent wetlands, streams, and open waters that connect to downstream waters; and small ponds or water features that retain stormwater. One commenter stated that the proposed rule demonstrates that the agencies plan to expand jurisdiction relative to the pre-2015 regulatory regime, using undefined terms like "similarly situated" and "in the region" to aggregate multiple tributaries, wetlands, and "other waters" to assess their effects collectively, an approach that the commenter stated is not supported in the *Rapanos* Guidance. Another commenter stated concern over expanded jurisdiction over private property.

One commenter expressed confusion regarding why a waterbody would not be assessed independently rather than in combination with "similarly situated" waters "in the region." One commenter recommended utilizing case-specific, individual analyses for hydrological connectivity to avoid combining water resources that do not have an effect on downstream connections. The commenter also argued that the aggregation approach "leaves land users with no way to assess the status of their local water, short of undertaking a complex and costly watershed study." The commenter urged the agencies to interpret "similarly situated" as an "individual wetland similarly situated to others in a landscape" rather than a means to exert jurisdiction over even the most remote waterbodies within a landscape.

A commenter argued that if aggregation were allowed, a landowner who requests an approved jurisdictional determination from the Corps could find their water feature aggregated with other "similarly situated" waters for a significant nexus determination. This commenter asserted that if all "similarly situated" properties are found to be jurisdictional, it could have significant impacts on property values, usage, and permitting processes. The commenter also stated that only the property owner who requested the approved jurisdictional determination would be able to make an administrative appeal of the Corps' decision. The commenter indicated that other property owners could request their own approved jurisdictional determination at a later date, but the Corps would likely uphold the initial determination, which the property owners could then appeal. Another commenter stated that the agencies have not made it clear whether they consider a significant nexus determination for one water within a watershed sufficient to bind other waters within the same watershed.

One commenter expressed concern about what they stated are the agencies' efforts to aggregate "similarly situated" waters across an entire landscape or watershed and exert jurisdiction on all waterbodies based on cumulative effects downstream rather than based on the impact of an individual waterbody. A commenter asserted that the proposed rule presumes "that virtually the entire tributary system, as well as

isolated waters and wetlands (with very limited exceptions) perform functions in the aggregate that benefit downstream waters.” Another commenter asserted that aggregating waterbodies to collectively assess their impact on downstream waters “belies the agencies’ claim that [the agencies] are just codifying the status quo and that the proposed rule will have no more than *de minimis* impacts on regulated entities or regulators.”

Some commenters were supportive of evaluating “similarly situated” waters collectively. One commenter stated that using similarly situated waters may assist in determining jurisdiction and delineating the watershed. Another commenter encouraged the agencies to use similarly situated waters within a region to streamline jurisdiction. One commenter urged that the interpretation of “similarly situated” or “regional” should confirm the jurisdictional nature of ephemeral and intermittent streams. Another commenter emphasized that ephemeral streams should be evaluated based on connectivity and cumulative effects, citing the term “similarly situated” in the significant nexus standard.

A commenter highlighted Justice Kennedy’s concurrence in *Rapanos* and asserted that the agencies must group waters that are similarly situated within a region. The commenter stated that the agencies can then apply jurisdiction without case-specific analyses.

A commenter recommended that, consistent with the 2015 Clean Water Rule, the Delmarva Bays of Maryland should be automatically considered as “similarly situated” within a region. Another commenter discussed the application of the “similarly situated” concept to Texas coastal prairie wetlands and quoted the 2015 Clean Water Rule describing these coastal prairie wetlands at length. The commenter stated that the 2015 Clean Water Rule instructed that these waterbodies be analyzed as “similarly situated” waterbodies, an approach that the commenter stated was supported locally as an improvement over the *Rapanos* Guidance. The commenter noted that the agencies did not receive substantive comments from the public in opposition to this approach in the 2015 Clean Water Rule.

**Agencies’ Response: The agencies acknowledge commenters who provided input regarding the scope of aggregation under the significant nexus standard, including commenters who expressed concern that aggregating waters could lead to an expansion in jurisdiction. In this action, the agencies are finalizing a definition of “waters of the United States” that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. See Final Rule Preamble Section IV.A. The agencies disagree that the final rule generally represents an expansion beyond the pre-2015 regulatory regime; rather, the agencies expect that there will be a slight and unquantifiable increase in waters being found to be jurisdictional under the final rule in comparison to the pre-2015 regulatory regime. Indeed, as discussed in Section V.A of the Preamble to the Final Rule, the final rule is generally comparable in scope to the pre-2015 regulatory regime that the agencies are currently implementing. Additionally, the agencies note that the final rule excludes many of the specific water features cited by some commenters as examples of features that should not be aggregated for purposes of the significant nexus standard. See Final Rule Preamble Section IV.C.7.**

The agencies disagree with commenters who stated that aggregating waters as part of a significant nexus analysis is inappropriate. The agencies have retained the language in this rule that waters will be assessed either alone or in combination with similarly situated waters in the region. Discussion of the agencies' approach to implementation of the significant nexus standard for particular categories of waters can be found in the sections of the preamble addressing tributaries, adjacent wetlands, and paragraph (a)(5) waters. *See* Sections IV.C.4.c, IV.C.5.c, and IV.C.6.c of the Final Rule Preamble. Assessing the functions of identified waters in combination is consistent not only with the significant nexus standard, as described in section IV.A of the Final Rule Preamble, but with the science demonstrating how upstream waters affect downstream waters, as further described in Final Rule Preamble Section IV.C.9 and TSD Section III.E.ii.

The agencies further disagree with commenters who asserted that the agencies' approach to "similarly situated" would be costly for landowners. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. *See* 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). *See* Final Rule Preamble Section IV.C.10 for the agencies' guidance to landowners on how to determine if a Clean Water Act permit is required.

The agencies acknowledge commenters who stated the proposed rule was inconsistent with the *Rapanos* Guidance. The agencies note the *Rapanos* Guidance is no longer in effect. Though the agencies are not relying on the *Rapanos* Guidance for purposes of implementing the final rule, many aspects of the final rule, including implementation-related issues, are consistent with or similar to the approaches taken in the *Rapanos* Guidance. The *Rapanos Guidance* is simply guidance and the agencies are promulgating a new rule and have clearly explained the basis for the changes from the *Rapanos* Guidance in the rule and its implementation. *See* Final Rule Preamble Section IV.C.9.

The agencies acknowledge commenters who expressed concern that all similarly situated waters in a watershed would become jurisdictional if any one of them was determined to satisfy the significant nexus standard. Final Rule Preamble Section IV.C.9.c describes that the determination of jurisdiction, whether positive or negative, applies only to the subject water(s) located in the specific area of interest and not any other similarly situated waters in the region.

The agencies disagree with commenters who asserted that the proposed rule would presume that virtually all waters perform functions in the aggregate that benefit downstream waters. In the proposed rule and in the final rule, the agencies have not reached any conclusions—categorical or otherwise—about which tributaries, adjacent wetlands (other than those adjacent to paragraph waters (a)(1)), or waters assessed under paragraph (a)(5) meet either the relatively permanent or the significant nexus standard. Instead, the final rule enables the agencies to make science-informed determinations on a case-specific basis of whether or not a water that falls within these categories meets either jurisdictional standard and therefore satisfies the definition of "waters of the United States" on a case-specific basis.

The agencies agree with commenters who expressed support for evaluating "similarly situated" waters but disagree with commenters who suggested that doing so could

**“streamline jurisdiction” or that aggregating similarly situated waters in the region would then allow the agencies to apply jurisdiction without case-specific analyses. Aggregating similarly situated waters in the region is consistent with the objective of the statute, the science, and with Justice Kennedy’s opinion in *Rapanos* and is a fundamental aspect of the significant nexus standard. The objective of the significant nexus standard is not to “streamline jurisdiction,” but rather to assess whether the subject water alone, or in combination, has a significant effect on the chemical, physical, or biological integrity of paragraph waters (a)(1) and therefore satisfies the definition of “water of the United States.” Because a finding of jurisdiction or non-jurisdiction applies only to the water(s) located in the specific area of interest and not any other similarly situated water in the region, each significant nexus analysis must consider unique case-specific circumstances.**

**The agencies disagree with commenters who recommended that specific regional waters be considered “similarly situated” as part of a significant nexus analysis, in a manner similar to the Clean Water Rule. In developing the final rule, the agencies thoroughly considered alternatives to this rule, including the 2015 Clean Water Rule, and have concluded that this final rule best accomplishes the agencies’ goals to promulgate a rule that advances the objective of the Clean Water Act, is consistent with Supreme Court decisions, is informed by the best available science, and promptly and durably restores vital protections to the nation’s waters. See Section IV.B.1 of the Preamble to the Final Rule for further discussion of the agencies’ grounds for concluding that the 2015 Clean Water Rule is not a suitable alternative to the final rule.**

#### 12.3.4 In the region

##### 12.3.4.1 *General comments*

Numerous commenters asserted that the proposed rule lacked clarity regarding the meaning of the term “in the region” and offered recommendations to the agencies. Another commenter claimed that the lack of clarity around the definition of “in the region” would provide the agencies with “the ability to define a region subjectively and in ways that will support consolidation of regulatory authority to the federal government.” One commenter questioned what criteria will be used, whether the criteria will vary by region, and what the scientific support is for aggregating “other waters,” stating that the SAB panel expressed concern about a lack of scientific support for these alternative approaches.

A commenter asserted that it was challenging to determine the intent of the agencies regarding the phrase “in the region” because there is lack of consensus within the scientific community regarding the meaning of the term. The commenter stated that a more expansive definition of “in the region” would further obscure the impacts of any single water feature on the downstream navigable water. Furthermore, the commenter asserted that “in the region” would be open to interpretation on a case-specific or at least a district-by-district basis without additional guidance from the agencies. Another commenter questioned what would constitute “too large” of a watershed, as the proposed rule did not provide a standard.

One commenter recommended that the scope of “in the region” be established on a regional basis in close collaboration with state agencies and suggested to include state staff when applying the significant nexus standard.

**Agencies’ Response:** The agencies disagree with commenters who indicated that the proposed rule lacked clarity regarding the meaning and implementation of “in the region” as it pertains to the significant nexus standard. The agencies sought comment on options for interpreting many of the terms associated with the significant nexus standard, including the appropriate “region.” As described in the Final Rule Preamble Section IV.C, the agencies have responded to public comments on these concepts and provide clarity regarding how the agencies intend to implement the significant nexus standard. See Section 12.3.3.1 for the agencies’ response to comments on how the agencies will interpret “similarly situated” and “in the region” for tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5). See Section 12.3.3.2 for the agencies’ response to comments regarding aggregation of water features as part of a significant nexus analysis.

In response to commenters who recommended using varying criteria to define the “region” to account for differences in conditions across the country, the agencies recognize that there are appropriate levels of regional variation in implementation of the regulations; however, the agencies strive for national consistency. The agencies will work to facilitate effective, consistent, and efficient implementation of the final rule once it becomes effective. The clarity and certainty provided in the final rule will result in further consistency, while still allowing for regional variation in implementation that may be necessary based on regional differences in aquatic resources; for example, the ordinary high water mark regional manuals, the regional supplements to the wetland delineation manual, or the regional streamflow duration assessment methods, all of which are outside the scope of this rulemaking but are related resources. In addition, because jurisdictional decisions are made on a case-specific basis, site-specific circumstances such as regional conditions will be considered as appropriate. See also the agencies’ response to comments in Section 18.3.

#### *12.3.4.2 Advocacy for broad interpretation of “in the region”*

Some commenters advocated for a broad interpretation of “in the region.” One commenter suggested using large areas when determining jurisdiction for adjacent wetlands.

Some commenters recommended that the minimum area for significant nexus analyses should be a watershed. Some commenters recommended that the “region” include the entire watershed. One commenter stated the agencies should interpret “in the region” broadly, such as on a watershed basis, to allow for analyses of ecosystems, watersheds and connections. This commenter indicated that providing a broad approach to “in the region” would allow their tribal government to provide input on a fewer number of regional determinations, rather than having to provide input on potentially many individual determinations that may affect the tribe if the approach is more narrowly applied. One commenter encouraged the agencies to define “in the region” as water types within the same sub-watershed of similar type, flow, and function.

A commenter stated that they supported the agencies' science-based guidance in 2015 that "in the region" is the watershed associated with the nearest navigable water. One commenter asserted that the agencies should designate the "region" to be "a single point entry watershed." Another commenter asserted that the "region" considered should be no smaller than the watershed to reflect best available scientific knowledge. The commenter stated that a watershed includes all the streams, wetlands, and other waters that flow to the nearest navigable water through a "single point of entry." The commenter also argued that there may be instances when it makes more sense to aggregate multiple watersheds or an ecoregion when a larger area impacts the integrity of downstream waters. One commenter stated that the evaluation of similarly situated waters in the region to evaluate effects on downstream navigable waters should incorporate a watershed approach, including adjacent wetlands. The commenter stated that wetlands adjacent to non-permanent waters should be subject to a joint significant nexus test with the adjacent water and all other waters within the same watershed that are upstream of the same navigable water. Another commenter urged the agencies to incorporate a broader understanding of "similarly situated" waters "in the region" and recommended that "in the region" include the entire watershed of the navigable water, including all streams, wetlands, lakes, and open waters within its boundaries. The commenter indicated that "[u]sing the watershed that flows to the nearest single traditional navigable water, the territorial seas, or interstate waters is consistent with court decisions that these waters are the ultimate focus of CWA protections."

Another commenter stated that while a watershed approach can make sense, the region examined should not be so large as to obscure the incremental impacts of a waterbody on downstream waters. Some commenters advocated for an approach based on hydrological and/or geomorphic characteristics and/or an ecoregion-based approach. Some commenters supported the "broadest possible definition" of "in the region," which they stated was the ecoregion. One commenter claimed that "in the region" could reference Level IV ecoregions since they tend to "align better with mountain ranges, valley bottoms, open desert, and river systems." Similarly, one commenter recommended that "in the region" be determined on a regional basis in close coordination with the states to account for differences in geology and climate. One commenter stated that ecoregions or physiographic regions would be appropriate geographic areas to use for "in the region" but clarified that only waterbodies "similarly situated" to the waterbody determined to be jurisdictional should be aggregated for analyses. The commenter also urged the agencies to train staff to apply the approach consistently. One commenter supported approaches for determining "in the region" that incorporate hydrologic and geomorphic characteristics, remote-sensing, and field observation since such approaches allow for the consideration of site-specific information that contributes to an understanding of the waterbodies' effects on downstream navigable waters. The commenter stated that their second choice for determining "in the region" would involve an ecoregion approach that makes use of a spatial framework for monitoring elements of the ecosystem.

One commenter was supportive of using the significant nexus standard to evaluate the role of ephemeral streams in the context of each other, preferably at no broader an area than ecoregion III or IV or similar measure (*e.g.*, 8 to 12-digit hydrological units).

One commenter stated that they support a regionalized approach when determining the region for the significant nexus assessments, which they stated enables evaluation of the variety of watershed scales that may be appropriate. The commenter cautioned that an ecoregion approach may be more tenuous than dealing directly with hydrography. Similarly, another commenter stated that application of the significant

nexus standard will vary according to the climate, geology, groundcover, and nature of each major waterway fed by tributaries in each region.

Many commenters stated that the *Rapanos* Guidance too narrowly limited the region in which waters should be assessed for the significant nexus standard. A commenter asserted that the agencies should depart from *Rapanos* Guidance, which they stated limited the definition of a “region” to “stream reach from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream.” One commenter recommended that for implementing the significant nexus standard, the “reach” should be defined as the entire stream “that extends downstream to the point where significant impacts are no longer anticipated.” Another commenter recommended determining the reach of the tributary for the significant nexus standard based on the flow and function of the tributary and the relevant functions performed by wetlands adjacent to the tributary. Another commenter stated that the *Rapanos* Guidance limits regional approaches as only streams and adjacent wetlands are determined jurisdictional if they are adjacent to the same tributary. This commenter indicated that neither the law nor available science supports this limited view and stated criticism that the agencies are limiting the protections of wetlands by not considering a broader approach.

A commenter stated support for a regional approach to the significant nexus standard and expressed that the agencies should interpret “in the region” more broadly, at least on a watershed scale, rather than the restricted approach in the *Rapanos* Guidance. This commenter interpreted the *Rapanos* Guidance as also supporting a regionalized approach, and the commenter stated that Justice Kennedy encourages looking beyond a segment of a stream. The commenter stated that the guidance provided after *Rapanos* was that “similarly situated” referred to a tributary and its adjacent wetlands but such a narrow interpretation “fails to adequately fulfill the purpose of the Clean Water Act and fails to reflect the best available science with regards to how ephemeral and intermittent waters ‘significantly affect the chemical, physical, and biological integrity of other covered waters.’” The commenter asserted that the agencies cannot fulfill the stated purpose of the Clean Water Act by looking simply at the reach of a stream. The comment further stated that scientists commonly use regional analyses to track the impacts of upstream waters on downstream waters.

One commenter expressed concern about the *Rapanos* Guidance approach of relying on stream order to define a relevant reach of a tributary, stating that different regions rely on differing hydrography datasets. The commenter stated that as technologies continue to improve, practitioners will have more tools available, and recommended choosing regionally appropriate tools and techniques to gain consensus when determining relevant reaches. Another commenter stated that the agencies must correct the pre-2015 guidance which they stated severely limited the geographic area considered, resulting in connected waters being excluded. The commenter urged the agencies to aggregate “similarly situated” waters “to capture the incremental but cumulative contributions of individual streams and wetlands on the health of the entire watershed, especially downstream waters.”

One commenter was opposed to using a “reach”-based approach for the significant nexus standard altogether. This commenter asserted that it does not make scientific sense to only evaluate the “relevant reach” of a water, which they stated entails assessing pieces of the watershed separately rather than evaluating the combined effects of all reaches within a watershed. The commenter stated that this approach could result in multiple differing determinations within the same tributary system. The

commenter stated that one small reach may not have a substantial impact, but that the combined effects of all such small reaches would. The commenter further stated that once a significant nexus has been established, all downstream tributaries become part of that nexus, even for other projects occurring in the same watershed. The commenter stated that it makes more sense to evaluate similarly situated waters in the region to evaluate effects on downstream navigable waters using a watershed approach, including adjacent wetlands. The commenter stated that wetlands adjacent to non-permanent waters should be subject to a joint significant nexus test with the adjacent water and all other waters within the same watershed that are upstream of the same navigable water.

**Agencies' Response:** The agencies acknowledge commenters who advocated for a broad interpretation of the “region” (*e.g.*, ecoregion or watershed) within which similarly situated waters would be aggregated for purposes of the significant nexus standard. The agencies also acknowledge commenters who stated that the *Rapanos* Guidance too narrowly limited the region in which waters should be assessed under the significant nexus standard. The agencies have identified “in the region” for purposes of the significant nexus standard in this rule as the catchment of the tributary. This region (*i.e.*, the catchment of the tributary) for the vast majority of tributaries is smaller, and usually substantially smaller, than the region identified by the watershed that drains to the nearest point of entry of a paragraph (a)(1) water, which was the “region” used to implement the 2015 Clean Water Rule. While this region is generally larger than the region assessed in the *Rapanos* Guidance under which the agencies assessed the relevant reach of a tributary in combination with its adjacent wetlands, the catchment is an easily identified and scientifically defensible unit for identifying the scope of waters that together may have an effect on the chemical, physical, or biological integrity of a particular traditional navigable water, the territorial seas, or an interstate water. As discussed in Section V.A of the Preamble to the Final Rule and Chapter I of the Economic Analysis, the final rule would establish a regime that is generally comparable to current practice, and the rule would generate *de minimis* costs and benefits as compared to the pre-2015 regulatory regime that the agencies are currently implementing. The agencies expect that there will be a slight and unquantifiable increase in waters being found to be jurisdictional under the final rule in comparison to the pre-2015 regulatory regime. See also Final Rule Preamble Section IV.C.9 for additional discussion of “significantly affect” and Final Rule Preamble Section IV.C.6.c for the agencies’ implementation approach for waters assessed under paragraph (a)(5).

As described further in Section 12.3.3.2, the agencies note that the significant nexus analysis applies only to the subject water(s) in the area of interest.

The agencies also acknowledge commenters who asserted that the spatial unit for “in the region” should be determined on a regional basis to account for differences in factors such as geology, climate, and groundcover. The agencies recognize that there are appropriate levels of regional variation in implementation of the regulations; however, the agencies strive for national consistency. The agencies will work to facilitate effective, consistent, and efficient implementation of the final rule once it becomes effective. The clarity and certainty provided in the final rule will result in further consistency, while still allowing for regional variation in implementation that may be necessary based on regional differences in aquatic

resources; for example, the ordinary high water mark regional manuals, the regional supplements to the wetland delineation manual, or the regional streamflow duration assessment methods, all of which are outside the scope of this rulemaking but are related resources. In addition, because jurisdictional decisions are made on a case-specific basis, site-specific circumstances such as regional conditions will be considered as appropriate. See also the agencies' response to comments in Section 18.3.

The agencies acknowledge commenters who expressed concern about relying on the *Rapanos* Guidance approach of using stream order to define a reach of a tributary, citing, for example, that different regions of the country rely on differing hydrography datasets. The agencies note that the approach in the final rule for aggregating waters as part of a significant nexus analysis is different than that of the *Rapanos* Guidance, as described further in Final Rule Preamble Section IV.C.9. However, the agencies will continue to use stream order to facilitate implementation of the relatively permanent standard (*see* Final Rule Preamble Section IV.C.4.c.ii) and the significant nexus standard (*see* Final Rule Preamble Section IV.C.4.c.iii) under the final rule. Final Rule Preamble Section IV.C.4.c provides examples of methods that can be used to determine stream order. Consistent with longstanding practice, the agencies will assess waters based on best professional judgment informed by the best available information.

#### 12.3.4.3 *Advocacy for narrow interpretation of "in the region"*

Some commenters argued that "in the region" should be defined narrowly, with some of these commenters further asserting that the proposed rule is unclear or too expansive. One commenter stated that the agencies should determine "in the region" based on the smallest scale that is implementable, stating that a smaller watershed-based scale may effectively help support an assertion of nexus in some states where broad geographic areas are not appropriate for identifying similarly situated waters. Another commenter expressed concern regarding the geographic scope of areas determined to be "in the region," and claimed that assessing impact on downstream waters within large areas would become a "monumental task." One commenter expressed concern that the agencies may aggregate waters over an entire watershed or region, which would make it impossible for the regulated community to know what is or is not jurisdictional and invite regulatory overreach.

Some commenters expressed concern that the proposed rule's approach to "reach" for defining the "region" for the significant nexus standard would inappropriately expand jurisdiction. One commenter expressed concern that the proposed rule's concept of "reach" would be overly broad and challenging to implement. The commenter asserted that the implementation of "reach" within the proposed rule could extend the agencies' jurisdiction far upstream past the proposed project site and commented on the challenges of performing a reach analysis beyond one's own property. The commenter urged the agencies to clarify their use of terminology in the proposed rule and asserted that the proposed alternatives for implementing these standards are similarly too broad and should not be adopted. Another commenter stated that the "entire reach" approach of the significant nexus standard may be an overreach by the agencies and present considerable implementation challenges, especially for small businesses. One commenter stated that the agencies' definition of "reach" compounds the uncertainty from the lack of a "tributary" definition.

A commenter similarly argued that the reach concept is problematic because it will extend beyond the limits of a project area, requiring applicants to obtain and document detailed information about an entire stream reach which may go on for miles and may not be accessible to the applicant. The commenter stated that this approach would be especially problematic for linear infrastructure projects which extend hundreds of miles and traverse numerous stream reaches (giving an example of a several-hundred-mile transmission project involving as many as 1,000 waterbody crossings and hundreds to thousands of land owners). The commenter also stated that under the agencies' proposed approach, the agencies could extend jurisdiction far upstream merely because these upstream areas are part of a reach whose downstream confluence is determined to have a significant nexus to a "water of the United States." The commenter asserted that this approach assumes that entire reaches are jurisdictional based on analyses of just one portion that has maximum flow.

Another commenter claimed that the proposed analysis of "reach" would be "inconsistent, unworkable, and impermissibly expansive." The commenter asserted that the proposed rule's lack of quantifiable objectives provides landowners no reasonable basis for discerning which waters are subject to federal jurisdiction and regulation. A commenter stated that it is unclear if property owners "in the region" may appeal the status of waters that are not covered by the approved jurisdictional determination.

One commenter asserted that the proposed approaches to "reach" would be unworkable in the arid Southwest because they could result in aggregation of waterbodies that are not "similar." The commenter asserted that small and/or remote waterbodies could be considered jurisdictional because they are aggregated with other larger waterbodies. This commenter asserted that there is no basis for the expansive aggregation, and the agencies' proposed alternatives would result in determinations of jurisdiction involving tenuous connections with navigable waters.

Other commenters stressed that "in the region" should be no broader than the *Rapanos* Guidance. One commenter recommended that the agencies continue to follow the 2008 guidance and consider the relevant tributary and adjacent wetlands as part of the significant nexus analysis. The commenter asserted that the agencies' proposed rule would significantly expand the scope of its analyses through its aggregation of waters within the region. The commenter claimed that "there is little doubt that the agencies significantly expand jurisdiction over ephemeral as well as intermittent tributaries based on this new approach to significant nexus."

Several commenters were specifically critical of an ecoregion and/or watershed-based approach to defining "in the region," stating that it is too expansive. One commenter claimed that such an approach would involve consideration of many wetlands that are unconnected to "waters of the United States." One commenter asserted that the agencies' approach to aggregating all wetlands in a region was inconsistent with the *Rapanos* decision, which they stated included instruction to consider "distance, quantity, and regularity of flow for each wetland." The commenter expressed concern that the proposed rule would allow the agencies to assert jurisdiction over water features quite far from each other and from downstream navigable waters. Another commenter expressed that it was not the intent of Congress to allow the agencies to manage this expansive region. One commenter asserted that under the proposal, assessing impacts across large geographic scales "compels a level of subjectivity that cannot be reconciled with the rigor and objectivity necessitated by the scientific method." Another commenter

claimed that aggregating waterbodies across expansive areas of watersheds and sub-watersheds would likely result in waters that are remote from navigable waters being found jurisdictional. The commenter also asserted that the use of ecoregions “would be even more problematic” due to the expansive size of the areas. The commenter claimed that the use of “contiguous area of land with relatively homogeneous soils, vegetation, and landform” would be challenging for most individuals and landowners to understand. The commenter urged the agencies to continue to reference *Rapanos* Guidance and consider only the reach of the stream of the same order and adjacent wetlands and argued that the agencies “are still bound by the limits of their delegated authority as interpreted by the Supreme Court.”

One commenter stated that the idea of aggregating all wetlands in a watershed to evaluate significant nexus would further expand the jurisdiction of the Clean Water Act and would be challenging to implement. This commenter argued that an aggregation policy would allow the agencies to assert jurisdiction over any “sometimes-wet” feature in a region. One commenter expressed concern that if “in the region” is defined as watersheds, it would allow hundreds of tributaries many miles apart to be aggregated for a significant nexus determination. One commenter expressed concern that the agencies might define “in the region” to be an area as expansive as an ecoregion, claiming it “defies reason to think that Congress intended to allow the agencies to assert jurisdiction based on a consideration of the cumulative effects of all similar water features that lie within such massive areas of land.”

A few commenters were opposed to using any approach that would group waters together by region. One commenter claimed that considering all tributaries within a region is overly broad and could be used to aggregate different types of waterbodies if the agencies demonstrate that all water features provide similar functions to the downstream waters. One commenter claimed that aggregating highly variable waters, such as those that exist in the West, for the purposes of determining their combined impact on navigable waters is not supported by the science. The commenter also claimed that the information necessary to perform such analyses is not available and pointed out the significant effort that would be involved for the agencies to collect this data. The commenter asserted that because of the significant distance between waterbodies and the significant amount of time between high precipitation events, and differences in flow between waterbodies, all waters in a watershed are not always similarly affecting navigable waters.

A commenter recommended that it is more appropriate to consider the impacts of waters on a watershed basis during a permitting process or National Environmental Policy Act (NEPA) process rather than as part of a jurisdictional determination of “other waters.” The commenter asserted that the proposed rule puts the “cart before the horse” by attempting to assess potential effects before a specific project has been proposed. The commenter also emphasized the importance of considering the magnitude of impacts a waterbody has on downstream waters as opposed to the presence/absence of impacts, citing recommendations from the EPA Science Advisory Board.

**Agencies’ Response: The agencies acknowledge commenters who advocated for a narrow interpretation of the “region” within which similarly situated waters would be aggregated for purposes of the significant nexus standard, including commenters who were specifically critical of an ecoregion and/or watershed-based approach to interpreting “in the region.” The agencies also acknowledge commenters who recommended that the “region” be no broader than the *Rapanos* Guidance. See Section 12.3.4.2 of the agencies’ response to comments for additional discussion on the agencies’ interpretation of “in the region.”**

The agencies generally disagree with commenters who expressed concern that the agencies would expand jurisdiction based on their interpretation of “in the region.” In this action, the agencies are finalizing a definition of “waters of the United States” that is within the agencies’ authority under the Act; that advances the objective of the Clean Water Act; that establishes limitations that are consistent with the statutory text, supported by the scientific record, and informed by relevant Supreme Court decisions; and that is both familiar and implementable. See Final Rule Preamble Section IV.A. The agencies disagree that the final rule generally represents an expansion beyond the pre-2015 regulatory regime; rather, the agencies expect that there will be a slight and unquantifiable increase in waters being found to be jurisdictional under the final rule in comparison to the pre-2015 regulatory regime. Indeed, as discussed in Section V.A of the Preamble to the Final Rule, this final rule is generally comparable in scope to the pre-2015 regulatory regime that the agencies are currently implementing.

The agencies disagree with commenters who stated that utilizing tributary reaches as part of determinations of jurisdiction would be challenging to implement consistently as applicants would be required to obtain and document detailed information beyond the boundaries of the proposed project site. Note that members of the public are not required to conduct or provide any analyses described as part of a jurisdictional determination request. Jurisdictional determination requesters need only provide the agencies with a minimal amount of information, including identification of the boundaries of the area of interest, to request a jurisdictional determination. See RGL 16-01, Appendix 1. The agencies note that the approach in the final rule for aggregating waters as part of a significant nexus analysis is different than that of the *Rapanos* Guidance, as described further in Final Rule Preamble Section IV.C.9. However, the agencies will continue to use stream order to facilitate implementation of the relatively permanent standard (see Final Rule Preamble Section IV.C.4.c.ii) and the significant nexus standard (see Final Rule Preamble Section IV.C.4.c.iii) under the final rule. The agencies have considerable experience identifying tributary reaches based on stream order under the pre-2015 regulatory regime and using the conditions of tributary reaches to inform jurisdiction under the relatively permanent and significant nexus standards. In addition, the agencies have further clarified and refined both the regulatory text and the guidance on how the agencies intend to implement the relatively permanent and significant nexus standards in the final rule. See Final Rule Preamble Section IV.C. Additionally, Final Rule Preamble Section IV.G describes advancements in data, tools, and methods used to make jurisdictional determinations, including in the digital availability of information and data. See the agencies’ response to comments in Section 8 for a discussion of the agencies’ interpretation of the terms “tributary” and “reach.”

The agencies disagree with commenters who stated that the significant nexus standard would allow the agencies to assert jurisdiction over waters that are far upstream from a paragraph (a)(1) water solely because they are part of a reach whose downstream confluence is determined to have a significant nexus that paragraph (a)(1) water. The

agencies also disagree with commenters who stated or implied that all similarly situated waters in a region would be jurisdictional if any one of them was determined to satisfy the significant nexus standard. The “significant nexus standard” means waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters. As described further in Section 12.3.3.2 of the agencies’ response to comments, the agencies note that the determination of jurisdiction, whether positive or negative, applies only to the subject water(s) located in the specific area of interest and not to any other similarly situated water in the region.

The agencies disagree with commenters who opposed using any approach that would group waters together by region, including commenters who criticized the concept of aggregating waterbodies that provide similar functions to downstream paragraph (a)(1) waters. See Section IV.C.9 of Final Rule Preamble for the agencies’ rationale for aggregating waters as part of the significant nexus analysis.

The agencies disagree with commenters who asserted that it is inappropriate to consider whether waters significantly affect downstream paragraph (a)(1) waters as part of a significant nexus analysis, including commenters who stated that such an inquiry is more appropriate as part of the NEPA or permitting process. See Section IV.A.2 of the Final Rule Preamble for a discussion of the scientific and policy basis of the significant nexus standard in the final rule. See also Section 13.2 of the agencies’ response to comments on the definition of “significantly affect.”

## 12.4 Significant Nexus in the Permitting Process

Many commenters addressed how the permitting process will be affected by the proposed rule. Many commenters from the regulated community expressed concern that case-specific analyses and the significant nexus standard will hinder the response time of the agencies and delay the permitting process. Several commenters suggested that an increase in the number of significant nexus analyses under the proposed rule would result in a backlog of jurisdictional determinations.

Some commenters expressed concern that the analysis required under the proposed rule’s significant nexus standard would be too resource intensive and cause delays throughout the permitting process. One commenter asserted that undertaking “the methodologies and metrics required to complete an airtight determination of significant nexus” is a substantial effort from “a logistical, regulatory, temporal, and monetary perspective” and that such an approach to determining Clean Water Act jurisdiction is “unsustainable.” The commenter further stated that the regulators and the regulated public should not incur the burden associated with making significant nexus determinations on a regular basis.

Some commenters suggested that the absence of additional or clearer definitions or detailed guidance regarding the implementation of the significant nexus standard would also result in inconsistent and unpredictable jurisdictional determinations and inconsistent enforcement. One of these commenters argued that the resulting increased costs and delays in project approvals and permitting would impede economic development and related infrastructure projects. Another commenter indicated that the

proposed rule TSD contains conflicting statements about the factors that may be considered as part of a significant nexus analysis, suggesting that this alleged inconsistency would create confusion for regulators and regulated entities. This commenter further argued that, due to confusion over the proposed rule's significant nexus standard, the public would find it challenging to determine whether permitting requirements apply and this could ultimately result in unpermitted discharges and accompanying enforcement actions and citizen suits.

A few commenters suggested that the agencies may see an increase in requests for preliminary jurisdictional determinations because some regulated entities may choose to concede jurisdiction rather than go through a potentially lengthy and expensive permitting process to determine whether a feature meets the proposed rule's significant nexus standard. Indeed, one commenter stated that common project development practices include assuming jurisdiction to receive a permit to avoid unnecessary costs to the project and increased work for the agencies associated with undertaking case-specific analyses. Another commenter anticipated that preliminary jurisdictional determinations will be utilized to save time, costs, and uncertainty.

A few commenters stated that jurisdictional determinations requiring a significant nexus analysis under the *Rapanos* Guidance seemed too subjective. One commenter stated that inconsistent application of the significant nexus standard under the *Rapanos* Guidance resulted in alternating jurisdictional determinations for the same wetland property. Another commenter stated that the Corps may have inconsistently applied the significant nexus standard and the relatively permanent standard, particularly in the Buffalo District and the New York District. One commenter stated that the results of case-specific significant nexus determinations often were unpredictable, subjective, and inconsistent across Corps districts and offices. The commenter also stated that these case-specific determinations were resource- and labor-intensive and created challenges for regulators. Another commenter asserted that the regulated public's experience has been that different Corps districts take a different approach to interpreting the regulations, even in areas that have climatic, topographic, and biotic similarities. One commenter stated that inconsistency across Corps districts has led the regulated community to become frustrated and is likely part of what has driven the lawsuits and multiple efforts to reform the rules.

One commenter emphasized the challenge of satisfying the significant nexus standard under the "restrictive case-by-case approach" in the *Rapanos* Guidance when the water feature being assessed had already been destroyed, leaving little or no information available to assess the former condition of the water feature. This commenter stated that the *Rapanos* Guidance, implemented in the absence of clear regulations, had "tangible effects on" enforcement challenges resulting in the abandonment of hundreds of violation cases and provided multiple such examples. The commenter expressed that without clear regulations, litigation will occur and waste resources.

Several commenters expressed concern that the significant nexus standard could place an unrealistic burden on applicants by requiring documentation of information beyond the limits of the project area. A few commenters expressed concern that jurisdiction would be simultaneously established for all "similarly situated waters" without the knowledge or participation of the landowners.

**Agencies' Response: The agencies disagree with commenters who stated that case-specific analyses and the significant nexus standard will hinder the response time of the agencies,**

delay the permitting process, be unpredictable and inconsistent, or cause challenges for the public to determine whether permitting requirements apply. The agencies further disagree with commenters who expressed concern that the significant nexus standard could place an unrealistic burden on applicants by requiring documentation beyond the limits of the project area. Note that members of the public are not required to conduct or provide any analyses described as part of a jurisdictional determination request. Jurisdictional determination requesters need only provide the agencies with a minimal amount of information, including identification of the boundaries of the area of interest, to request a jurisdictional determination. *See* RGL 16-01, Appendix 1. As discussed further in Final Rule Preamble Section IV.A.4, the agencies have determined the final rule is both familiar and implementable. All definitions of “waters of the United States,” including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR have required some level of case-specific analysis. Consistent implementation of the final rule will be aided by improved and increased scientific and technical information and tools that both the agencies and the public can use to determine whether waters are “waters of the United States.” *See* Final Rule Preamble Section IV.G. Additionally, the public may contact the appropriate permitting authority if they are unclear on whether permitting requirements apply. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. *See* 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). In addition, Final Rule Preamble Section IV.C.10 provides guidance to landowners on how to determine when a Clean Water Act permit is required.

The agencies disagree with commenters who suggested that, absent additional definitions or detailed guidance for implementing the significant nexus standard, there may be the potential for inconsistent or unpredictable jurisdictional determinations. However, in the final rule, the agencies have clarified and refined both the regulatory text and the guidance on how the agencies intend to implement the significant nexus standard. Implementation of the significant nexus standard is described throughout applicable subsections of Final Rule Preamble Section IV.C for tributaries, adjacent wetlands, and waters assessed under paragraph (a)(5) (see Sections IV.C.4.c.iii, IV.C.5.c.iii, and IV.C.6.c.iii, respectively). Additionally, as discussed in the Preamble to the Final Rule Section IV.G, the agencies have identified a variety of implementation data, tools, and methods available for use to implement the significant nexus standard. The agencies are not mandating specific data or tools to implement the final rule. The agencies will assess jurisdiction based on the most applicable methods and best available sources of information for the specific site under evaluation. As with any final regulation, the agencies will consider developing additional tools to promote consistent implementation of the final rule’s approach. Nevertheless, the agencies conclude that the final rule, together with the preamble and existing tools, provides sufficient clarity to allow consistent implementation of the final rule.

The agencies disagree with commenters who indicated that the factors included in the proposed rule and proposed rule TSD were contradictory, or that the factors would be overly burdensome. *See* Section 12.2.2 of the agencies’ response to comments for additional discussion.

**The agencies acknowledge commenters who stated the significant nexus standard would be challenging to implement when the water feature being assessed had already been destroyed without prior regulatory approval, leaving little or no information available to assess the former condition of the water feature in an enforcement setting. Determining the jurisdictional status of an unlawfully impacted water has always required case-specific investigation and best professional judgement based on the best available information. Section IV.G of the Final Rule Preamble further describes advancements in the data, tools, and methods used to make jurisdictional determinations, including in the digital availability of information and data.**

**In response to commenters who expressed concern that jurisdiction would be simultaneously established for all “similarly situated waters” without the knowledge or participation of the landowners, Final Rule Preamble Section IV.C.9.c describes that determinations of jurisdiction under the significant nexus standard, whether positive or negative, apply only to the subject water(s) located in the specific area of interest and not any other similarly situated water in the region.**

#### 12.4.1 Intersection with state regulatory processes

Many commenters addressed how the proposed rule’s significant nexus standard could impact state regulatory processes. Some commenters expressed support for the inclusion of the significant nexus standard in the proposed rule as contributing to a federal “baseline” of water quality protection. Other commenters expressed concern that the significant nexus standard would create challenges for state programs and state regulatory authority, among other related issues. One of these commenters asserted that the lack of clarity around whether a feature possesses a significant nexus could cause “liability issues” for local and state agencies as the regulated community would not know when a project requires a Clean Water Act permit.

**Agencies’ Response: The agencies acknowledge commenters who stated that the inclusion of the significant nexus standard in the definition of “waters of the United States” contributes to a “baseline” of protection for water resources at the federal level. The agencies have concluded that it is the significant nexus standard that advances the objective of the Clean Water Act because it is linked to effects on the downstream water quality of paragraph (a)(1) waters while also establishing an appropriate limitation on the scope of jurisdiction by requiring that those effects be significant. The relatively permanent standard provides important efficiencies and additional clarity for regulators and the public as it more readily identifies a subset of waters that will virtually always significantly affect paragraph (a)(1) waters, but, on its own, the standard is inconsistent with the text of the statute and Supreme Court precedent and is insufficient to advance the objective of the Clean Water Act. This rule’s utilization of both the relatively permanent standard and the significant nexus standard thus gives effect to the Clean Water Act’s broad terms and environmentally protective aim as well as its limitations. See Final Rule Preamble Section IV.A.3.**

**As also described in Final Rule Preamble Section IV.A.3.b, the Clean Water Act sets a baseline of federal protection for waters that meet the definition of “waters of the United States” and authorizes states to be more protective than the Act while also leaving substantial responsibility and autonomy to the states over those waters that do not have a significant nexus to the core waters covered by the Act. The agencies agree that partnerships with states, tribes, and local governments are important to meet the objective of the Act and have worked with these entities to ensure that they had opportunities to provide input on the rule. See Final Rule Preamble Section III.C for a summary of the agencies’ stakeholder outreach for this rulemaking, including the agencies’ federalism and tribal consultation activities in developing the rule.**

**The agencies disagree with commenters who asserted that the significant nexus standard will be problematic for local and state agencies since the regulated community will not know when a proposed project should have a permit or a jurisdictional determination. The agencies have determined that the regulations established in the final rule are founded on the familiar framework of the 1986 regulations and are generally consistent with the pre-2015 regulatory regime. They are fully consistent with the statute, informed by relevant Supreme Court decisions, and reflect the record before the agencies, including the best available science, as well as the agencies’ expertise and experience implementing the pre-2015 regulatory regime. In addition, the agencies find that the final rule increases clarity and implementability by streamlining and restructuring the 1986 regulations and providing implementation guidance informed by sound science, implementation tools, and other resources. Further, because the rule is founded upon a longstanding regulatory framework and reflects consideration of the agencies’ experience and expertise, as well as updates in implementation tools and resources, the agencies find that the final rule is generally familiar to the public and implementable.**

#### 12.4.2 Industry-specific concerns

Many commenters expressed concerns about the proposed rule’s impact on different sectors of the regulated public. A few commenters asserted that vague terminology and the lack of clarity would make it challenging for landowners to determine whether a permit is required for their property. One commenter expressed concern that uncertainty about the jurisdictional status of waters would complicate decisions about project viability for developers.

A few commenters mentioned the conflicts the proposed rule may create with other Administration goals including climate, infrastructure, and economic development. One commenter expressed concern that the proposed rule would affect the ability of utilities to bring renewable energy and resilient systems online in support the Administration’s clean energy initiatives. Quoting the TSD, another commenter argued that the significant nexus standard does not consider the effects that case-specific determinations would have on alternative energy and transmission projects, particularly in the Southwest. As an example, the commenter highlighted how the standard may delay the development of California’s high speed rail system by the jurisdiction of waters, such as vernal pools, based on connections to navigable waters, even though this project may be mitigating up to thousands of impacted acres in California’s Central Valley. The commenter also expressed that the significant nexus standard may result in challenges to

climate and economic goals by not defining sideboards of wetland connectivity. A commenter asserted that categorical definitions, rather than case-specific determinations, would create optimal conditions for state, industrial, and agricultural management.

Several commenters addressed the effect of the significant nexus standard on infrastructure projects. One commenter expressed concern that the significant nexus standard would decrease efficiency when building electric transmission infrastructure. Another commenter stated that the significant nexus standard would potentially lead to jurisdictional uncertainty for complex infrastructure projects, such as pipelines and transmission lines, as they cross state and tribal borders. Another commenter asserted that the tributary reach analysis, in particular, might be problematic for linear infrastructure projects which may extend for hundreds of miles including roads, pipelines, and electric utilities. One commenter expressed concern that, without more predictability, the proposed rule would impede rail operations by delaying rail infrastructure projects including those needed to address safety concerns, aging infrastructure, and to support the national and global supply chain. Other commenters discussed concerns that the unpredictability of the case-specific determinations would impact project delivery and routine maintenance by state Departments of Transportation or municipal Departments of Public Works.

Many commenters stated that the proposed rule would create an unreasonable burden for agricultural producers. One commenter asserted that the combined application of the relatively permanent standard and the significant nexus standard would result in a requirement that almost all farmers and landowners would need a jurisdictional determination or a Clean Water Act permit before engaging in activities on their land. Another commenter indicated that adopting the significant nexus standard, instead of the continuous surface connection test, is detrimental to farmers and landowners as it adds to the regulatory burden and allows the government to control private property.

Several commenters indicated that the “waters of the United States” definition has historically caused confusion for farmers and ranchers. One commenter asserted that it would be nearly impossible for farmers to make informed decisions and that subjective and inconsistent determinations made by individual regulators would lead to disputes between farmers and the agencies. Another commenter stated that farmers would find it challenging to figure out whether a federal permit is needed due to a lack of clarity on how regulators would apply the concepts of “similarly situated” and “significantly affect.”

Many commenters expressed concern that undefined terms and general lack of clarity would mean farmers might be unaware that waters are jurisdictional until they are at risk of civil and criminal liability. One commenter argued that unpredictable and varying assessments from different Corps field offices mean that farmers and ranchers have no assurance against arbitrary or discriminatory enforcement. One commenter asserted that “vague terminology” cannot be applied to agricultural operations without burdensome analyses. Another commenter indicated that a lack of clear guidance would leave forest owners vulnerable to inconsistent determinations and potentially arbitrary enforcement actions. One commenter stated that farmers will not know if a water feature on their property is jurisdictional due to the multiple standards, lack of commerce-based regulation, and aggregation of water bodies. This commenter argued that farmers will be unable to make management decisions without involving a government agency and asserted that these individuals are subject to hefty fines and penalties if in violation of the Clean Water Act. The commenter recommended that the agencies provide clarity regarding the limits to authority.

One commenter emphasized the importance of fertilizers, crop protections, and other conservation practices, focusing on farmers. The commenter stated that farming around jurisdictional waters creates challenges to efficiently produce crops. This commenter also argued that farmers cannot anticipate every crop protection product or practice needed to address insect, weed, and disease pressures far enough in advance of the need to apply for or amend a permit and do not have the resources to re-apply for a permit every five years. One commenter emphasized that pesticide users will experience delays while the agencies determine jurisdiction on floodplains based on the significant nexus standard.

Many commenters discussed mining industry concerns and asserted the proposed rule lacked clarity regarding implementation of the significant nexus standard. One commenter stated that aggregate operators will be forced to guess what “in the region” and “similarly situated” will mean on the ground. Other commenters asserted that significant nexus process would impact their ability to provide the aggregate needed for infrastructure projects. One commenter requested clarification on behalf of the mining industry as to whether all waters aggregated within “the region” would be jurisdictional or whether the determination of significance would be based only on the proposed impacts. The commenter expressed concern that the aggregation of waters would affect the phased reclamation approach during the mining process. Another commenter requested clarity on the proposed “reach concept” and expressed concern regarding potential safety issues for property owners near mining property who might need to access mine sites to conduct their own analyses. This commenter also stated that the mining industry faces civil and criminal penalties for violations for a vague, unclear rule and requested clarification to better implement the regulation.

A few commenters addressed impacts to other industries. One commenter stated that the jurisdictional scope of adjacent wetlands may result in the jurisdiction of stormwater projects, such as treatment control best management practices and green infrastructure projects, which undermines the purpose of these projects. Another commenter stated that the rule creates challenges for golf course professionals as they manage water features.

**Agencies’ Response: The agencies disagree with commenters who stated that vague terminology and a lack of clarity in the proposed rule would make it challenging for landowners to determine whether a permit is required for their property, as well as commenters who expressed concern that uncertainty about the jurisdictional status of waters would complicate industry’s decisions about the viability of proposed projects. In the final rule, the agencies are exercising their authority to interpret “waters of the United States” to mean the waters defined by the familiar 1986 regulations, with amendments to reflect the agencies’ construction of limitations on the scope of the “waters of the United States” informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies’ experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining “waters of the United States.” Through this rulemaking process, the agencies have considered all timely public comments on the proposed rule, including changes that improve the clarity, implementability, and durability of the definition. The regulations established in the final rule are founded on the familiar framework of the 1986 regulations and are generally consistent with the pre-2015**

regulatory regime. They are full consistent with the statute, informed by relevant Supreme Court decisions, and reflect the record before the agencies, including the best available science, as well as the agencies' expertise and experience implementing the pre-2015 regulatory regime. In addition, the agencies find that the final rule increases clarity and implementability by streamlining and restructuring the 1986 regulations and providing implementation guidance informed by sound science, implementation tools, and other resources. Further, because the rule is founded upon a longstanding regulatory framework and reflects consideration of the agencies' experience and expertise, as well as updates in implementation tools and resources, the agencies find that the final rule is generally familiar to the public and implementable. See Final Rule Preamble Section IV.A.4. Additionally, the public may contact the appropriate permitting authority if they are unclear on whether permitting requirements apply. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. See 33 CFR 325.1; Regulatory Guidance Letter 16-01 (2016). Final Rule Preamble Section IV.C.10 also provides guidance to landowners on how to determine when a Clean Water Act permit is required.

The agencies disagree with commenters who suggested that aspects of the rule (*i.e.*, the tributary reach analysis, the significant nexus standard, and case-specific determinations) would be unpredictable, inefficient, and may result in permitting delays that hinder other administration goals (*e.g.*, climate, infrastructure, and economic development). The agencies disagree with commenters who stated that subjective and inconsistent jurisdictional determinations made by individual regulators would lead to disputes between the agencies and the regulated public. As discussed further in Final Rule Preamble Section IV.A.4, the agencies have determined the final rule is both familiar and implementable. All definitions of "waters of the United States," including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR have required some level of case-specific analysis. The agencies find that the clarifications in this rule address many of the concerns raised in the past about timeliness and consistency of jurisdictional determinations under the Clean Water Act. See Final Rule Preamble Section IV.C.7 and IV.G. See Section 12.1 of this document for the agencies' response to comments concerning case-specific versus categorical jurisdiction.

The agencies also disagree with commenters who stated that the proposed rule would create an unreasonable burden for agricultural producers, including farmers and ranchers. As described in Final Rule Preamble Section IV.C.7, the final rule includes a number of exclusions from the definition of "waters of the United States," including longstanding exclusions for prior converted cropland and waste treatment systems, and exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime. In addition to these exclusions, many of which are important for agricultural producers, the final rule also will not affect any of the permitting exemptions important to agricultural producers, such as exemptions from section 404 permitting requirements for normal farming, ranching, and silviculture activities. The final rule will also not affect any of the existing exemptions or exclusions for agricultural stormwater discharges and return flows from irrigated agriculture from section 402 NPDES permitting requirements.

The agencies acknowledge commenters who asserted that there was a lack of clarity regarding how regulators would apply the concepts of “similarly situated” and “significantly affect.” Final Rule Preamble Section IV.C.9 describes that, after considering public comments, the agencies revised the definition of the term “significantly affect” in the final rule to increase clarity. See Section 12.2.1 of this document for responses to comments regarding the definition of “significantly affect.” See Section 12.3 of this document for responses to comments regarding implementation of the significant nexus standard, including interpretation of the term “similarly situated.”

The agencies acknowledge commenters who expressed the need for clear implementation guidance. As discussed in the Final Rule Preamble Section IV.C and Section IV.G, the agencies have identified a variety of implementation guidance, tools, and methods available for use to determine whether a water, either individually or in combination with similarly situated waters in the region, satisfies the significant nexus standard. The agencies are not mandating specific data or tools to implement the final rule. The agencies will assess jurisdiction based on the most applicable methods and best available sources of information for the specific site under evaluation. As with any final regulation, the agencies will consider developing additional tools to promote consistent implementation of the final rule’s approach. Nevertheless, the agencies conclude that the final rule, together with the preamble and existing tools, provides sufficient clarity to allow consistent implementation of the final rule.

The agencies acknowledge commenters who expressed concern that the rule includes multiple jurisdictional standards, lacks a basis in commerce, and aggregates waterbodies for the significant nexus standard. Section 12.3.1 of this document provides the agencies’ responses to comments concerning the jurisdictional standards in the rule. Section III.A of the Final Rule Preamble provides the legal background for the final rule including a discussion of the origin of the significant nexus standard. Final Rule Preamble Section IV.A.2 discusses the scientific and policy basis of the significant nexus standard in the final rule and further describes that the final rule replaces the interstate commerce test with the relatively permanent standard and significant nexus standard. The significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. The relatively permanent standard provides important efficiencies and additional clarity for regulators and the public by more readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters.

See Section 12.3.2 of this document for the agencies’ response to comments concerning general implementation of the significant nexus standard. See Sections 12.3.3 and 12.3.4 of this document for the agencies’ response to comments regarding aggregating waterbodies as part of the significant nexus analysis including the agencies’ interpretation of “similarly situated” and “in the region,” respectively.

**Final Rule Preamble Section IV.C.9.c describes that determinations of jurisdiction, whether positive or negative, apply only to the subject water(s) located in the specific area of interest and not to any other similarly situated water in the region.**

**The agencies acknowledge commenters who expressed concern that the proposed rule may result in the jurisdiction of stormwater projects such as treatment control best management practices and green infrastructure projects. Section IV.C.7 of the Preamble to the Final Rule describes exclusions in the final rule for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime. Stormwater control features and green infrastructure features are not specifically excluded in the final rule but may be assessed on a case-specific basis to determine if they meet the criteria for any of the exclusions in the final rule.**

## **12.5 Comparison with Prior Regulations**

### **12.5.1 Comparison with the 2015 Clean Water Rule**

A few commenters asserted that the proposed rule's approach is more similar to the 2015 Clean Water Rule than the pre-2015 regulatory regime and that it will expand jurisdiction relative to the pre-2015 regulatory regime. One commenter shared concerns about "the return of the significant nexus standard that was utilized in the 2015 Clean Water Rule," which the commenter stated will ensure determinations of jurisdiction through the significant nexus standard. Another commenter indicated that incorporating the significant nexus standard will create a rule similar to the 2015 Clean Water Rule, which will allow for regulatory uncertainty and litigation regarding the scope of the rule. Another commenter stated that the expansion of the pre-2015 regulatory regime would create uncertainty in the permitting process. A commenter stated that the Clean Water Rule was subjective, and asserted that the proposed rule is an extension of the 2015 Clean Water Rule.

One commenter indicated that the 2015 Clean Water Rule protected waters that:

- Affect the chemical integrity of waterways through uptake, retention, transformation and transport of nutrients or contaminants;
- Affect the physical integrity of waterways by controlling rates of runoff, streamflow, temperature and sediment delivery;
- Affect the biological integrity of waterways by providing food resources, thermal refuges, spawning sites, nursery areas, and essential habitat for unique plants and animals, including numerous threatened and endangered species, as well as recreationally and commercially important species;
- Are altered by human activities, to the detriment of downstream water bodies and the public interest; and
- Are likely to be among the freshwater ecosystems most sensitive to impacts of climate extremes such as drought.

A commenter indicated that under the 2015 Clean Water Rule, the agencies found "that waters adjacent to all tributaries have a significant nexus to traditionally navigable waters" (80 FR at 37.069). Another

commenter emphasized the importance of protections for ephemeral streams and non-adjacent wetlands in the significant nexus standard, as regulated under the 2015 Clean Water Rule.

**Agencies' Response:** The agencies disagree with commenters who stated the proposed rule was an extension of the 2015 Clean Water Rule. The agencies further disagree with commenters who indicated that inclusion of the significant nexus standard would create a rule similar to the 2015 Clean Water Rule, leading to regulatory uncertainty and litigation. The agencies acknowledge commenters who summarized the 2015 Clean Water Rule in their comments, including those who described the types of waters they determined were protected by the 2015 Clean Water Rule.

In developing the final rule, the agencies thoroughly considered alternatives to this rule, including the 2015 Clean Water Rule, and have concluded that this final rule best accomplishes the agencies' goals to promulgate a rule that advances the objective of the Clean Water Act, is consistent with Supreme Court decisions, is informed by the best available science, and promptly and durably restores vital protections to the nation's waters. See Section IV.B.1 of the Preamble to the Final Rule for further discussion of the agencies' grounds for concluding that the 2015 Clean Water Rule is not a suitable alternative to the final rule.

Section III.A of the Final Rule Preamble provides the legal background for the final rule, including a discussion of the origin of the significant nexus standard and the concept of "similarly situated;" Section IV.A.2 further discusses the scientific and policy basis of the significant nexus standard in the final rule.

The agencies also disagree with commenters who stated that the agencies would assert jurisdiction too broadly under the proposed rule or that it would expand jurisdiction relative to the pre-2015 regulatory regime. In this action, the agencies are exercising their authority to interpret "waters of the United States" to mean the waters defined by the familiar 1986 regulations, with amendments to reflect the agencies' determination of the statutory limits on the scope of the "waters of the United States" informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining "waters of the United States." The final rule is both familiar and implementable. See Final Rule Preamble Section IV.A. The agencies disagree that the final rule represents an expansion beyond the pre-2015 regulatory regime. Rather, as discussed in Section V of the Preamble to the Final Rule, the final rule is generally comparable in scope to the pre-2015 regulatory regime that the agencies are currently implementing.

#### 12.5.2 Comparison with the 2020 NWPR

Several commenters discussed the 2020 NWPR. One commenter stated that the 2020 NWPR provided clarity and consistency, which they asserted is removed by the proposed rule. A commenter indicated that the 2020 NWPR resulted in fewer uncertainties and improved the jurisdictional determination process.

This commenter recommended that the final rule use clear and predictable definitions of “waters of the United States” to avoid inconsistent application of the significant nexus standard. A commenter stated that organizations opposed to the 2020 NWPR may pursue litigation to stall the implementation of a good environmental rule.

A commenter stated that, relative to the 2020 NWPR, the proposed rule would make it more challenging, time-consuming, and costly to evaluate tributaries for jurisdictional status under the relatively permanent and significant nexus standards, and that the case-specific determinations would result in permitting delays. Another commenter expressed that the 2020 NWPR avoided case-specific analyses with clear categories of jurisdictional wetlands. This commenter requested that the agencies return to the 2020 NWPR. The commenter suggested removing intermittent flows from the definition of “direct hydrologic surface connection” to require a more significant connection of a wetland with a traditional navigable water. A commenter stated that the 2020 NWPR increased clarity regarding the terms “adjacent” and “floodplains.” One commenter asserted that, in the proposed rule, the agencies described implementation challenges under the 2020 NWPR (*e.g.*, distinguishing between natural and man-made barriers and determining whether a wetland was inundated in a typical year); however, the commenter stated that those issues “pale in comparison to applying a significant nexus test to remote waters and adjacent wetlands on a case-by-case basis.”

A commenter expressed that the significant nexus standard and the relatively permanent standard are preferable to the 2020 NWPR. One commenter noted that the relatively permanent standard as applied under the 2020 NWPR failed to include many ephemeral and isolated waters as jurisdictional. Another commenter stated support for the removal of the typical year provision.

**Agencies’ Response: In developing the final rule, the agencies thoroughly considered alternatives to this rule, including the 2020 NWPR, and have concluded that this final rule best accomplishes the agencies’ goals to promulgate a rule that advances the objective of the Clean Water Act, is consistent with Supreme Court decisions, is informed by the best available science, and promptly and durably restores vital protections to the nation’s waters. See Section IV.B.3 of the Preamble to the Final Rule and the agencies’ response to comments in Section 4 for further discussion of the agencies’ grounds for concluding that the 2020 NWPR is not a suitable alternative to the final rule.**

**The agencies disagree with commenters who asserted that the proposed rule would make it more challenging, time-consuming, and costly to evaluate the jurisdictional status of tributaries. The agencies further disagree with commenters who asserted that case-specific determinations under the proposed rule would result in permitting delays, or that the 2020 NWPR avoided case-specific analyses. As discussed in Final Rule Preamble Section IV.A.3, the agencies have determined that fact-based standards for determining Clean Water Act jurisdiction are reasonable. All definitions of “waters of the United States,” including the pre-2015 regulatory regime, the 2015 Clean Water Rule, and the 2020 NWPR have required some level of case-specific analysis. This rule continues the use of case-specific jurisdictional tests, but also provides needed clarity by establishing regulations that include definitions of key terms and specific exclusions. Implementation of the final rule will be aided by improved and increased scientific and technical information and tools that both the**

agencies and the public can use to determine whether waters are “waters of the United States.” See Final Rule Preamble Section IV.G. Furthermore, as discussed further in Final Rule Preamble Section IV.A.4, the agencies have determined the final rule is both familiar and implementable.

In response to the commenter who suggested removing intermittent flow from the definition of “direct hydrologic surface connection,” the agencies note that neither the proposed rule nor the final rule includes a definition of “direct hydrologic surface connection.” See Final Rule Preamble Section IV.C.6 for the agencies’ implementation of the adjacent wetlands provision, including the concept of a “continuous surface connection.”

The agencies acknowledge the commenter who expressed support for the removal of the “typical year” standard from the 2020 NWPR. Section IV.B.3 of the Final Rule Preamble describes the significant implementation challenges presented by the “typical year” standard. The final rule does not include a “typical year” standard.