WESTERN URBAN WATER COALITION

February 7, 2022

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(Docket No. EPA–HQ–OW–2021–0602)

U.S. Environmental Protection Agency
Office of Water (4504–T)
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Department of the Army
Office of the Assistant Secretary of the Army for Civil Works
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RE: Comments on Proposed Rule, "Revised Definition of 'Waters of the United States'" 86 Fed. Reg. 69372 (Dec. 7, 2021), Docket No. EPA–HQ–OW–2021–0602

The Western Urban Water Coalition (WUWC)[1] appreciates this opportunity to comment on the Department of the Army, Corps of Engineers, Department of Defense and the U.S. Environmental Protection Agency's (EPA) (collectively, the Agencies) proposed rule revising the definition of Waters of the United State (WOTUS) under the Clean Water Act (CWA). 86 Fed. Reg. 69372 (Dec. 7, 2021).

Introduction

WUWC was established in 1992 to address the West's unique water supply and water quality challenges that threaten the economic sustainability and growth of the western population centers. WUWC consists of the largest urban water utilities in the West, which together serve more than 40 million urban water consumers in 18 major metropolitan areas across seven states.

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[1] WUWC consists of the following members: **Arizona** (Central Arizona Project, City of Phoenix and Salt River Project); **California** (Eastern Municipal Water District, the City of Los Angeles Department of Water and Power, The Metropolitan Water District of Southern California, San Diego County Water Authority, Santa Clara Valley Water District, and City and County of San Francisco Public Utilities Commission); **Colorado** (Aurora Water, Colorado Springs Utilities, and Denver Water); **Nevada** (Las Vegas Valley Water District, Southern Nevada Water Authority, and Truckee Meadows Water Authority); **New Mexico** (Albuquerque Bernalillo County Water Utility Authority); **Utah** (Salt Lake City Public Utilities); and **Washington** (Seattle Public Utilities). Seattle Public Utilities is not participating in the submission of these comments on behalf of WUWC.

Some of these utilities also operate wastewater, stormwater, natural gas, and electric, including hydroelectric, facilities for their customers.

WUWC members are nonprofit public utilities dedicated to providing a reliable, high-quality urban water supply for present and future generations. As operators of urban water supply systems, WUWC members serve the health, environmental, and economic needs of their communities around the clock, every day of the year. WUWC advocates for effective and practicable approaches to the implementation of environmental protection programs in a time when water supplies are becoming increasingly scarce and the development of sustainable supplies is vital.

WUWC has historically been, and will continue to be, a supporter of the goals of the CWA. WUWC members have a strong interest in clean water for municipal water supplies and in the regulatory processes protecting water quality. WUWC members are advocates for predictability and certainty in the determination of federal jurisdiction over waterbodies and the reduction of unnecessary costs and delays in the permitting process. Whether section 402 and/or section 404 of the CWA apply in a given circumstance is of great significance to WUWC members because, as municipal water providers, they build and operate reservoirs and other essential water supply related infrastructure, including long pipelines, as well as recharge and reuse facilities. In addition, many of our members are multi-service utilities who also provide stormwater and wastewater services to our customers that trigger regulatory oversight. For these reasons, WUWC supports the Agencies' proposal to redefine the areas qualifying as WOTUS. We also have recommendations on certain implementing provisions of those regulations and corresponding guidance.

As rulemaking progresses, WUWC encourages the Agencies to take into account how their actions impact the ability of water providers to balance competing water supply and environmental protection needs, especially in the West. This includes challenges associated with rapid population growth, drought, forest fires, post-fire floods, and the overall health of forested watersheds. The West is, in fact, one of the regions that will be the most directly and significantly affected by the outcome of this rulemaking process. By way of example, it is within this geographic region that one frequently finds dry arroyos and washes that flow only in response to infrequent storm events, isolated ponds, intermittent and ephemeral streams with a tenuous connection to downstream navigable waters, effluent dominated and dependent water bodies, and extensive ditch and canal systems designed to meet both agricultural and municipal needs.

For these reasons, WUWC has been very active in the regulatory initiatives to define what constitutes a jurisdictional water under the CWA and administrative efforts to implement a WOTUS definition. We have appeared before congressional committees and Members of Congress, met with federal agencies and commented on guidance documents. Prior to the publication of the 2015 Clean Water Rule, WUWC provided, and here again provides, technical feedback to the Agencies on both the 2015 Rule and the Connectivity Report ("Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence"). WUWC met with EPA and other agency staff on numerous occasions over the past six years to discuss the technical aspects of a WOTUS definition as it may impact the arid west.

These meetings have consistently focused on the technical implementation issues associated with any definition and have avoided the legal debate. Our previously submitted comments include the following:

- Comments on the Proposed Rule to Clarify the Definition of "Waters of the United States" under the Clean Water Act, Docket ID No. EPA-HQ-OW-2011-0880 (Comments dated November 14, 2014)
- Clarification Sought on Final Rule to Clarify the Definition of "Waters of the United States" under the Clean Water Act (Letter to EPA seeking clarification dated August 7, 2015)
- Comments on the Proposed Rule to Re-Codify the Pre-Existing Definition of Waters of the United States," Docket ID No. EPA–HQ–OW–2017–0203 (Comments dated September 27, 2017)
- Comments on the Proposed Rule to Add Applicability Date to 2015 Clean Water Rule, Docket ID No. EPA–HQ–OW–2017–0644 (Comments dated December 13, 2017)
- Comments on the Proposed Rule on the Revised Definition of "Waters of the United States," Docket ID No. EPA–HQ–OW–2018-0149 (Comments dated April 15, 2019)
- Comments on Notice of Public Meetings Regarding "Waters of the United States," Docket ID No. EPA–HQ–OW–2021-0328 (Comments dated September 3, 2021)

WUWC believes that it is possible to fashion a WOTUS proposal that meets the objectives of the CWA while allowing for the efficient and cost-effective construction, maintenance, and operation of necessary water and wastewater infrastructure in the arid West and throughout the country. For example, in connection with the 2015 rule, WUWC offered several key points of technical information which demonstrated that the proposed rule did not rely on the best available information regarding WOTUS criteria in the arid states, including the following:

- In reviewing the *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* (connectivity report) and comments on the connectivity report (EPA SAB Panel 2014), it is clear that most of the discussion and information focused on "streams" and there was very little consideration given to the dry ephemeral drainages of the arid West.
- Research done in the arid West and cited by the connectivity report tends to focus on larger, higher-order drainages. The assumption that tributaries of any size in the arid West behave proportionally and, in a regional or larger context, are similar to large streams based on the data presented for those large streams is not valid.
- A review of the literature cited in the connectivity report demonstrates that the few references of research applicable to the arid West suggest a non-linear, highly variable relationship when comparing larger streams to ephemeral and intermittent drainages.
- Only a few of the 1,016 references in the connectivity report include research with applicability to low order headwater streams in the arid West. It was striking that the most categorically pertinent literature presented was on topics that do not have much

applicability to determining the significance of small streams' downstream connectivity to larger tributaries.

- Standard references for arid West such as Fluvial Processes in Dryland Rivers (Graf 1988), were not included and discussed in the connectivity report. Presentation of this information could have provided the basis for the connectivity report to disclose the differences for such systems in the arid West which could have informed the proposed rule and led to a regional approach for addressing ephemeral and intermittent channels in the arid West.

Our discussion of these points with the Agencies was just beginning for the purpose of developing implementing guidance when the transition from the Obama to the Trump Administrations took place. WUWC hopes to pick up the conversation with the Agencies again with these comments as a starting point for doing so, and to further discuss the supplemental resources that the Agencies relied on for this proposed rule, as described in the Technical Support Document.

The WOTUS definition, along with accompanying guidance, must take into account our changing climate, where a "new norm" is emerging, and the socioeconomic and public health needs of historically underserved communities. This will require both a measure of flexibility in rule application as well as strategically placed investment that promotes the timely construction and successful operation of water and wastewater facilities. The Administration's Infrastructure Investment and Jobs Act is a good first step in meeting these goals, and the Build Back Better legislation, or some form thereof, may build on that foundation. However, it is necessary to ensure that such initiatives are not undermined through ill-conceived regulatory actions.

Finally, WUWC is aware of the Administration's plan to address the WOTUS issue in two steps—(1) propose a foundational rule to restore the pre-2015 Rule regulatory approach, and then (2) "fine tune" or build upon this proposed rule at some point in the future. Unfortunately, political shifts occur on a fairly regular basis and those negatively impacted by final rules oftentimes resort to litigation that can last for many years. WUWC urges the Agencies to adopt a rule in 2022 that: (1) reduces or eliminates the uncertainty that led to the past decade of debate over WOTUS; (2) accommodates regional hydrologic, geologic, and geographic differences where warranted and appropriate; (3) adopts language which addresses the regulatory concerns associated with climate change; and (4) strikes a balance that preserves the environmental values identified in the CWA while allowing for regulatory certainty and the timely and cost-effective investment in infrastructure needed to meet local water and wastewater supply and treatment needs.

National Environmental Policy Act

This rulemaking should be supported by an environmental assessment prepared in accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*., and agency implementing regulations. NEPA analysis of the effects of this rule, and reasonable alternatives, is necessary in order for this rule to address the concerns described in this letter and to be legally defensible. In its 2014 proposed rule, the Corps prepared a draft environmental assessment in accordance with NEPA and published its preliminary determination that the section 404 aspects of the proposed rule do not constitute a major Federal action significantly affecting the quality of the human environment, and thus preparation of an environmental impact statement will not be required. EPA and Corps Proposed Rule, 79 Fed. Reg. 22188, 22222 (Apr. 21, 2014). However, this proposed rule does not address NEPA compliance, leaving the potential requirement of an environmental impact statement unaddressed. The Agencies should prepare an environmental assessment with public involvement. 40 C.F.R. § 1501.5(e).

Significant Nexus

The significant nexus analysis (SNA) to determine if certain waters meet the definition of a WOTUS involves several components, each of which poses potential concerns to WUWC. These include definitions of:

- “relevant reach”
- “similarly situated”
- “in the region”
- “significantly affect”
- “functions” (to be considered when implementing the SNA)

WUWC’s concerns are most evident when employing the SNA to determine the jurisdictional status of ephemeral drainage features and potentially isolated waters in the arid West. WUWC’s comments and suggestions on this topic are intended to help the Agencies develop an approach that results in a durable definition of the term ‘‘waters of the United States’’ and that recognizes regional differences and minimizes the potential for lengthy court challenges.

As discussed in greater detail below, WUWC requests that the Agencies consider the following in implementing a SNA under the proposed revised definition of WOTUS:

- The SNA should focus on the relevant reach defined as the tributary together with the relevant functions (i.e., those performed within the relevant reach that relate to the chemical, physical, and biological support of the Traditionally Navigable Water (TNW)) performed by the wetlands adjacent to the tributary.
- The Agencies should continue to follow the *Rapanos* Guidance when determining which waters are similarly situated. In evaluating whether a significant nexus is present, consideration should be given to the flow and functions of the tributary together with the functions performed by the wetlands adjacent to the tributary.
- The Agencies should add to the definition of “significantly affect” a list of functions of upstream waters, assessing both the existence of the effect and the specific nature thereof. The Agencies should limit the functions to those associated with connected “waters” and avoid land use controls.

Relevant Reach

Under the *Rapanos* Guidance, when performing a SNA, the first step is to determine the relevant reach of the tributary being assessed, even when the subject water may only include a wetland. The Agencies then consider the flow and functions of the tributary together with the functions performed by all the wetlands adjacent to the tributary in evaluating whether a significant nexus is present. Under this approach, where it is determined that a tributary and its adjacent wetlands collectively have a significant nexus with TNWs, the tributary and all of its adjacent wetlands are jurisdictional. The Agencies note that this approach reflects the Agencies' interpretation of "similarly situated" to include all wetlands adjacent to the same tributary. The Agencies requested comment on "similarly situated" and "in the region" as used for the SNA. 86 Fed. Reg. at 69437.

The SNA should focus on the relevant reach defined as the tributary and all the wetlands adjacent to the tributary that perform relevant functions (i.e., those functions performed within the relevant reach that relate to the chemical, physical, and biological support of the TNW).

Similarly Situated in the Region

Under the proposed rule, waters possess the requisite significant nexus if they either alone, or in combination with similarly situated wetlands in the region, significantly affect the chemical, physical, or biological integrity of other covered waters more readily understood to be navigable. 86 Fed. Reg. at 69438. Under the *Rapanos* Guidance, the Agencies have considered the flow and functions of the tributary together with the functions performed by all the wetlands adjacent to the tributary in evaluating whether a significant nexus is present. As noted above, this approach reflects the Agencies' interpretation of "similarly situated" to include all wetlands adjacent to the same tributary.

WUWC notes that the *Rapanos* Guidance focused on similarly situated wetlands and not similarly situated waters in a broader landscape or watershed context. There is substantial variability in the types of waters within a given watershed in the arid West. Aggregating highly variable waters over a very large region and using the combined potential effects of these waters on the chemical, physical, or biological integrity of a TNW to determine that all of these "similarly situated waters," individually or collectively, are jurisdictional is not an approach supported by the science. As discussed further below, there is simply too much variability within waters in the arid West, particularly within ephemeral and intermittent drainages, to use such an approach to determining the jurisdictional status of the waters. Additionally, for many areas, particularly in the western U.S., the factual information that would be needed to try to aggregate waters into "similarly situated" based on the combined potential effects of these waters on the chemical, physical, or biological integrity of a TNW is simply not available. Will the Agencies be responsible for collecting the needed information? This would place an additional burden on the many U.S. Army Corps of Engineers (Corps) regulatory offices, which are already short staffed.

In the arid West, there can be a substantial distance between "other waters" (including ephemeral and intermittent drainages) and a TNW and substantial time between precipitation and flow events. Within the watershed encompassing that distance, there can be numerous "other waters" with different relationships to the TNW including hydrology, landform, soils, vegetation, and distance to the TNW. It is not appropriate to assume that these "other waters" are similarly situated because it cannot be assumed that they perform similar functions and are located sufficiently close to a TNW to be evaluated as a single landscape or functional unit. For example, as noted in the Corps field guide to the identification of the ordinary high water mark (OHWM) in the arid West, "[E]xtreme weather events (e.g., summer thunderstorms) may produce locally intense precipitation over an entire watershed or perhaps just a portion of an entire watershed producing short-duration, potentially high-energy (depending on watershed size, relief, and soil conditions) flow in these areas and a complete lack of flow in others" (Lichvar and McColley 2008). These highly localized precipitation events are common in the arid West. When such events occur, the "other waters" in the entire watershed are not acting in a combined similar manner on a TNW (i.e., some drainages are conveying runoff that may reach a TNW, some drainages convey water for a short distance that does not reach a TNW, and other drainages remain dry).

Another issue with the proposed rule's approach of assessing the combined effects of similarly situated "other waters" in the region is that the approach is, in effect, performing a cumulative effects analysis on the entire watershed without knowing the action or actions that are to be considered when determining the combined effects. As an example, in determining that the combined effects of similarly situated "other waters" over a broad area in the region significantly affect the chemical, physical, or biological integrity of a TNW (i.e., determining that all the similarly situated "other waters" in the region are jurisdictional), the approach assumes that any impact on the functions of these "other waters" will have more than a speculative or insubstantial effect on a TNW. This simply is not true. A wide range of minor localized effects are associated with a single water or wetland in the region that would have minor or no effects on a downstream TNW. Combining the potential effects of numerous waters over a large region to determine jurisdiction assumes all the waters may be affected by future actions instead of assessing case-by-case actions in the basin and the magnitude of their individual and cumulative effects on a downstream TNW.

It makes sense for the Agencies to evaluate effects on waters and wetlands on a watershed basis and to consider cumulative effects; however, the appropriate time to perform the assessment of these effects is during the permitting process, not when determining the jurisdictional status of "other waters." Otherwise, one has the problem of assuming that all of the waters will be impacted at some point in time, rather than evaluating the reasonably foreseeable future actions as part of the permitting or National Environmental Policy Act process. As part of the permitting process, the Agencies have site-specific information on the waters and wetlands to be affected, the type of action and its potential effects, and knowledge of past, present, and future actions in the watershed to determine cumulative effects in the watershed. The proposed rule puts the "cart before the horse" by performing the effects analysis (combined effects of similarly situated "other waters" and TNWs) to determine jurisdiction before determining the effects of a specific proposed action as part of the permit application process.

Effects and connections differ in their intensity, duration, frequency, magnitude, predictability, location in the watershed, and significance on the chemical, physical, or biological integrity of a TNW. The importance of considering the difference in effects is evident in comments from the

Environmental Protection Agency (EPA) Science Advisory Board (SAB) Panel for the Review of EPA Water Body Connectivity Report which state: "[T]he descriptions in the preamble of the proposed rule of evidence of physical, hydrological, and biological connectivity would be more scientifically rigorous if they focused on the magnitude or impact of the connection instead of the presence/absence (binary) perspective" (EPA SAB Panel 2014).

It is not supportable to assume that if all of the combined similarly situated "other waters" could affect the chemical, physical, or biological integrity of a TNW, then individually, each water comprising the similarly situated waters affects the chemical, physical, or biological integrity of a on (a)(1), (2), or (6) water (TNW). This assumption is not logical and does not consider scale. All does not equal one.

The Agencies also need to consider the unintended consequences of defining "similarly situated" in the region too broadly. If defined too broadly, the determination of the jurisdictional status of an "other water" will potentially take on great regional significance. Numerous concerned parties in a watershed or landscape unit will closely monitor the jurisdictional determinations (JDs) of "other waters" that could result in an entire class of wetlands or waters in their "region" being determined jurisdictional. The Corps will need to provide landowners in "the region" due process notice. In the arid West where water infrastructure can run great distances and ranches are large, what process will be followed to resolve a controversy? Will the outcome be appealable? Is it justified to make such a determination for all similarly situated waters where the only conclusion is that the water "could" affect a TNW? As noted above, this would place a substantial additional burden on many Corps regulatory offices, which are already short staffed. The JD process, which in the past has typically been between a permit applicant and the Corps, will become a watershed-wide regional process with multiple parties entering the jurisdictional debate in an effort to protect their interests. This will not simplify or streamline the JD process and is likely to increase delays, conflicts, confusion, and challenges. This is particularly likely to happen in the arid West due to the variability of waters in the watersheds and the existence of numerous dry drainages. Finally, employing an overly broad definition of "similarly situated" in the region would be inconsistent with the pre-2015 rule as implemented and would undermine the Agencies' attempt to create a more durable definition while imposing a land-use regulation.

WUWC requests that the Agencies continue to follow the *Rapanos* Guidance when determining "similarly situated" for performing the SNA by considering the flow and functions of the tributary together with the functions performed by all the wetlands adjacent to the tributary in evaluating whether a significant nexus is present. "Similarly situated" should apply to these wetlands and the tributary to which they are adjacent and not be expanded to other waters for the reasons discussed above.

Significantly Affect

The SNA is proposed to be used to assess whether the effect that the waters under consideration have on the chemical, physical, or biological integrity of a TNW is more than speculative or insubstantial. The Agencies will consider distance from a WOTUS, distance from a TNW, hydrologic factors, size, density, number of waters that have been determined to be similarly situated, and climatological variables. 86 Fed. Reg. at 69450.

As the proposed rule states, the "significant nexus" standard does not necessarily establish bright lines with respect to determining which waters have sufficient impacts on downstream TNWs. 86 Fed. Reg. at 69399. The proposed rule states that in evaluating a water individually, or in combination with other similarly situated waters, for the presence of a significant nexus to a TNW, interstate water, or the territorial seas, the Agencies consider factors that influence the types and strength of the chemical, physical, or biological connections and associated effects on those downstream waters. 86 Fed. Reg. at 69430. The factors listed in the proposed rule and their descriptions appear to be more focused on the presence or absence of a potential connection and a potential effect than the magnitude of a potential effect. However, the SNA is supposed to determine whether the effect of the functions of the waters being assessed is more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of a TNW. In other words, the SNA is supposed to assess the magnitude of the effect, not merely if a connection and an effect may occur.

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. *See also* "Functions Considered" discussion below.

In many cases, determining a significant nexus will be relatively straightforward. However, as distances from a TNW increase and potential connections to a TNW become more tenuous, it becomes more challenging to reliably determine a significant nexus. This is a challenge not only for the Agencies, but also the regulated public, who may not recognize the potential for a dry arroyo or gulch to be a WOTUS. This challenge becomes acutely evident in the western U.S. where the arid landscape is dominated by dry ephemeral drainages that can often be found great distances from a TNW.

As the proposed rule points out, ephemeral drainages can shape larger downstream river channels by accumulating and gradually or episodically releasing stored materials such as sediment and large woody debris. 86 Fed. Reg. at 69391. While this is certainly true for some ephemeral drainages, or reaches of ephemeral drainages, the issue for determining a significant nexus is a matter of degree. Many ephemeral drainages rarely flow and often those infrequent flows may never reach a TNW. Even if flows should sometimes reach a TNW, the frequency of such an event must be considered in the context of determining the "significantly affect" standard.

For decades, the Agencies' practice in reviewing the jurisdictional status of waters and wetlands has been to consider "normal circumstances" (i.e., what occurs most frequently). For example, the OHWM by its very name is based on "normal circumstances" (i.e., what frequently occurs within a channel to create the physical indicators of flow), not a record flood or low water base flows. In humid regions, the active floodplain is typically inundated during low to moderate (2- to 10-year recurrence) events (Riggs 1985) and is characterized by high-flow channels, generally unvegetated surfaces, and frequently a break in slope at either margin (Lichvar et al. 2006). However, modeling has shown that slightly larger events (5- to 10-year recurrence) may be necessary to engage the active floodplain in arid systems (Lichvar et al. 2006). Wetlands are delineated based on normal circumstances (i.e., not a drought year or wet year). For example, the

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) states "an understanding of normal seasonal and annual variations in rainfall, temperature, and other climatic conditions is essential in interpreting hydrology indicators in the Arid West" (Corps 2008). This longstanding approach of using normal circumstances should also be used when determining a significant nexus. Using an infrequent flow event to determine that a water meets the "significantly affect" standard is similar to relying on an infrequent flood event to determine an OHWM or wetland boundary.

WUWC believes there are ways to address the challenges of determining if an ephemeral drainage and potentially isolated other waters meet the "significantly affect" standard that would provide the Agencies and regulated public greater certainty and consistency in applying the SNA. WUWC's suggestions are discussed below under *Ephemeral and Intermittent Drainages*. WUWC requests that the final rule define "isolated waters" and requests that the Agencies continue to follow the Solid Waste Agency of Northern Cook County (SWANCC) Guidance whereby field staff were directed to seek approval from agency headquarters before asserting jurisdiction over isolated waters that are intrastate and nonnavigable, and to continue the practice since the issuance of the SWANCC Guidance of not asserting jurisdiction over such ''other waters.''

Functions Considered in Determining the "Significantly Affect" Standard

The proposed rule poses the question if it would be useful to add to the definition of "significantly affect" a specific list of functions of upstream waters to assess when making a significant nexus determination. 86 Fed. Reg. at 69431. WUWC requests that the Agencies do so and clarify either in the rule or guidance the applicability of specific functions when determining a significant nexus. For example, the proposed rule states that the lack of hydrologic connections can also contribute to the strength of effects for certain functions such as floodwater attenuation or the retention and transformation of pollutants. *Id*. While this may be true when only evaluating these functions in isolation, the functions need to be considered in the context of performing the SNA. The lack of a hydrologic connection to a TNW of the water undergoing the SNA should lead to a determination that the water is nonjurisdictional due to the lack of a hydraulic connection to a TNW. Without such context, the evaluation of functions of the water being assessed is meaningless for the determination of a significant nexus.

The Agencies' approach (i.e., that the lack of hydrologic connections can also contribute to the strength of effects for certain functions) can have unintended consequences. For example, by logical extension, the creation or enhancement of areas without a hydrologic connection to a TNW that improve floodwater attenuation, or the retention and transformation of pollutant functions would be accepted as compensatory mitigation for adverse impacts on a WOTUS involving the loss of such functions. This has not been standard practice for the Agencies and is unlikely to be considered appropriate compensatory mitigation by the Agencies for adverse impacts on a WOTUS. Determining that the lack of hydrologic connections can also contribute to the strength of effects for certain functions, such as floodwater attenuation or the retention and transformation of pollutants, and thus making a landscape feature without a connection to a TNW jurisdictional, is a potentially slippery slope. The Agencies risk extending their CWA jurisdiction into historically state and local land use regulation.

Tributary

The proposed rule defines "waters of the United States" as including tributaries of TNWs, interstate waters, impoundments, or the territorial seas if the tributary meets either the "relatively permanent" standard or the "significant nexus" standard. The Agencies' longstanding interpretation of tributary for purposes of CWA jurisdiction includes not only rivers and streams, but also lakes and ponds that flow directly or indirectly to downstream TNWs, interstate waters, the territorial seas, or impoundments of jurisdictional waters. 86 Fed. Reg. at 69421-69422.

WUWC requests that the Agencies define "tributary" in the final rule. Under the proposed rule, a tributary can include drainages with less than permanent flow if they meet the "significant nexus" standard (e.g., ephemeral and intermittent drainages). Therefore, it is important to define the physical characteristics that will be used in the field to determine if a drainage feature with less than a relatively permanent flow can potentially be considered a tributary. It is important to sequentially apply these criteria for determining the jurisdictional status of drainages with less than permanent flow. For drainages with less than permanent flow, the longstanding and familiar pre-2015 Rule regulatory regime and practices would first determine if a channel had the physical indicators of flow (OHWM and bed and banks) and if these indicators were continuous before applying the SNA. WUWC requests that the final rule retains the longstanding and familiar pre-2015 Rule regulatory regime and practices by including in the definition of tributary the use of OHWM and bed and banks as physical indicators of flow when determining the jurisdictional status of channels with less than relatively permanent flow. The use of these indicators and their limitations are further discussed below.

Ephemeral and Intermittent Drainages

How the jurisdictional status of ephemeral and intermittent drainages in the arid West is determined is a critically important issue for WUWC. Dry ephemeral and intermittent drainages are very common in the western U.S. and dominate the arid West. As the proposed rule notes, in Arizona, most of the stream channels (96 percent by length) are classified as ephemeral or intermittent. 86 Fed. Reg. at 69391. For the arid West, the question of jurisdiction under the CWA typically does not focus on larger, higher-order drainages. The issue of questionable jurisdiction resides with the commonly occurring smaller lower-order dry ephemeral and intermittent drainages. WUWC requests that "ephemeral stream" and "intermittent stream" be defined in the final rule using the longstanding definitions of the Corps. An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for ephemeral stream flow. An intermittent stream has flowing water during certain times of the year, when groundwater or melting snowpack provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

The Lack of Sufficient Supporting Scientific Studies and Reports on the Unique Nature of Ephemeral and Intermittent Drainages

As discussed above, in connection with the 2015 rule, WUWC offered several key points of technical information which demonstrated that the proposed rules did not rely on the best available information regarding WOTUS criteria in the arid states, particularly related to intermittent and ephemeral drainages. Although the Technical Document has added to the scant literature of the connectivity report regarding the connectivity and functions of southwestern intermittent and ephemeral drainages (e.g., Goodrich et al 2018), the new and previous references do not address the critical issues for defining a WOTUS of how to determine the strength of a connection to a downstream TNW or the magnitude of effect to the TNW. Based in part on the literature, the Technical Document concludes that there is a potential for connections between intermittent and ephemeral drainages and downstream TNWs. WUWC requests that the proposed rule and subsequent guidance provide literature-backed criteria on how to determine the strength of a connection and its effect on the chemical, physical, or biological integrity on a downstream TNW.

The Challenge of Determining Jurisdiction of Intermittent and Ephemeral Drainages

For many ephemeral and intermittent drainages in the western U.S., the physical features of flow (OHWM and bed and banks) typically used to identify a potential WOTUS and the landward limits of jurisdiction can be difficult to discern, are often discontinuous, and can be almost meaningless (e.g., an OHWM a few inches deep and bed and banks along a drainage a few feet wide). The Corps manual on delineating the OHWM in the arid West (Lichvar and McColley 2008) notes that in the arid West region of the U.S., waters are variable and include ephemeral/intermittent and perennial channel forms. The most problematic OHWM delineations are associated with the commonly occurring ephemeral/intermittent channel forms that dominate the arid West landscape. Other than the topographic feature of the drainage, there is frequently little to distinguish an ephemeral drainage from the surrounding landscape in the arid West, particularly erosional features.

The concept of the OHWM determining if a stream is jurisdictional and the lateral limits of that jurisdiction is tied to the OHWM being formed by frequent flow events. This relationship has been established based upon streams found in the more humid regions of the U.S. In the arid West, this relationship is not supported by observations, studies, and the literature. A simple relationship between a morphologic variable and discharge is successful only for streams with definable regular flows or some definable steady state; this is not the case for dryland streams (Graf 1988, p. 104). The OHWM for streams in regions outside of the arid West is associated with a bankfull flow typically considered to have a return interval of 1 to 2 years. In more humid regions of the country, streams will equal or exceed the mean annual flood once every 2.33 years. However, metrics like the mean annual flood and the return interval of bankfull flow have almost no practical or theoretical significance in dryland streams because of the extreme variability of flow in such streams (Graf 1988, p. 103). This variability will likely increase in the future due to climate change. The discontinuous features may also be associated with channels with gradients that flatten or broaden. Bankfull flows are difficult to determine in the field in dryland channels that are frequently incised, very broad or braided, or developed on bedrock. Bankfull flow in dry areas is not even the same within a single drainage basin. Extensive data collection shows that the range of frequency of bankfull flows in dryland channels is from 1 to

32 years, a breadth too great to inspire confidence in the reliability of the measure (Graf 1988, p. 104).

The difficulty in transferring concepts of channel behavior from humid to dryland areas lies in the underlying assumptions of continuous system operation with well-defined feedback mechanisms, assumptions that are not met in the dryland process (Graf 1988, p. 197). Precipitation and runoff inputs to dryland channels are sporadic, so the difference between high and low flows is greater than in humid streams. These wide fluctuations prevent the development of a linkage between a particular flow magnitude and channel geometry related to bankfull conditions (Graf 1988, p. 296). The order of events of varying magnitudes may be more important in explaining the present observed geomorphic conditions than the exact nature of the flood frequency curve or the statistical properties of flood frequencies (Graf 1988, p. 104).

Clearly, the use of an OHWM (a morphologic variable or geomorphic condition) to determine that an ephemeral or intermittent channel in the arid West is a "tributary" and then making the assumption that the ephemeral or intermittent channel has a significant nexus to a TNW and is therefore jurisdictional, is not supported by observation, studies, or the literature. Use of the OHWM and bed and banks as indicators of flow that could reach a TNW and then applying the SNA will result in numerous false positives (i.e., a determination that a drainage is jurisdictional when in fact it does not have more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of a downgradient TNW).

In the arid West, it is common for periodic flows in intermittent and ephemeral drainages to not reach a downstream TNW. Such situations include:

- Closed basins
- Channels that end in alluvial fans
- Channel transmission losses
- Discontinuous channels

The Technical Support Document for the proposed rule (p. 169) states that "66% and 20% of the drainage basins in Nevada and New Mexico, respectively, are closed and drain into playas (dry lakes)." Similar percentages would be expected in other arid western states. Alluvial fans are widespread in the southwestern U.S. where it estimated that about 31 percent of the land surface is covered by alluvial fan deposits (Lichvar and McColley 2008, p. 7). In many situations, the diffuse runoff over alluvial fans is more likely to infiltrate into the alluvial fan resulting in a lost spatial connectivity. Very large flows may be required for runoff to cross the alluvial fan and connect to a downstream water (Goodrich et al. 2018, p. 403). Similarly, intermittent and ephemeral channels can have high rates of transmission losses. In arid areas, channels may not have any flow for several years and flows may not reach a downstream TNW. Dryland channels experience high rates of downstream transmission losses because of the porous nature of typical channel bed materials (Graf 1988). Spatial variability and limited spatial extent of runoff by infiltration into the bed of ephemeral channels (transmission losses) become dominant factors in runoff response (Goodrich et al. 2018, p. 413). This influent stream environment (channel transmission losses) is typical of many southwestern streams, where the volume of transmission water losses in ephemeral channels increases as watershed size increases, resulting in a losing stream environment as opposed to a gaining stream environment encountered in wetter hydroclimatic regimes (Goodrich et al. 2018, p. 409). The discontinuous nature of many intermittent and ephemeral channels in the arid West is discussed above.

Considering these common situations in their totality, there is a substantial percentage of intermittent and ephemeral drainages that do not connect to a downstream TNW, and the proposed rule needs to address these common regional occurrences. WUWC agrees with the conclusion of the Technical Document (p. 172) "that intermittent and ephemeral streams *can* have important connections and impacts on downstream waters, regardless of where they are located geographically (emphasis added)." But this is true for only certain identified situations. The proposed rule, however, appears to state that connections between ephemeral and intermittent drainages and larger downstream TNWs always occur. The proposed rule states "[A]ll tributary streams, including perennial, intermittent, and ephemeral streams, are chemically, physically, and biologically connected to larger downstream waters via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported." 86 Fed. Reg. at 69390. As discussed in our comments this simply is not true. WUWC suggests that the proposed rule rely more on the science-based language of the Technical Document that concludes that there is a potential for such connections. It should also provide criteria on how to determine the strength or significance of a connection and its effect on the chemical, physical, or biological integrity on a downstream TNW.

Solutions for Determining Jurisdiction for Ephemeral and Intermittent Drainages

There are potential solutions that WUWC requests the Agencies consider for addressing the jurisdictional status of ephemeral and intermittent drainages in the western U.S. that would provide greater regulatory certainty, reduce the workload for the Corps regulatory program, and allow the Agencies to focus on actions and drainages with greater potential to affect TNWs:

- State in the final rule that ephemeral and intermittent drainages that lack an OHWM and bed and banks lack indicators of flow with enough frequency to have more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of a downgradient TNW.
- Clearly state in the final rule and subsequent guidance that the absence of an OHWM and bed and banks will be used in the western U.S. to determine the lack of a potential connection to a downstream TNW for reaches of intermittent and ephemeral drainages upgradient of the reach lacking these features.
- Where a significant nexus is found to exist, develop regional general permits that allow specified fill activities in ephemeral and intermittent drainages in the western U.S. with specific conditions to minimize impacts on downgradient TNWs.

Ordinary High Water Mark and Breaks in Jurisdiction

The absence of an OHWM and bed and banks for an ephemeral or intermittent drainage should be used to indicate the lack of a potential connection to a downstream TNW and determine that the drainage is nonjurisdictional. The proposed rule notes (Footnote 31) that the Agencies find that reinstating the longstanding and familiar pre-2015 Rule regulatory regime will provide regulatory certainty in this interim period. WUWC agrees and requests the pre-2015 Rule regulatory regime and practices regarding isolation and breaks in jurisdiction be included in the proposed rule when determining the jurisdictional status of an ephemeral or intermittent drainage.

Many ephemeral and intermittent drainages in the arid West have discontinuous bed and banks and/or OHWMs (discontinuous features). These discontinuous features are the result of infrequent flow events and are indicators that such drainages may not have sufficient or consistent flow to connect to a downstream TNW, or chemically, physically, or biologically affect the integrity of a downgradient TNW. In many situations under the longstanding and familiar pre-2015 Rule regulatory regime and practices, the discontinuous nature of these features is substantial enough to "isolate" and render the drainages nonjurisdictional upgradient of these substantial breaks in jurisdictional features.

The proposed rule should define the characteristics that distinguish nonjurisdictional areas and features (e.g., uplands, gullies, rills, and vegetated swales) from jurisdictional areas and features. This guidance is particularly important in the arid West where the differences between an ephemeral drainage and gullies and rills can be minor. Unlike rivers and perennial streams, and in some instances intermittent drainages, the hydrology associated with dry ephemeral drainages in the arid West does not typically support resources along the drainage that substantially differ from the surrounding arid landscape (e.g., there are no aquatic habitats, wetlands, riparian areas, fish, or aquatic benthic invertebrates).

In many situations under the longstanding and familiar pre-2015 Rule regulatory regime, determinations of nonjurisdiction for ephemeral and intermittent drainages based on isolation and discontinuous features have occurred in the arid West. These nonjurisdictional determinations include:

- Ephemeral and intermittent drainages with substantial breaks in jurisdictional features where the break in jurisdictional features makes it unlikely that flows reach a TNW.[2]
- Ephemeral and intermittent drainages with no breaks in jurisdictional features that contain no surface flow during most years due to dry conditions or human surface and shallow ground water diversions that reduce streamflow to zero.
- Erosional gullies that do not have jurisdictional features except where they transport irrigation runoff.
- Ephemeral and intermittent drainages where the channel ends in a fan or sheet flows over the landscape and makes it unlikely that flows reach a TNW.

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[2] *Cf. Cnty. of Maui v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 1476 (2020) (a CWA permit is required when a point source pollutant discharged to groundwater has the same functional equivalency as a direct discharge to a navigable water).

- Ephemeral and intermittent drainages where the channel loses definition due to agricultural or other activities that make it unlikely that flows reach a TNW.
- Ephemeral and intermittent drainages where the channel loses surface or subsurface flow that make it unlikely that flows reach a TNW.
- Ephemeral and intermittent drainages where the channel ends in a closed basin and it is unlikely that flows reach a TNW.

Regional General Permits

The proposed rule notes that the Agencies intend to continue to develop general permits and simplified procedures to ensure that projects, particularly those that offer environmental or public benefits, can proceed with the necessary environmental safeguards while minimizing permitting delays. 86 Fed. Reg. at 69416. WUWC believes that proposed projects involving the discharge of fill material into dry ephemeral and intermittent drainages in the western U.S. provide an excellent opportunity for the Agencies to continue to develop regional general permits (RGPs) and simplified permitting procedures to ensure that specified types of activities will have no or minimal adverse effects on downgradient TNWs, no or minor loss of functions, and no loss of aquatic habitat. WUWC believes a RGP program is needed, in addition to the measures for OHWM and breaks in jurisdiction discussed above, because of the likelihood of false positives regarding jurisdiction determined using the OHWM, bed and banks, and SNA previously discussed; the numerous dry intermittent and ephemeral drainages in the western U.S.; and the ability to control adverse effects in these drainages with proper RGP conditions.

Such a program would allow a project proponent to assume an ephemeral or intermittent drainage is jurisdictional (preliminary JD) for the purposes of their proposed activity (i.e., without bias for future JDs) and proceed with streamlined permitting for specified activities provided the RGP conditions were met. The benefit of the RGP program is the avoidance of the costly and time-consuming individual permit process. RGP conditions could include:

- The drainage occurs in the region covered by the RGP.
- The drainage meets the definition of ephemeral or intermittent.
- The discharge of fill material will not occur in wetlands or aquatic habitat.
- All work within the drainage will occur when the channel is dry and there is unlikely to be a precipitation event that could result in flow within the channel.
- Channel connectivity will be maintained post-fill by culverting or reconstructing a channel around the fill. Culverts and reconstructed channels will have the capacity to convey flows similar to the channel reaches immediately upgradient and downgradient of the fill. Reconstructed channel length will equal or exceed the channel length filled.

Such a RGP program would allow project proponents to fit their projects into a RGP that would minimize any potential adverse effects on downgradient TNWs, streamline permitting, reduce the need for approved JDs, and reduce the workload for the Agencies. Conditions such as those suggested above, and others, would substantially minimize the potential for adverse impacts and preserve the potential functions of arid West ephemeral and intermittent drainages discussed in the proposed rule. 86 Fed. Reg. at 69391.

Ditches

The proposed rule's treatment of ditches is unclear, especially with reference to ditches found in the arid West. It is stated that "consistent with previous practice, ditches constructed wholly in uplands and draining only uplands with ephemeral flow would generally not be considered 'waters of the United States.'" The preamble then continues, "[a]lso consistent with previous practice, the Agencies would typically assess a ditch's jurisdictional status based on whether it could be considered a tributary (and …would not assess whether the ditch was jurisdictional under the "other waters" provision)." The agency then seeks comment upon what should constitute a relevant reach for a ditch.

Many western municipalities and water districts use ditches as a part of their water delivery systems.[3] Such ditches often have flows on a perennial, or at least seasonal, basis. In other cases, municipal water providers may cross ditches in the construction of their water collection and delivery infrastructure, triggering a potential Section 404 permitting situation. Finally, some western utilities may use ditches in conjunction with their stormwater collection and conveyance systems. Therefore, whether the diches are themselves considered WOTUS can significantly impact municipal operations.

Most western ditches not only go to the river or stream (TNW) for their points of diversion, but often return water back to a perennial or intermittent stream. Such return flows may, in fact, be legally required under their state water right decrees. In addition, though ditches "constructed in uplands" may be exempt, there is no specific guidance provided regarding the interpretation of "in" in this context. Will the mere interface (i.e., the necessary diversion structure) between the ditch and a jurisdictional water result in a determination that the ditch is a WOTUS? Would the downstream discharge to a WOTUS result in a similar conclusion? To categorize such ditches as WOTUS based on these facts would significantly interfere with their construction, maintenance, and operation without any significant water quality benefit.

There are a number of ways to address the above concerns while continuing to meet the water quality objectives of the CWA. For example, an exemption could be added indicating that "the construction, repair, or replacement, in and across an otherwise jurisdictional water, of ditch infrastructure necessary for the diversion and placement to beneficial use of water diverted therefrom shall not be a basis upon which to identify the ditch or the waters therein as waters of the United States."[4]

In the alternative, the agency rule or guidance could focus on the functions (i.e., the nature and character of the ditch) as compared to its location. Waters found in ditches that have been

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[3] The inappropriate regulation of ditches as a consequence of WOTUS determinations may run afoul of the administration of state water rights contrary to the language of Sections 101(g) and 510(2) of the CWA. [add member facts on # of miles of ditches used?]
[4] Similar language could be developed indicating that the mere crossing of a TNW by a ditch would not "federalize" the ditch.

designed as man-made conveyances to meet the water supply needs of cities, towns, and agriculture have been removed from the natural system and, therefore, are not to be considered WOTUS any more than are the waters found in municipal distribution systems, artificial lakes or ponds, or certain stormwater control features. Thus, ditches could be categorically exempt "so long as the primary purpose thereof is to capture and control waters and place them to beneficial use under state law, including municipal or agricultural use, or to control and convey stormwater run-off." An approach based on the functions or the purpose of the ditch (i.e., man-made conveyances to meet the water supply needs of cities, towns, and agriculture) would be consistent with the proposed rule by differentiating the functions and purposes of these man-made conveyances from natural tributaries.

The proposal also indicates that the agency intends to reinstate its prior position that a ditch "can be both a water of the United States and a point source." Such an interpretation is inconsistent with the plain language of the statute. *Toxics Action Ctr. Inc. v. Casella Waste Sys. Inc.*, 2021 WL 3549938 at *7-10 (D.N.H. Aug. 11, 2021) (finding the claim that a ditch simultaneously can be a "water of the United States" and a point source to be inconsistent with the statutory text). It is imperative that the Agencies reconsider and clarify their position on this topic (i.e., that a ditch need not be considered a point source). A failure to do so will likely lead to protracted litigation as it could significantly impair the ability of western municipalities and the agricultural community to conduct essential water transfer activities.

Instead, the Agencies should acknowledge that a ditch may not meet the definition of a WOTUS or the definition of a discharge of a pollutant. As noted above, hundreds, if not thousands, of western ditches remove water from a TNW under decreed water rights and return a portion of that water diversion to a downstream TNW. The water is discharged to the downstream TNW for a number of reasons, including where: (1) the TNW acts as a part of the train of conveyance; (2) only a portion of the original diversion can be fully consumed as a matter of law; (3) less than all of the water is found to be necessary for beneficial use at a particular point in time; and (4) the intervening infrastructure, e.g., laterals, are incapable of fully depleting all that is diverted. Further, the chemical composition of the water in the ditch may have changed over the distance of the conveyance due to the addition of stormwater runoff, irrigation returns, discharges to the ditch, ambient temperature changes, etc. However, to require a National Pollutant Discharge Elimination System (NPDES) permit at the point of discharge back to the TNW would place a technically/economically impractical burden on ditch owners that they historically have not had to bear. Water/wastewater treatment plants cannot be constructed at the terminus of working ditches.[5]

In addition, though the Section 502(14) definition of "point source" includes a reference to "ditch," that does not mean that all ditches must be treated as regulated point sources for purposes of Section 402 of the CWA just as all pipes and other water conveyance infrastructure is not regulated as such. There must still exist an addition of pollutants from the structure of concern to jurisdictional waters and the irrigation return flow exception cannot apply. *See, e.g.*, CWA sections 402(l) and 502 (12). This determination will be made by the delegated permitting

[5] As noted above, to find otherwise would interfere with the exercise of lawfully decreed state water rights.

authority.[6] Similar to groundwater, Congress did not intend to regulate water supply conveyance infrastructure. To the extent these ditches could be used as conduits for pollutants from other sources to a TNW, *County of Maui*, *supra*, made clear that these discharges may be regulated as if being discharged directly into a TNW. Therefore, this issue can be addressed by requiring that any point source discharging to a ditch (as compared to discharges from the ditch), where pollutants in the discharge water would reach a TNW, would require a NPDES permit. Conditions contained therein would be designed to protect the quality of the TNW. Such an approach would achieve the water quality objectives of the CWA, while allowing ditch facilities to operate as they have historically.

Impoundments

WUWC supports the identification of impoundments as a separate category of jurisdictional waters. However, WUWC finds that absent additional clarification, the statement that "impounding waters can create TNWs even if the waters that are impounded are not themselves TNWs" is problematic. In addition, the agency observation that "impounding a water can create a relatively permanent water even if the water that is being impounded is a non-relatively permanent water" is similarly of concern. Such statements may lead to an overly broad interpretation of what constitutes a jurisdictional water.

Despite agency reliance on "relatively permanent" and "significant nexus" standards, there must continue to be a demonstration that the waterbody in question is susceptible to use in interstate commerce, i.e., it is shown to be navigable. *See* 33 C.F.R. § 329.5. The concept of navigability arising under the Commerce Clause does not apply to man-made structures that lack any hydrologic connection to a TNW and are not constructed in a TNW, nor does the CWA provide a statutory basis for reaching that conclusion. Therefore, the Agencies should clarify that "off-channel" reservoirs constructed in uplands with no surface hydrologic connection to a TNW (e.g., where the water is pumped in and out) are not WOTUS.

"Artificial" waterbodies of the type referenced above are an integral part of water supply systems, will be increasingly needed due to climate change, and must be able to operate in a manner required to meet their intended purposes free of CWA regulatory constraints. For example, there may, at times, be a need to totally drain, chemically treat, or modify the capacity of these waterbodies. The conduct of such activities should lie in the sole discretion of the facility operator.

Further, the Agencies should clarify that an impoundment can sever jurisdiction for the perennial or intermittent stream on which it was constructed if surface water is not conveyed therefrom on a continuous or intermittent basis to a TNW or territorial sea. Similarly, the Agencies need to acknowledge that if the upstream extent of a tributary is defined by an impoundment that ceases

[6] It is similarly inappropriate to require reliance upon the exemption provided under the Water Transfers Rule, 40 C.F.R. § 122.3(i), as this will also be a constant source of conflict regarding its applicability in given factual situations.

to contribute perennial or intermittent flow to the drainage downgradient of the impoundment, the drainage above the impoundment is not jurisdictional.

Interstate Waters and Wetlands

WUWC supports the removal of interstate waters as a separate category of jurisdictional waters. There are numerous ephemeral streams, ditches, and isolated waterbodies in the western U.S. that may cross state boundaries, but that would fail to qualify as WOTUS under any other provision of the proposed rule. The proposal states that jurisdictional determinations should be based on sound science; however, interstate waters would be automatically included. The jurisdictional status of waters that cross state lines should be based on a uniform set of fact- and law-based criteria as compared to placing reliance merely upon a geographic/political boundary determination. This is also true for waters that flow across, or from a part of, boundaries of federally recognized tribes. Eliminating this category of per se jurisdictional waters places the proposal on a sounder factual and legal footing and assists in avoiding needless permitting and litigation disputes.

Additional Exclusions

WUWC believes that certain other man-made features, some of which advance the protection of water quality, should be excluded from the WOTUS definition.[7] These include the following:

- Stormwater Features: Municipalities, oftentimes in conjunction with MS4 permit compliance activities, construct and operate stormwater control facilities. The proposal indicates that such structures are excluded only if "constructed in uplands." However, at least portions of many such facilities are, of necessity, built in low-lying drainage areas as compared to uplands. This problem could potentially be addressed by finding that such drainage areas are ephemeral features that flow only in response to precipitation events and serve to protect or improve, as compared to degrade, water quality. In that sense, they do not "significantly affect" water quality and do not meet the "significant nexus" test.

  An alternative is to look at the functions of the stormwater feature in question as compared to its character or nature. In other words, if the stormwater control feature was used, in fact, for water quality protection or improvement purposes, then the conveyance would not be treated as a WOTUS even if a part of it is not found to have been placed in an upland. Exemption language along the lines of the following could be adopted: "Stormwater control features or facilities excavated or constructed for purposes of collecting, conveying, treating, infiltrating, or storing stormwater runoff in a manner consistent with state- or EPA-established MS4 permit requirements are not waters of the United States."

- Post-Fire Remediation Activities: The West is being ravaged by wildfires, many of which are in municipal water supply watersheds. Post-fire remediation activities must be undertaken immediately to protect downstream water quality. However, if the impacted

[7] At the very least, they should be the subject of an NWP.

drainages are considered WOTUS, significant time delays and additional unnecessary costs may be incurred as a consequence of completing the permit approval process. One way that this concern could be addressed is for the entire remediation area and associated intermittent or ephemeral waters to be considered exempted waste treatment systems under 33 C.F.R. 328.3(8). At the very least, the preamble or accompanying guidance could endorse agency adoption of either a post-fire remediation nationwide permit (NWP) (should other NWPs not apply) or a land agency review process that expedites any necessary CWA approvals.

- Water Reuse and Recycling Features: WUWC members are located in water-short areas. They currently, or in the near future, may rely upon water recycling and reuse facilities as a means of wisely using a scare resource to meet ever-growing demands. Such facilities may include collection and settling ponds, recharge ponds, and other structures that are a part of the utilities' water conveyance and treatment processes, but that are not currently clearly excluded from treatment as WOTUS under the proposal. WUWC supports not only clarification under the proposed rule that such features could be excluded as part of "waste treatment systems," but believes that they could be more directly addressed with specific exclusionary language such as: "Water reuse and recycling structures, including recharge, conveyance, storage, and treatment facilities constructed for the purpose of supporting the recycling and reuse of municipal or industrial water supplies shall not be considered waters of the United States."

- Water Supply and Delivery Infrastructure:

  WUWC requests that the Agencies provide a separate, clear exclusion for water supply and delivery facilities and infrastructure. Adding an express exclusion for water supply and delivery facilities and infrastructure would further the Agencies' goal of providing greater clarity over which waters are and are not regulated under the CWA, would simplify the jurisdictional determination process, and would be consistent with the purpose of the CWA and the Agencies' interpretation of the CWA and Supreme Court precedent. *See* 86 Fed. Reg. at 69424 (the longstanding exclusions for prior converted cropland and waste treatment systems from the WOTUS definition "provide important clarity"); *see also* 85 Fed. Reg. 22250, 22317-18 (Apr. 21, 2020); *see, e.g., Rapanos v. United States*, 547 U.S. 715, 736 n.7 (2006) ("highly artificial, manufactured, enclosed conveyance systems— such as 'sewage treatment plants,' . . . and the 'mains, pipes, hydrants, machinery, buildings, and other appurtenances and incidents' of the city of Knoxville's 'system of waterworks,' *Knoxville Water Co. v. Knoxville*, 200 U.S. 22, 27, 26 S. Ct. 224, 50 L. Ed. 353, 3 Ohio L. Rep. 572 *(*1906)—likely do not qualify as 'waters of the United States,' despite the fact that they may contain continuous flows of water") (some citations omitted.).

  Public water supply and delivery facilities and infrastructure could be excluded from regulation as WOTUS through the utilization of language similar to the exclusion provided for waste treatment systems. *See* 85 Red. Reg. at 22324—recognizing the importance of water reuse and recycling "particularly in the arid West where water supplies can be limited and droughts can exacerbate supply issues." Public water systems typically divert water from a WOTUS into a water system that conveys, stores, treats and delivers water to end users. The water has significant economic and social value, and the costs to treat it to drinkable standards are high. Water agencies are therefore extremely protective of the quality of the water in their systems and expend a great amount of time, money, and effort to ensure that both the supply within the system and the associated source waters are fully protected. Excluding these systems from regulation as WOTUS will not result in the degradation of water quality. On the other hand, requiring that water providers meet all water quality standards and associated requirements for water found in man-made storage and conveyance systems will unduly increase the time and cost of permitting and exacerbate water supply challenges being faced in a climate change driven environment.

WUWC stands ready to work cooperatively with the Agencies on the exact language for such an exemption.[8]

Climate Change

While the preamble to the proposed rule discusses climate change as a factor in WOTUS determinations, including some of its potential impacts on water quality, it fails to address, in any significant detail, exactly how a changing climate will specifically impact on-the-ground WOTUS determinations. For example, a drying climate in the arid West will decrease the frequency of flows in many ephemeral drainages that are already typically dry, making it increasingly less likely that flows will reach a TNW in the future with any regularity.

It is true that climate change has already affected flow regimes, especially in the arid West. This includes the existence of deeper and more frequent droughts and more intense, pollutant-generating storm events. Climate change has warmed waterbodies beyond historical levels and added to coastal flooding. However, nothing in the proposal appears designed to realistically confront these and similar climate-related water quality challenges. In fact, the proposal may very well, at least indirectly, exasperate anticipated permit compliance and infrastructure construction and maintenance issues associated with activities impacting WOTUS.

As noted in the WUWC introductory comments, the need for new, expanded, and modified water and wastewater infrastructure is now, and will continue to be, greater than ever before, especially in arid environments. This will necessitate the construction of extensive water diversion, storage, delivery, and treatment systems, including pipelines, recycle and reuse facilities, treatment plants, and stormwater control structures. To the extent these facilities are constructed in normally dry landscapes (e.g., ephemeral drainages that will now potentially be considered WOTUS), the time and cost of designing, constructing, and operating them could increase

[8] The state of Colorado, which has a very broad definition of "state waters" that extends its reach beyond WOTUS, has nevertheless recognized this issue, and has statutorily excluded "waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all waters withdrawn for use until use and treatment have been completed." C.R.S. 25-8-103(19).

exponentially. This is especially true given the "regional" component of any significant nexus analysis (*see* comments on the Significant Nexus analysis).

A determination that most western ephemeral streams are jurisdictional will also lead to regulatory compliance dilemmas in a "climate change" world. To date, the Agencies have failed to identify any credible approach to alleviating these concerns. By way of example:

- If waterbody temperatures increase over time, water quality standards established to protect historic designated uses, including aquatic life, will be exceeded with little opportunity to alleviate the problem technically or economically.
- Though agency backsliding or downgrading (antidegradation) requirements can ostensibly be addressed through the employment of use attainability analyses (UAAs), in practice UAAs are extremely costly and time consuming to implement, and their results are often rejected by the Agencies. Existing rules provide that designated uses are based on "past" uses or potential uses even if the use is currently not being attained. There exists a rebuttable presumption that the use can be attained. However, as also noted above, climate change will result in a "new normal." Current agency policy, and this WOTUS proposal, do not adequately take this situation into account.
- Extreme storm events associated with climate change, especially in otherwise arid environments, scour naturally silt-laden stream environments, leaving them devoid of most, if not all, of the aquatic life that once existed. It can take decades, if not longer, for any sustainable aquatic system to reestablish. However, for waters considered WOTUS, the past uses and associated criteria will continue to apply.
- In many instances, absent upstream man-induced discharges, arid area streams would flow only in response to precipitation events. These streams are, in fact, effluent-dependent waterbodies. Yet these regulated discharges remain subject to the full panoply of water quality requirements applicable to a natural system. Climate change will only add to the number of such systems and the current WOTUS proposal and agency guidance afford little or no relief.
- Wildfires are currently a common occurrence in the "hotter and drier" West, leaving landscapes scared and subject to pollutant-laden flash flows and debris relocation. It is essential to immediately undertake post-fire mitigation in such watersheds, including the installation of flow and debris barriers and sediment traps in channels where storm flows will collect, even if they are normally dry, to protect downstream reservoirs and water supplies. WOTUS determinations and accompanying regulatory requirements may serve to slow the process and increase the costs associated with this necessary work.
- The agency asserts that even in such a hotter and drier environment, ephemeral streams are "increasingly critical to protecting and maintaining downstream integrity" and thus they should oftentimes be considered WOTUS. This blanket conclusion is poorly explained and difficult to understand. It is not supported by any identified data.[9]

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[9] For example, the agency notes that numerous ephemeral streams in AZ have been excluded from jurisdiction under NWPR but offers no data indicating that this has resulted in adverse water quality impacts.

Normally, dry ephemeral stream beds are not a source of water for beneficial use and there is oftentimes no sustainable ecological condition in place that warrants their protection. Further, any construction-related disturbance of the channel that could potentially result in a degradation of water quality in downstream TNWs would occur during a "no flow period," and any associated piping would be placed "underground" to protect the infrastructure from future harm. Thus, the feature, let alone any flow, would be essentially undisturbed.[10] At the very least, in the case of such arid area ephemeral streams, the burden of proof associated with a case-by-case determination should fall on the agencies. It should be their burden to establish the existence of any significant nexus. *See* "Ephemeral Drainages" discussion above.

- Finally, as alluded to above, it is essential that the Agencies address the impact of climate change not only in the context of its impact on WOTUS determinations, but throughout the regulatory regime. This includes the adoption of designated uses and accompanying water quality criteria. Guidance and support must be provided to the states in their identification and implementation of refined designated uses, site-specific standards, temporary modifications, UAAs, and other creative mechanisms designed to cope with a changing environment in the context of what has historically been a fairly rigid regulatory regime.

It is imperative that as the Agencies finalize the WOTUS rule, they take into account, and adequately address, the above issues incorporating, as appropriate, the suggestions made elsewhere in these comments.

Lack of Scientific and Technical Support for Proposed Extension of WOTUS Definition to All Intermittent and Ephemeral Streams

The proposed rule states "[A]ll tributary streams, including perennial, intermittent, and ephemeral streams, are chemically, physically, and biologically connected to larger downstream waters via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported." 86 Fed. Reg. at 69390. This implies that all ephemeral and intermittent drainages are a WOTUS. As discussed in our comments, this simply is not true**.** The proposed rule, supporting Technical Document, and the previous Connectivity Report do not present the scientific and technical information needed to conclude that all ephemeral and intermittent drainages are WOTUS. There is scant information presented for these commonly occurring features in the arid West and the few references regarding ephemeral and intermittent drainages in the arid West do not provide the needed scientific and technical support and framework for determining the strength or significance of a connection of an ephemeral or intermittent drainage to a TNW and its effect on the chemical, physical, or biological integrity on a downstream TNW.

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[10] To the extent a minor area would be "filled" for some purpose, there is no reason to believe that this would have any negative effect on downstream TNWs, and it could very well alleviate future flash flow conditions of concern.

Conclusion

WUWC appreciates the opportunity to comment on the most recent WOTUS proposal. The decision regarding how to define “Waters of the United States” will have a significant impact on the activities of water and wastewater utilities throughout the country, but especially on those located in the arid West where ephemeral and intermittent drainages are oftentimes the dominant hydrological features, and where the need to construct and operate new delivery and treatment facilities in the face of a changing climate regime will be the greatest.

WUWC hopes that the Agencies are open to practical regional approaches to protecting our scarce and precious water resources while allowing for the timely and cost-effective construction and operation of necessary infrastructure. While the Agencies’ proposal indicates that this is only the first step in the WOTUS rulemaking process, WUWC believes that the resultant rule will likely be the governing regulation for years to come. WUWC’s comments suggest a viable path forward, and we stand ready to meet with agency staff at any time to further discuss this important topic

Thank you for the opportunity to provide these comments. If you have any questions regarding these comments, please contact me at 702-258-7166 or greg.walch@lvvwd.com, or the WUWC national counsel, Don Baur at 202-654-6234 or dbaur@perkinscoie.com.

Very truly yours,

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End Notes

For the purposes of these comments, the arid West is defined as the arid and semiarid portions of the western United States that extend from south-central Texas west to southeastern California and north along the east side of the Sierra Nevada and Cascade Ranges to the Canadian Border in eastern Washington. The eastern boundary of this region extends from central North Dakota south through central South Dakota, Nebraska, western Kansas, and Oklahoma to south-central Texas. The arid and semiarid areas of this region, which incorporates portions of 17 western states, is characterized generally by annual precipitation of less than 10 and 20 inches, respectively (Arid West Water Quality Research Project http://cdm16658.contentdm.oclc.org/cdm/ref/collection/p267501ccp2/id/1699).

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