April 15, 2019

Michael McDavit
Oceans, Wetlands, and Communities Division Office of Water (4504-T)
U.S. Environmental Protection Agency
EPA Docket Center, Office of Water Docket
Mail Code 28221T
1200 Pennsylvania Avenue NW
Washington, DC 20460
OW-Docket@epa.gov
CWAwotus@epa.gov

Jennifer A. Moyer
Regulatory Community of Practice (CECW–CO–R)
U.S. Army Corps of Engineers
441 G Street, NW Washington, DC 20314
USACE_CWA_Rule@usace.army.mil

Re: Revised Definition of "Waters of the United States," Docket ID No. EPA-HQ-OW-2018-0149

The State of Colorado submits these comments on the proposed Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154 (Feb. 14, 2019) (the "Proposed Rule"). Colorado appreciates the opportunity provided by the U.S. Environmental Protection Agency ("EPA") and the U.S. Army Corps of Engineers ("Corps") (collectively, "Federal Agencies") to share feedback on this proposal.

I. INTRODUCTION AND BACKGROUND

Colorado places the highest priority on protection of the State's land, air, and water, and relies upon a combination of federal and state regulations to ensure that protection. The headwaters of Colorado provide a water supply to nineteen states and Mexico—providing millions of people with water for drinking, agriculture, industries, and recreation—and are critical to the survival of numerous species of concern.

As with many Western states, the large majority of Colorado's stream miles are classified by the United States Geological Survey ("USGS") as either intermittent or ephemeral.[1] The scope of federal jurisdiction over those intermittent and ephemeral streams is currently evaluated using the *Revised Guidance on Clean Water Act Jurisdiction Following the Supreme Court Decision in Rapanos v. U.S. and Carabell v. United States* ("2008 guidance") issued by the George W. Bush administration. If adopted, the Proposed Rule would shrink federal jurisdiction far below that of the 2008 guidance—to a smaller number of Colorado waters than any other administration since the passage of the Clean Water Act ("CWA") in 1972—due to the new definitions of intermittent and ephemeral streams and adjacent wetlands. Regarding intermittent streams, many, if not all, are currently within federal jurisdiction under the 2008 guidance. While the Proposed Rule's vague definition of these waters makes it difficult to ascertain the extent of the loss of federal protections, *infra* Section V.C., at the least we believe that the current language regarding ephemeral streams "breaking jurisdiction" will exclude a large portion of these waters from federal jurisdiction. *Infra*, Section V.D. Regarding ephemeral waters, many are not currently jurisdictional under the 2008 guidance but the Proposed Rule would categorically exclude all of them from federal jurisdiction, regardless of their connection to downstream waters. The Proposed Rule would also remove large numbers of Colorado's wetlands from current federal jurisdiction under the 2008 guidance.[2]

In brief, these comments will explain why Colorado does not support any rollback of federal jurisdiction under the 2008 guidance.[3] Colorado objects to the Proposed Rule because it would remove from federal jurisdiction many Colorado waters that are currently within federal jurisdiction under the 2008 guidance. These waters are highly important to the quality of Colorado's water. They should continue to be protected under the CWA.

A. Colorado's Importance as a Headwaters State

Given its status as a headwaters state, Colorado brings an important perspective to the debate over how to define waters of the United States ("WOTUS"). Colorado has within its boundaries the headwaters of four major multistate river systems: the Platte, the Arkansas,

---

[1] The USGS National Hydrography Dataset ("NHD") estimates that 44% of Colorado's streams are intermittent and 24% are ephemeral, meaning that at least 68% of Colorado's waters are temporary in nature. Some studies suggest the USGS underestimates stream channel length because they are based on 1:100,000 scale topographical maps and do not include stream segments less than one mile in length. For instance, a study by Heine et al. in 2006 found that even the higher resolution flowlines used by the USGS at a 1:24k (1 inch on the map equals 2000ft) scale, stream channel lengths are underestimated by 64.6%. *See* Heine, R.A., C.L. Lant, and R.R. Sengupta. 2004. *Development and comparison of approaches for automated mapping of stream channel networks*. Annals of the Association of American Geographers 94(3):477-490; Levick, L., J. Fonseca, D. Goodrich, M. Hernandez, D. Semmens, J. Stromberg, R. Leidy, M. Scianni, D. P. Guertin, M. Tluczek, and W. Kepner. 2008. *The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest*. U.S. Environmental Protection Agency and USDA/ARS Southwest Watershed Research Center, EPA/600/R-08/134, ARS/233046. Moreover, as described below in Section V.C., the difference between "ephemeral" and "intermittent" waters is rarely a bright line in Colorado or other Western States.

[2] Roger Meyer and Andrew Robertson, *Clean Water Rule Spatial Analysis A GIS-based scenario model for comparative analysis of the potential spatial extent of jurisdictional and non-jurisdictional wetlands* (GeoSpatial Services Saint Mary's University of Minnesota Jan. 2019) (finding 15-54% of the wetlands in the South Platte headwaters would lack federal jurisdiction under the Proposed Rule).

[3] In these comments, the State of Colorado does not take a position on the 2015 WOTUS Rule.

the Rio Grande, and the Colorado. Many of these headwaters comprise a web of wetlands, ephemeral streams, and intermittent streams, which are often connected to traditionally navigable waters. These waters have critical importance to the quality of water used by Colorado and nineteen downstream states for drinking, agriculture, recreation, and the health of both aquatic and terrestrial ecosystems. Restricting the jurisdictional reach of the CWA to exclude headwaters with a hydrologic or other scientifically-established connection to navigable waters is fundamentally incompatible with the CWA's congressional mandate to restore and maintain the chemical, physical, and biological integrity of the nation's waters. *See* 33 U.S.C. § 1251(a).

B. Colorado's Primary Interests in Jurisdiction and Application of the CWA

1. Water Quality

Colorado's rivers supply millions of people in nineteen states and Mexico with water needed for drinking, agriculture, industries, aquatic life and recreation. Water from these Colorado headwaters is also critical to the survival of aquatic life and healthy aquatic ecosystems. In order for Colorado's water to be useful for drinking, agriculture, aquatic life, and other critical purposes, it must be of a high quality. Polluted, low quality water hurts Colorado and hurts the nation. Protecting water quality in headwater states like Colorado has been a national priority since the passage of the CWA in 1972. In the last forty years, Colorado and the federal government have worked together to make enormous progress in protecting water quality throughout Colorado, including in Colorado's headwaters. Protecting these waters should continue to be a national priority under the CWA.

2. Colorado Species

Healthy aquatic and wetland habitats and good water quality are critical for preserving Colorado's native species and for providing outstanding recreational fishing. Recreational fishing contributes $2.4 billion in economic output per year and supports over 17,000 jobs in Colorado. Protecting the physical, chemical, and biological integrity of waters is necessary to preserve these natural resources and recreational opportunities.

3. Water Administration

Colorado supports clear and recognizable limits to the extent of CWA jurisdiction. Congress and the U.S. Supreme Court have placed important limitations on the jurisdictional reach of the CWA and have consistently recognized the primary and exclusive authority of each state to "allocate quantities of water within its jurisdiction," which decisions "shall not be superseded, abrogated, or otherwise impaired by th[e CWA]." *See* CWA § 101(g); 33 U.S.C. § 1251(g). In addition to incorporating the language of CWA §101(g), the rule should further clarify that neither the CWA nor the rule itself can alter or impair any State's rights, duties, or obligations under interstate compacts or decrees of the Supreme Court of the United States equitably apportioning the flows of an interstate stream. Colorado supports the Federal Agencies' stated intentions to give full force and effect to this Congressional declaration, ensuring that states retain authority and primary responsibility over land and water resources to carry out the overall objective of the CWA. Likewise, Colorado emphasizes the importance of CWA § 101(g), particularly to the western states where water resources are often limited and water rights are carefully administered.

4. Agricultural Activities

Nearly half of Colorado's acreage is dedicated to farming, ranching, and other agricultural operations that contribute tens of billions of dollars a year to the state's economy. Because the state's agricultural commodities feed Coloradans and beyond, water quantity and quality are of critical importance to Colorado producers. To make the most responsible and productive decisions, farmers and ranchers must have certainty with respect to whether their lands include jurisdictional waters. Therefore, Colorado supports objective, clear, and recognizable limits to the extent of CWA jurisdiction and a reinforcement and clarification of the scope of existing agricultural exemptions. *Infra*, Section III.B.

II. OVERALL SUMMARY OF COLORADO COMMENTS ON THE PROPOSED RULE

Colorado supports federal CWA jurisdiction grounded in a scientific understanding of how watersheds function. Colorado also supports, in principle, a rule that recognizes the primary authority of the states to regulate land and waters within their boundaries. Congress has recognized, however, that certain issues warrant federal protections, including protections for WOTUS. Accordingly, Colorado supports a definition of WOTUS that is broad enough to accomplish the goals of the CWA—restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters—while also protecting the state's authority to regulate its own waters and a private party's authority to make his/her own land use decisions.

With this in mind, and as a threshold matter, Colorado objects to the Proposed Rule's removal from federal jurisdiction waters that are currently within federal jurisdiction in Colorado under the 2008 guidance, which includes waters with a "significant nexus," as described by Justice Kennedy in *Rapanos v. United States* (hereinafter the "Kennedy Significant Nexus Test"). However, Colorado is aware that the Kennedy Significant Nexus Test needs clarification. Clarification of the Kennedy Significant Nexus Test would reduce, if not eliminate, the subjectivity associated with "significant nexus" determinations post-*Rapanos* and will provide landowners with confidence in managing their land. Thus, Colorado proposes that the Federal Agencies adopt a modified Kennedy Significant Nexus Test, "the Colorado Significant Nexus Test."

The Colorado Significant Nexus Test would include objective, definable parameters supported by science, such as physical or biological markers of such connectivity. Providing these kinds of sideboards to the Kennedy Significant Nexus Test would help provide clear, science-based, and unambiguous jurisdictional determinations that clarify the degree or gradient of connectivity (i.e., at what point the connectivity nexus becomes "significant"). Science should inform the identification of defined parameters that determine where along the connectivity gradient WOTUS end and state waters begin.[4]

Given the foregoing, Colorado opposes the Proposed Rule because:

- It will have significant and unacceptable impacts to the state's ability to protect state waters for beneficial uses, and, in the absence of extraordinary state efforts, will harm Colorado's economy and the quality of Colorado's waters;

[4] For instance, Colorado supports a significant nexus that requires a hydrologic connection based on scientific criteria that can be objectively, consistently, and repeatedly applied throughout the Corps' different districts in the West.

- There are significant flaws with the basis and reasoning for the Proposed Rule, including the failure to adequately incorporate the connectivity and downstream significance of these waters; and

- Additional processes are needed prior to issuance of a final rule, including consultation under the Endangered Species Act ("ESA") and analysis under the National Environmental Policy Act ("NEPA").

However, Colorado does support two aspects of the Proposed Rule: the additional clarity that the rule provides regarding the existing agriculture exemption; and continued consistency with Section 101(g) of the CWA. We request that any WOTUS rule include these provisions.

All in all, Colorado urges the Federal Agencies to adopt a rule that clarifies the definition of WOTUS to improve regulatory certainty and in doing so, does the following:

- Applies the U.S. Supreme Court's CWA jurisprudence, including *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985), *Solid Waste Agency of Northern Cook County v. U.S Army Corps of Engineers*, 531 U.S. 159 (2001), and Justice Kennedy's concurrence in *Rapanos v. United States*, 547 U.S. 715 (2006).

- Advances (and does not undermine) the objectives of the CWA: "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

- Retains consistency and certainty with longstanding federal CWA practice, particularly the protection of water quality in Colorado;

- Relies on science, not arbitrary categories;

- Is flexible enough to acknowledge the biological and hydrological conditions of western streams and wetlands;

- Considers the cumulative impacts of tributaries on downstream navigable waters;

- Reinforces and clarifies the existing agricultural exemptions;

- Continues the current WOTUS rules' consistency with Section 101(g) of the CWA and recognition of states' authority to manage water quantity; and

- Adopts the Colorado Significant Nexus Test in order to provide additional clarity regarding the application of the Kennedy Significant Nexus Test.

III. ASPECTS OF THE PROPOSED RULE THAT COLORADO SUPPORTS

Colorado supports two provisions of the Proposed Rule: its recognition of the importance of upholding state sovereignty to administer and allocate water and the increased clarity it offers regarding the agricultural exemption already established in the CWA.

A. Continued Recognition of the Importance of Upholding State Sovereignty to Administer and Allocate Water

Colorado supports clear and recognizable limits of the extent of CWA jurisdiction, as described above. Congress and the U.S. Supreme Court have placed important limitations on the jurisdictional reach of the CWA and have consistently recognized that the primary and exclusive authority of each state to "allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this Act." *See* §101(g) of the CWA. In addition to incorporating the language of Section 101(g) of the CWA, any rule should further clarify that neither the CWA nor the rule itself can alter or impair any state's rights, duties, or obligations under interstate compacts or decrees of the Supreme Court of the United States equitably apportioning the flows of an interstate stream.

Colorado supports the Federal Agencies' stated intentions to give full force and effect to the congressional purposes of Section 101(g), ensuring that states retain authority and primary responsibly over land and water resources to carry out the overall objective of the CWA. Likewise, Colorado emphasizes the importance of Section 101(g), particularly to western states where water resources are often limited and water rights are carefully administered.

B. Support for Agricultural Exemptions and Increased Clarity Surrounding Agricultural Activities

Agriculture is one of the largest economic sectors in Colorado. This industry feeds the people of Colorado and beyond, while conserving environmental resources. Because water quantity and quality are of the utmost importance to agricultural operations, producers need a regulatory definition that provides a clear point at which WOTUS end and land begins. The burdens of CWA permitting and the significance of penalties for violating the Act make it critically important that the regulated community knows what is jurisdictional and what is not.

To that end, Colorado supports the continued exclusion of prior converted cropland from the definition of WOTUS as well as the definition of that term to clarify that cropland would have to be abandoned and revert to wetland status in order for the exclusion to no longer apply. Abandonment is clarified to mean land that has not been used for, or in support of, agricultural purposes at least once in the last five years. Agricultural purposes are described in the preamble to include land use that makes the production of an agricultural product possible, including, but not limited to, grazing and haying. The Proposed Rule would also clarify that cropland that is left idle or fallow for conservation or agricultural purposes for any period of time remains in agricultural use, and, therefore, maintains the prior converted cropland exclusion. These proposed clarifications should provide some degree of certainty to landowners that they will not lose exclusion status when implementing enhanced land stewardship practices.

In addition to prior converted cropland, the Proposed Rule would exempt from regulation groundwater in some situations and areas of depression where irrigation water collects. Colorado supports these exemptions; these excluded categories are critical in order for landowners to distinguish the difference between state and federal wetlands and whether or not the landowner requires a permit for activities on his/her land. Moreover, with a clear understanding of what is and is not jurisdictional under the CWA, producers can implement stewardship practices without the delay involved in the permitting process or the fear of legal action.

The CWA at 33 U.S.C. § 1344(f) provides exemptions from permitting for normal farming, silviculture, and ranching activities (*e.g.*, plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices); construction or maintenance of farm or stock ponds or irrigation ditches, or maintenance of drainage ditches; and construction or maintenance of farm roads or forest roads, provided, however, that any discharge of dredged or fill material into navigable waters that brings an area into a use to which it was not previously subject and where the flow or circulation of navigable waters may be impaired requires a permit. By incorporating this exemption scheme into the 1977 amendments to the CWA, Congress made a deliberate policy choice to exempt the ordinary activities of farmers and ranchers from certain permitting requirements of the CWA. Colorado appreciates that the Proposed Rule carries forward and continues to implement this policy choice.

To enshrine this policy choice more clearly in regulation, Colorado suggests that the WOTUS definition fully incorporate the non-prohibited discharges of dredged or fill material set forth at 33 U.S.C. § 1344(f) in order to provide additional clarity and certainty for the agricultural sector. To that end, Colorado respectfully requests that the Proposed Rule include additional revisions to the exemptions at 33 C.F.R. § 323.4 to provide further clarification by better defining "upland soil and water conservation practices" in Section 323.4(a)(1)(iii). Specifically, most normal farming, silviculture, and ranching activities, including upland soil and water conservation practices (*e.g.*, erosion control practices), do not require federal permits under Section 404 of the CWA. However, the phrase "upland soil and water conservation practices" is not specifically defined in regulation and, thus, the application of the exemption may be unclear in some circumstances. Therefore, Colorado proposes for the consideration of the Federal Agencies the inclusion of a definition for "upland soil and water conservation practices" at 33 C.F.R. § 323.4(a)(1)(iii) as follows:

> Upland soil and water conservation practices means any discharge of dredged or fill material to waters of the United States incidental to soil and water conservation practices for the purpose of improving, maintaining, or restoring uplands including, but not limited to, rangeland management practices, erosion control practices, and vegetation management practices.

Including such a definition would recognize that farmers and ranchers implement these types of practices on a daily basis, thereby reducing non-point source pollution and so improving water quality.

IV. LIKELY IMPACTS TO COLORADO IF THE PROPOSED RULE IS FINALIZED

The Proposed Rule will remove from federal jurisdiction numerous waters that are currently within federal jurisdiction in Colorado under the 2008 guidance. This will have negative impacts upon the State of Colorado's resources, economy, and water quality. These impacts are not reflected in the Proposed Rule's economic or resource analysis and appear to have not been considered by the Federal Agencies.

A. Burden on Colorado Resources

The Proposed Rule shifts the burden onto Colorado to protect federally excluded wetlands and waters, thereby saddling Colorado with the burden of protecting the quality of water received by nineteen states that receive Colorado waters. It would also necessitate that Colorado amend its laws and build an expensive new state Section 404 program in order to

allow fill activities in state-only waters. It may also necessitate the expansion of the state's pretreatment program. These would be extraordinary new financial and regulatory burdens for Colorado. There is nothing in the Proposed Rule that would compensate Colorado for these extra costs. Instead, funding may shrink, as noted below.

1. CWA § 404 Permitting Gap

Colorado defines its "state waters" far more broadly than WOTUS: Colorado state waters are "any and all surface and subsurface waters which are contained in or flow in or through this state," with minor exceptions for treatment system waters. *See* Colorado Water Quality Control Act, § 25-8-103(19), C.R.S. Colorado law then bars discharges of pollutants to state waters without a state or federal permit. *See* Colorado Water Quality Control Act, § 25-8-501, C.R.S. (requiring permits for the discharge of pollutants with limited exemptions).

Colorado does not have its own program to permit discharges of fill to state waters. *See* § 25-8-101, C.R.S., *et seq.* (Colorado Water Quality Control Act). This has not presented significant problems up until now because Colorado has relied upon the federal Section 404 program to permit discharges of fill to its waters.

Under the Proposed Rule, all ephemeral waters, some intermittent waters, and many of Colorado's wetlands[5] may be excluded from federal jurisdiction, and thus could become ineligible for Section 404 fill permits. Without such federal permits, the Colorado Water Quality Control Act treats discharges of fill to state waters the same as any other discharges

[5] Saint Mary's University of Minnesota's Geospatial Services, with input from the Colorado Natural Heritage Areas, created a model to evaluate the extent of federally protected wetlands and other surface waters. Roger Meyer and Andrew Robertson, Clean Water Rule Spatial Analysis A GIS-based scenario model for comparative analysis of the potential spatial extent of jurisdictional and non-jurisdictional wetlands (GeoSpatial Services Saint Mary's University of Minnesota Jan. 2019).

The model uses three different analysis scenarios from "most restrictive" to "very restrictive" to "less restrictive." The most restrictive scenario limits CWA protections to directly adjacent and perennial (*i.e.*, permanent) surface waters. The very restrictive scenario limits protections to adjacent and perennial/intermittent waters. The less restrictive scenario offers protections to adjacent wetlands, perennial, intermittent and ephemeral waters, and ditches or channelized streams. The model analyzed three different watersheds, one of which was the South Platte River Headwaters watershed in Colorado.

The South Platte Headwaters Watershed encompasses approximately 1,604 square miles and contains the headwaters of the South Platte River, a designated TNW protected under the CWA. Surges in water flow in the South Platte River occur during the spring snowmelt. NHD streams and rivers are mostly classified as intermittent, ephemeral, and perennial (*i.e.*, 46% intermittent, 11% perennial, 33% ephemeral, 2% pipeline, and 5% ditches).

The results of this case study show that by narrowing the scope of federal jurisdiction under the "most" and "very" restrictive scenarios, the number of wetlands protected by the CWA are substantially decreased, leading to a potential loss of benefits provided by wetlands such as flood control and attenuation, pollution control, wildlife habitat, and recreation. The South Platte Watershed model looked at 67,597 wetlands covering 1,026,696 acres. Model results indicate that the very restrictive scenario would result in 10,344 acres, or 15% of the total wetlands, lacking jurisdiction. The most restrictive scenario could result in 36,836 acres, or 54% percent of total wetland acreage, lacking federal jurisdiction.

of pollutants—these discharges cannot result in exceedances of water quality standards or compromise the classified uses of those waters. There is no provision, like in Section 404 of the Clean Water Act, for mitigation or replacement of the filled wetlands or waters. Since discharges of large quantities of fill, by their nature, are likely to result in exceedances of state water quality standards and compromise the classified uses of these waters, Colorado could not permit them under the Colorado Water Quality Control Act and current regulations. *See, e.g.,* 5 CCR 1002-61, Reg. 61.8(1) (Colorado's Water Quality Control Division cannot issue a permit when "the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States"). Without a permit, under Section 25-8-501, C.R.S. (which requires permits for such discharge of pollutants to state waters) these discharges would be illegal under the Colorado Water Quality Control Act.

Establishing its own permitting program for fill activities would require that the state of Colorado amend the Colorado Water Quality Control Act, promulgate new regulations, and appropriate millions of dollars for new permitting and mitigation programs. Until Colorado does all this—which would take years and is far from certain—fill activities cannot occur in waters that are only subject to Colorado (as opposed to federal) jurisdiction. The proposed narrowing of waterbodies subject to federal jurisdiction for water quality purposes, therefore, creates a "gap" where certain development/infrastructure activities will simply not be able to take place.

This restriction on fill activities—even for one or two years—could have enormous negative economic consequences to Colorado's economy. For example, between 2012 and 2017, the Corps issued more than 3,696 general and nationwide Section 404 permits in Colorado, many of which were for the kinds of waters that will now be excluded from federal jurisdiction. In addition, since 2008 the Colorado Water Quality Control Division has reviewed applications for Section 401 water quality certifications (as part of individual 404 permits) for thirty-six projects involving, in whole or in part, ephemeral and intermittent streams. These permitted fills in Colorado include projects that are directly related to protecting Colorado's water supply, improving Colorado's stream banks, building new developments, expanding existing businesses, and otherwise advancing Colorado's infrastructure and economy. If the Proposed Rule goes into effect, none of these activities could be permitted in non-federal waters at this time, resulting in cancelled and delayed projects and economic harm.

Neither the Federal Agencies' economic analysis nor its Resource and Programmatic Assessment consider this serious and immediate economic impact of the 2019 Proposed Rule in Colorado.

2. Program Funding

Colorado's clean water program depends upon federal funds for a significant portion of its total budget. This "Section 106" programmatic funding allows the State of Colorado to implement the CWA and protect Colorado's waters for drinking water, agriculture, and aquatic life. Any cut will significantly harm Colorado's ability to protect its waters.

Based upon a review of the state's current Section 106 funding calculations, the Proposed Rule appears likely to shrink Colorado's federal clean water funding because a portion of the Division's funding is based on the miles of WOTUS in a state. Under this formula, a narrower definition would result in less funding. While the Federal Agencies verbally assured the State of Colorado that the Proposed Rule would not lead to cuts in Colorado's federal clean water

funding, they have neither proposed any changes to the current formula nor included any language in the Proposed Rule that would ensure that the Proposed Rule's cuts to federal jurisdiction do not result in cuts to federal funding for states. Any final rule should address the states' Section 106 funding formula in detail and explain whether the final rule will or could impact that funding in the future.

3. CWA Section 319 Nonpoint Source Funding

Under Section 319 of the CWA, states, territories, and tribes receive grant money that supports a wide variety of activities to assess the success of specific nonpoint source implementation projects. The State of Colorado is concerned that the Proposed Rule, if implemented, would lead to a decrease in critical nonpoint source (*i.e.*, Section 319) funds for Colorado because the Proposed Rule may result in the loss of jurisdictional wetland acreage.

Specifically, critical aquatic habitat is one of the criterion in the formula EPA uses to distribute Section 319 funds across all states. EPA uses wetland acreage as a surrogate to represent critical aquatic habitat. If the data source EPA uses to define wetland acreages shows a decrease in wetland acreages, which may happen if wetlands no longer receive federal protection, funding for Colorado's Section 319 program could be decreased. This would negatively affect Colorado's ability to implement nonpoint source projects because the state's Section 319 grant is the primary funding mechanism for statewide nonpoint source projects that reduce pollution through collaborative, voluntary, and locally-driven actions. These projects not only improve water quality, addressing such things as runoff from abandoned mine lands and agricultural activities, but also improve local economies and increase the priority local communities place on clean, usable water.

At this time, critical aquatic habitat is one of the criterion in the formula EPA uses to distribute Section 319 funds across all states. EPA uses wetland acreage as a surrogate to represent critical aquatic habitat. If the data source EPA uses to define wetland acreages shows a decrease in wetland acreages, which may happen if wetlands no longer receive federal protection, funding for Colorado's 319 program could be decreased.

4. CWA Pretreatment Program

The CWA's pretreatment program is designed to protect publicly owned treatment works ("POTWs") infrastructure and reduce conventional and toxic pollutant levels discharged by industries and other nondomestic wastewater sources into municipal sewer systems and subsequently discharged into receiving waters. The pretreatment program is very important to water quality, the protection of municipal plants, and the protection of beneficial uses. While Colorado has a state pretreatment program, it does not have delegated authority for pretreatment under the CWA; thus, EPA implements the program. In addition, EPA has begun issuing permits to significant categorical industrial users that discharge to POTWs without EPA-approved programs.

At least one of the POTWs with an EPA pretreatment program discharges to a zero flow stream that is unlikely to be within federal jurisdiction under the Proposed Rule. There may be other POTWs with pretreatment programs that discharge to intermittent streams that have a downstream "break" that would exclude them from federal jurisdiction. Under the Proposed Rule, it is unclear (but appears unlikely) that the EPA would continue to implement

the pretreatment program for those POTWs, thus placing the burden on Colorado to do so. This would be a significant resource burden for Colorado. If the Proposed Rule were enacted, Colorado would have to employ additional full time staff to implement this program or take resources away from permitting. The Proposed Rule's Resource and Programmatic Assessment does not discuss this impact.

5. Disposal of Septage

Septage is waste from domestic septic tanks and is a significant source of potential surface water pollution. Under 40 C.F.R. § 503.14(b), bulk septage cannot be applied to agricultural land, forest, or a reclamation site that is ten meters or less from WOTUS, as defined in 40 C.F.R. § 122.2, unless otherwise specified by the permitting authority.

While some counties and local health departments may regulate septage disposal, there is no parallel state regulation to 40 C.F.R. § 503.14 in Colorado that would bar application of such waste within ten meters of a state water. *See* 5 CCR 1002-43, Statement of Basis and Purpose 43.24 (in the on-site wastewater treatment regulations required to be adopted by all Colorado counties, statement that "[t]he Commission decided to not provide additional requirements for the disposal of septage within section 43.4.O.5. The Commission recommends compliance with EPA 40 C.F.R., Part 503 Biosolids Rule..."); 5 CCR 1002-64 (excepting septage from state biosolids rules). Nor does Colorado require state permits for this activity. The federal regulations are the only state-wide restrictions in Colorado on the land application of exclusively domestic septage. As such, if the Proposed Rule goes into effect and the scope of federal waters is narrowed from the 2008 guidance, in order to simply maintain the current level of protections from septage to Colorado's waters, the State of Colorado or its counties would have to establish new septage regulations and provide new oversight. These actions will have considerable costs that are not discussed in the Proposed Rule's Resource and Programmatic Assessment.

6. Increased Litigation and Uncertainty Regarding the Location of Points of Compliance

Colorado implements the CWA's National Pollutant Discharge Elimination System ("NPDES") and has developed a robust state water quality program that seeks to protect state waters through a discharge permitting program. The Proposed Rule could significantly impact the effectiveness of this state permitting program by increasing the litigation risks regarding Colorado permits' points of compliance because the Proposed Rule would treat pollution to excluded waters as point sources to a water of the United States but only at the point of federal jurisdiction (which, under the Proposed Rule, could be miles downstream). Some of the most significant dischargers in Colorado discharge to ephemeral and intermittent streams that are within federal jurisdiction under the 2008 guidance but may not be within federal jurisdiction under the Proposed Rule. These include a uranium mine, several coal mines, and numerous coal bed methane wells. The State of Colorado believes that the Colorado Water Quality Control Act and state regulations authorize and direct the State of Colorado to continue to require compliance with effluent limits, including federal technology based limits (called ELGs), at the point at which the discharge hits state (rather than federal) waters. But it is likely that permittees will challenge the state through costly litigation and may ask for a second, downstream point of compliance where federal waters begin. Such a second point of compliance would lead to the degradation of miles of state waters classified for beneficial uses, including drinking water supply and aquatic life. While any such litigation challenge is

likely to be unsuccessful, it could take years to be resolved. That kind of litigation would be crippling for a tightly-resourced permitting program like Colorado's, monopolizing permit writers and thus preventing the issuance of renewal permits that would better protect Colorado's water quality.

7. Other Potential Complications and Resource Burdens

Having had only a few months to consider the wide-ranging impacts of the Proposed Rule, the State of Colorado is concerned that there may be even more burdens upon its resources, or additional complications to existing programs that the Federal Agencies have also failed to consider. For instance, will the Proposed Rule affect how EPA permits federal facilities in Colorado? Will the Proposed Rule affect the availability of Oil Pollution Act of 1990 cleanup funds? If EPA had provided additional time during this comment period, the State of Colorado could have provided a more detailed assessment of such issues. Given the short timeframe allocated to public comments, however, the State of Colorado calls upon the Federal Agencies to carefully research and consider every way in which a final rule may impact each state and recognized tribe, including Colorado.

B. Degradation of Waters Entering Colorado

While Colorado is a headwaters state, it does contain a number of waters that rely upon ephemeral and intermittent headwaters in Wyoming, Oklahoma, Utah, New Mexico, and the Southern Ute reservation. Many of those states and tribes lack separate state or tribal protections for non-federal waters, meaning that if the Proposed Rule is in effect, at least some non-jurisdictional tributaries and wetlands are likely to be filled in or polluted without controls. The degradation of those waters will adversely affect Colorado's water quality and Colorado's aquatic life. It could also lead to increased costs for water users, like drinking water plants, who may have to take extra measures to treat the degraded water, or farmers, who may not be able to use this water anymore.

C. Higher Likelihood of Illegal Fill of Excluded Tributaries and Wetlands and the Associated Impacts to Species

As discussed above, without significant state action and resource commitments by the State of Colorado, it will be difficult or impossible for persons to obtain a permit to fill in a water removed from federal jurisdiction. On the flip side, without a legal permitting mechanism, some people are likely to go forward and fill in wetlands and excluded tributaries without any permits or mitigation. At this point, unlike the federal government, Colorado has no resources dedicated to preventing or tracking such illegal fill activities.

The current Section 404/Section 401 permitting program allows for the authorization of stream stabilization and other related projects, while also requiring mitigation for project impacts to wetlands. For example, where a project impacted 35 acres of wetlands, the Corps required complete replacement of the affected wetland and riparian habitat. Project proponents met this requirement through the revegetation of disturbed areas and newly created stream banks as well as through the establishment of new wetlands.[6] Had this or similar projects not been permitted under the federal program, mitigation of these impacts

[6] Smith Environmental Consulting, *Banning Lewis Ranch (BLR) 401 Certification. Prepared for the Colorado Department of Public Health and Environment, Water Quality Control Division* (May 4, 2010).

may not have been required, potentially resulting in significant loss of wetland habitat in a rapidly growing region of the state. Furthermore, Section 82.6(B)(1) of 5 CCR 1002-82 ("Regulation 82") requires all projects receiving Section 401 certifications to implement best management practices ("BMPs") to ensure that the potential for adverse water quality impacts due to construction activities is minimized. If the Proposed Rule's definition of WOTUS removes federal jurisdiction from certain waters, there will be no Section 404 permit, no 401 certification and, thus, no requirement from Regulation 82 to implement protective or remedial BMPs. Moreover, people may fill in wetlands or waters that are so sensitive the Corps would never have issued a permit.

Illegally filling in ephemeral and intermittent streams and wetlands excluded by the Proposed Rules from federal jurisdiction is likely to cause damage to habitat, refuge, and breeding grounds for species life in Colorado. The damage from illegal fills will be compounded by less federal Section 7 consultation under the Endangered Species Act for other activities that will affect these waters. Species' reliance on these waters is described in detail below in the attached white paper entitled *Biological Importance of Ephemeral and Intermittent Streams and Non-Adjacent Wetlands in Colorado* (Appendix 1) and includes:

- The fish species Arkansas darter occupies intermittent streams through much of their range in Colorado. This species was a candidate for federal ESA listings, until determined not warranted in 2016. It remains a Tier 1 Species of Greatest Conservation Need ("SGCN") in Colorado.

- Intermittent and ephemeral waters are vital for other Eastern Plains fish species such as Southern redbelly dace (Tier 1 SGCN), Northern redbelly dace (Tier 1 SGCN; state endangered), and Plains topminnow (Tier 1 SGCN; evaluated for ESA).

- Several Tier 1 SGCN fish species spawn in ephemeral streams, including roundtail chub, flannelmouth sucker, and bluehead sucker. The larval fish are washed down into perennial waters.

- Federally endangered fish species including razorback sucker, Colorado pikeminnow, and bonytail have been found in intermittent streams.

- Boreal toads (Tier 1 SGCN; evaluated for ESA) breed in montane wetlands, including beaver ponds, intermittent streams, and wet meadows and emergent marshes. Toads return to the same breeding spots year-after-year.

- Plains and northern leopard frogs (Tier 2 SGCN; evaluated for ESA) utilize ephemeral and intermittent stream habitats and associated wetlands throughout Colorado's eastern plains.

- Over 250 invertebrate taxa inhabit intermittent streams in Colorado. They are an important food supply to fish and other aquatic organisms as they wash downstream. They also help recolonize downstream populations after floods or other disturbance events.

- ESA "endangered" mice in Colorado including Preble's Meadow Jumping Mouse and New Mexico Jumping Mouse depend on riparian vegetation, including ephemeral streams. Degradation of riparian vegetation is a primary factor in the population

decline of New Mexico Jumping Mouse. Habitat protection and restoration is included in the Preble's recovery plan.

- Thirty-five wetland-dependent species of rare plants in Colorado, including eight that are listed as Plant Species of Greatest Conservation Need in the Colorado Wildlife Action Plan, three of which are listed as federally threatened.

- There are at least ten plant communities in Colorado that are tracked by the Colorado Natural Heritage Program which only occur adjacent to ephemeral streams, intermittent streams, and isolated or groundwater-fed wetlands.

These potential impacts on Colorado species were not discussed in the Proposed Rule or its supporting documents.

Moreover, if there were a large quantity of illegal fills, such fills could reduce summer flows as well. Based on the prevailing science, wetlands are often connected by sub-surface flows to adjacent streams and though they may not be connected by surface flows, the sub-surface flows are intrinsic to the hydrologic connectivity to runoff and specifically to maintaining base flow in perennial streams.[7] Wetlands contribute to downstream flows during the summer months by filling during spring rainfall, recharging the groundwater, and slowly discharging over an extended period. Thus, loss of these wetlands will compromise the flow duration and timing in perennial streams.

D. Degradation of Water Quality

Cumulatively, illegal fills, degradation from out of state waters, and a possible weakening of Colorado's NPDES program are likely to lead to a degradation in Colorado's water quality. *Supra*, Section IV.B. This would affect Colorado negatively in a number of ways that are not adequately considered (or considered at all) in the Proposed Rule or its supporting documents.

1. Damage to Drinking Water Supplies

Many of the waters currently within federal jurisdiction in Colorado under the 2008 guidance and now proposed for exclusion provide high quality water for drinking and agriculture. Within Colorado, 10,510 miles of intermittent and ephemeral streams provide water for surface water intakes supplying public drinking water systems.[8] Headwater and wetlands fills upstream of those intakes may degrade the quality of the water used by those systems. If the quality of these headwaters declines, public health could be jeopardized and downstream drinking water plants will incur greater costs to treat their water. Private well users whose wells are close to surface water bodies may also find their drinking water degraded and health impacted.

---

[7] U.S. EPA (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, DC.

[8] EPA, *Percentage of Surface Drinking Water from Intermittent, Ephemeral, or Headwater Streams in Colorado*.

2. Damage to Agricultural Water Supplies

Degradation of water quality might also compromise farmers' ability to use their downstream water rights for agriculture. For example, if the water coming out of ephemeral and non-jurisdictional intermittent waters has high Sodium Adsorption Ratio ("SAR") values and sodium concentrations, and downstream farmers and ranchers then exercise their water rights to those flows, that water may significantly damage cornfields, soils, and dairy cattle. Colorado farmers and ranchers have been injured by such high-SAR discharges in the past due to large discharges of effluent from coalbed methane wells.[9]

3. Damage to Colorado's Recreation Economy

Water-based recreation is an important component of Colorado's economy, with $3.8 billion in total annual spending in Colorado.[10] Recreational users avoid streams or lakes with heavy growths of algae and its associated odors, which are ultimately caused by nutrient pollution[11, 12]. Colorado's state parks occasionally close swim-beaches due elevated fecal bacteria. Increases in bacterial and nutrient pollution due to loss of wetlands or increased pollution in headwaters could damage downstream recreational waters.

Degraded water quality can also compromise downstream recreational opportunities, especially fishing. Healthy aquatic and wetland habitats and good water quality are critical for preserving Colorado's native species and for providing outstanding recreational fishing. Recreational fishing contributes $2.4 billion in economic output per year and supports over 17,000 jobs in Colorado.[13] Protecting the physical, chemical, and biological integrity of Colorado's waters is necessary to preserve such recreational fishing.

Degraded water quality could also negatively impact the popularity of rafting, kayaking, and other non-motorized boating in Colorado. This would also hurt Colorado's economy. Non-motorized boaters, including canoeists, kayakers, whitewater rafters, and stand up paddle boarders spend $1.3 billion annually in Colorado.[14] Just the 550,000 commercial rafters in Colorado in 2016 spent $70 million in direct expenditures, which translated into about $179.8 million in total economic contribution within Colorado.

V. FLAWS WITH THE BASIS AND REASONING FOR THE PROPOSED RULE

A. Legal Foundation and Consistency with CWA Objectives

The Proposed Rule is inconsistent with existing case law defining the scope of federal jurisdiction under the CWA, which uniformly holds that the Kennedy concurrence in *Rapanos*

---

[9] *See, e.g.*, CO-0048020 Fact Sheet at 8 (Dec. 28, 2009).
[10] Southwick Associates (2018). *The 2017 Economic Contributions of Outdoor Recreation in Colorado*. Fernandina Beach, FL.
[11] Jakus, P. M., Nelson, N., & Ostermiller, J. (2017). *Using Survey Data to Determine A Numeric Criterion for Nutrient Pollution*. Water Resources Research, 53(12), 10188-10200.
[12] Smeltzer, E., & Heiskary, S. A. (1990). Analysis and Applications of Lake User Survey Data. *Lake and Reservoir Management*, 6(1), 109-118.
[13] Southwick Associates (2018). *The 2017 Economic Contributions of Outdoor Recreation in Colorado*. Fernandina Beach, FL.
[14] John Loomis, *Economic Contribution to the Colorado Economy and Benefits to Visitors from Water-Based Recreation*, Colorado Waters (Colorado State University July/August 2018).

is the controlling opinion from that case. As the Solicitor General of the United States noted in a recent filing with the United States Supreme Court, "[e]very court of appeals to have considered the issue [since *Rapanos*] has determined that the CWA covers at least those waters that satisfy the test set forth in Justice Kennedy's concurrence." *Robertson v. United States*, S.Ct. No. 18-609, Brief for the United States in Opposition (March 2019). *Compare Rapanos v. United States, 547 U.S. 715 (2006)* (Kennedy, J., concurring) (describing a wetland as falling within the scope of the CWA's jurisdiction if it bears a "significant nexus" to a traditional navigable waterway). Indeed, more justices rejected the *Rapanos* plurality opinion than agreed with it.

The Proposed Rule is also inconsistent with the CWA's purpose "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The restoration and maintenance of the chemical, physical, and biological integrity of "the Nation's waters" depends upon the protection of headwaters and headwater wetlands, in particular those that satisfy the Colorado Significant Nexus Test. *See Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring) (finding "wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.'"). As such, the State of Colorado is concerned that by stripping federal protections away from those headwaters and wetlands, the Proposed Rule will undermine the basic goal of the CWA.

B. Failure to Incorporate Science

Colorado is concerned that the Proposed Rule is not grounded in science and strongly disagrees with the Federal Agencies' statement that "science cannot be used to draw the line between federal and state waters, as those are legal distinctions that have been established within the overall framework and construct of the CWA." Determining whether waters or wetlands satisfy the Colorado Significant Nexus Test requires the application of science.

The Federal Agencies' discounting of science in this regard, and establishing a definition of WOTUS contrary to such science, is based upon an assumption that such science is divorced from the all-important "legal distinctions that have been established within the overall framework and construct of the CWA." However, science is in fact fundamental to the overall framework and construct of the CWA. For instance, the Supreme Court itself has grounded its WOTUS analyses in scientific concepts like wetlands functionality. *See, e.g., Rapanos*, 547 U.S. at 780. Establishing a fundamental rule for the scope of the CWA without relying on science is contrary to the purpose and structure of the CWA. Moreover, without scientific underpinning and support, any conclusion as to what is or is not WOTUS would be arbitrary and capricious. Treating "legal issues" as a separate matter makes no sense in the context of the CWA.

Reliance on scientific methods and data collection (as well as science more generally) is required in a number of regulatory goals and definitions implementing the CWA.[15]

[15] For example, 40 C.F.R. § 131.3(c) requires that national recommended water quality criteria be "based on the latest scientific information on the relationship that the effect of a constituent concentration has on particular aquatic species and/or human health." Use attainability analyses which assess the chemical, physical, biological and economic factors affecting the attainment of designated uses are determined by a "structured scientific assessment." 40 C.F.R. § 131.3(g). In addition, 40 C.F.R. § 131.5(a)(2) requires that EPA review state-adopted water quality standards to ensure that

Specifically, the CWA requires: (i) standardized and quality controlled methods of data collection and measurement; (ii) statistically appropriate analysis/hypothesis testing; (iii) peer review; and (iv) reference to and appropriate use of the results from scientific literature.[16]

C. Failure to Consider Connectivity and Impact of Excluded Waters

In addition to this explicit rejection of science, the Proposed Rule's exclusion of intermittent and ephemeral waters currently within federal jurisdiction in Colorado under the 2008 guidance, specifically waters that satisfy the Colorado Significant Nexus Test, ignores the basic science regarding wetlands hydrology and connectivity and the importance of intermittent and ephemeral waters to downstream water quality in the West.[17]

First, there is unlikely to always be a bright line between ephemeral and intermittent waters in Colorado. Intermittent streams are often defined as those streams with seasonal surface flow and ephemeral streams are often defined as those streams flowing in response to short term precipitation events. But these definitions represent an artificial, discrete construction imposed on a dynamic and continuous variable (surface flow). In one year a stream may appear ephemeral and in others may appear intermittent. Similarly, some streams may appear perennial (flowing for years at a time) but may lose surface flow during periods of drought. In the West and other arid climates, streams and stream reaches may be devoid of surface flow, with a channel morphology indicative of ephemeral flow, but which may flow for years at a time after a large precipitation events fill perched aquifers (impermeable layers of rock or sediment which hold water above the main water table) that sustain baseflow in streams thought to be ephemeral. In fact, there are a number of mechanisms which determine flow and loss of flow in these temporary river systems and which can be classified beyond simply "intermittent" or "ephemeral." *See* Appendix 2:1 (More Information on Science of Tributaries, Delineation Between Ephemeral and Intermittent Streams).

Second, the recent scientific literature demonstrates that ephemeral and intermittent streams play a large collective role in maintaining and defining the physical, chemical, and biological integrity of perennial waters. *See* Appendix 2:1. This literature demonstrates that intermittent and ephemeral system impairment, loss, unregulated fill, or pollution would have considerable and long-lived negative consequences for fisheries, ecosystem services, and economies dependent on them. For instance, these stream networks provide runoff to

---

those standards are "based on sound scientific rational." Similarly, 40 C.F.R. § 131.5(a)(7) requires that EPA review certain state standards to ensure that those standards are "based upon appropriate technical and scientific data and analyses." Further, 40 C.F.R. § 131.11(2) sets forth the criteria by which states protect designated uses of certain waters, including the use of "other scientifically defensible methods" when establishing numerical values for pollutants.

[16] Examples include calculating or otherwise reviewing water quality standards, effluent toxicity tests/limitations/guidelines, watershed wasteload allocations, evaluating discharger compliance, evaluation of dredge and fill sediment quality and review of the designated uses, among others.

[17] A broad discussion of the science surrounding physical and biological markers of connectivity follows these comments in Appendix 2. Although that discussion addresses intermittent and ephemeral streams beyond those that satisfy the Colorado Significant Nexus Test and argues for classifications beyond intermittent and ephemeral, it is not Colorado's position that streams that do not satisfy the Colorado Significant Nexus Test should be subject to federal jurisdiction under the CWA. As stated previously, Colorado supports continued federal protection of waters under the Colorado Significant Nexus Test, which relies on the Kennedy Significant Nexus Test as a foundation but also requires the addition of definable parameters supported by science such as physical or biological markers of such connectivity.

regional aquifers which provide critical base flows to perennial streams. They also regulate the supply of nutrients and sediments to downstream waters, improving water quality and providing a source of food for downstream species occupying perennial waters. These waters provide an important point of nutrient uptake and removal that reduces nutrient loads to perennial downstream waters and associated aquatic communities. Degradation of these headwater streams would impair their function and alter delivery of macroinvertebrates, organic matter, and nutrients to downstream waters, often in other states. Moreover, a wide diversity of macroinvertebrates inhabit these systems and are specifically adapted to the unique physical and chemical conditions. Fish and macroinvertebrates utilize and depend on the exports from these systems for food/nutrients/carbon inputs. Multiple threatened and endangered species rely on these systems as predator and invasive species refuge and as seasonal spawning habitat. *See* Appendix 2:1; Appendix 1.

Finally, the "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence" ("Connectivity Report"), and review of the report by EPA's Science Advisory Board concluded that tributary streams, wetlands, and open waters in floodplains and riparian areas are connected to and strongly affect the water quality of downstream traditional navigable waters, interstate waters, and the territorial seas. 80 Fed. Reg. 37,057. The Proposed Rule does not reflect these conclusions.

D. More Specific Ways in Which the Proposed Rule's Treatment of Tributaries Is Inconsistent with Basic Science

The Proposed Rule would grant federal jurisdiction to tributaries only if they: (i) exhibit relatively permanent geographic features; (ii) contribute surface flow to a traditional navigable water in a typical year; and (iii) do not flow to any ephemeral features. All ephemeral waters, regardless of their connection to downstream waters, are excluded, and any intermittent waters upstream of such ephemeral waters are also excluded.

This tributary proposal is not consistent with connectivity science and hydrology, including the science summarized above. For example, the Proposed Rule excludes subsurface connections, which would nonetheless impact the physical, chemical, and biological integrity of traditionally navigable waters. The Proposed Rule's reliance on a tributary being a "geographic feature" that is "relatively permanent" also ignores the past science-based approach that looks at hydrology of tributary streams to determine their relationship with traditionally navigable waters. The proposal also ignores cumulative effects of multiple tributaries on downstream waters. Colorado feels strongly that it is appropriate to consider the cumulative impacts of potential activities on multiple tributaries upstream of traditionally navigable waters within a particular watershed and can only support a federal rule that includes this concept.

The break of jurisdiction in the Proposed Rule for all tributaries above an ephemeral water is particularly troubling. Under the Proposed Rule, if an intermittent water flows to an ephemeral feature, everything upstream of the ephemeral break would no longer be jurisdictional, regardless of length. First, it should be noted that such "breaks" are likely to be very common in Colorado. For instance, in the tributaries of the Purgatoire River in Southern Colorado, a coal bed methane NPDES permittee submitted reports to the State of Colorado in October 2015 and in September 2016 that many of its large discharges of effluent to what would likely be intermittent waters under the Proposed Rule dried up prior to reaching the downstream, more perennial segments—an ephemeral waters "break" under the

Proposed Rule.[18] And Colorado's rivers are full of dams or other water projects that divert a river's flows and might create such a jurisdictional break.

Second, the Proposed Rule offers no scientific or legal justification for these jurisdictional breaks. Why would the existence of a stretch of ephemeral waters—waters that may support aquatic life and contribute to downstream water quality—mean that there is no longer a significant connection to traditional navigable waters? It is also inconsistent with the approach taken in the 2008 guidance that "a tributary, for the purposes of this guidance, is the entire reach of the stream that is of the same order (*i.e.*, from the point of confluence, where two lower order streams meet to form the tributary, downstream to the point such tributary enters a higher order stream)." 2008 guidance at 6, n.24.

Also, as noted above, the line between "ephemeral" and intermittent streams may not be a bright line. *Supra,* Section V.C. The proposal would also essentially allow parties to divert themselves out of federal jurisdiction, which Colorado does not support. Lastly, on-the-ground implementation would be complicated and confusing and is likely to create jurisdictional problems for Colorado's federal pretreatment program, among others, as described above.

E. The Proposed Rule's Definition of Adjacent Wetlands is Inconsistent with Science and Supreme Court Precedent

The only wetlands proposed to be WOTUS would be those that are adjacent to, or, more specifically, "abut or have a direct hydrologic surface connection to other 'waters of the U.S.' in a typical year." 84 Fed Reg. at 4184. "Such direct hydrologic surface connections during a typical year may be the result of perennial or intermittent flow between a wetland and a jurisdictional water." *Id.* at 4188. "Wetlands physically separated from a jurisdictional water by upland or by dikes, barriers, or similar structures" lack a direct hydrologic surface connection to jurisdictional waters and are considered isolated rather than adjacent—hence not jurisdictional. *Id.* The Proposed Rule "would end the current practice of conducting case-specific significant nexus evaluations for non-abutting wetlands to relatively permanent and non-relatively permanent waters." *Id.* at 4186.

Colorado opposes the blanket exclusion of all other wetlands and supports application of the Colorado Significant Nexus Test to wetlands, which could provide for jurisdiction over wetlands adjacent to non-navigable tributaries that are not relatively permanent if they have a significant nexus with a traditional navigable water. *See* 84 Fed. Reg. at 4160.

The Unites States Supreme Court has repeatedly applied the Kennedy Significant Nexus Test to wetlands, and Colorado does not believe that the Federal Agencies' decision to now abandon it is well-founded.

By excluding wetlands connected through the subsurface to jurisdictional tributaries, the Proposed Rule would exclude many of Colorado wetlands that are currently within federal jurisdiction under the 2008 guidance. In fact, a large number of Colorado's wetlands are connected to tributaries through subsurface connections. For instance, on North Sand Creek near Cowdry, Colorado there is a wetland complex that is largely connected to Sand Creek

[18] XTO, *Request for Permit Modification Based on Survey of 37 Outfalls XTO Energy, Inc. Permit Nos. CO-0048054 and CO-0048062* (Oct. 23, 2015) (also called "XTO Dry Reach Study").

through the subsurface. While Colorado strongly supports the continued exclusion of any groundwater as WOTUS, we also support a rule that would include within federal jurisdiction wetlands that satisfy the Colorado Significant Nexus Test, even if that connection is through subsurface flows.

Similarly, the Proposed Rule would appear to exclude all fens from federal jurisdiction, though a number are currently within federal jurisdiction under the 2008 guidance. Fens are groundwater-fed wetlands that can take thousands of years to form and are a high priority for conservation and restoration due to their extremely sensitive nature. Numerous rare plants in Colorado only exist in wetland fen habitats. Many of the species are isolated to these few small wetland habitats and are either endemic to Colorado or are arctic relics, found nowhere else in the lower 48. There are different types of fen habitats including extreme rich fens, which are imperiled both globally and within the state. Examples of rare plant species found in wetland fens include: Porter feathergrass (*Ptilagrostis porterii*) (Tier 2 SGCN), Greenland primrose (*Primula egaliksensis*), pale blue-eyed grass (*Sisrynchium pallidum*), and slender cottongrass (*Eriophorum gracile*). Wetland fens exist on both public and private lands in Colorado, mainly in the Rocky Mountain region of central Colorado. Colorado opposes the exclusion of federal jurisdiction for any fens that are currently within federal jurisdiction under the 2008 guidance.

Wetlands are critical to downstream water quality and provide habitat for some of Colorado's rarest species. *See* Appendix 1. Colorado opposes the Proposed Rule's exclusions of numerous wetlands currently within federal jurisdiction under the 2008 guidance.

F. The Lakes and Ponds Category Lacks Legal or Scientific Justification

Colorado does not support the creation of a distinct jurisdictional category for lakes and ponds, especially given the absence of a current accepted definition of either term across scientific disciplines. *See* 84 Fed. Reg. at 4184. Moreover, it appears that the same things that create jurisdiction for tributaries (perennial or intermittent between the subject flow and a traditional navigable water) also create jurisdiction for lakes and ponds. *Id.* at 4183. We are at a loss to see the benefit of this added category.

VI. ADDITIONAL LEGAL PROCESSES ARE NEEDED PRIOR TO ISSUANCE OF A FINAL RULE

Additional processes are needed to ensure that the public is adequately consulted on the substantive aspects of the Proposed Rule and that the Proposed Rule complies with the Administrative Procedure Act ("APA"), the ESA, and NEPA.

A. Additional Public Comment Needed for Agency Process to Determine Whether Intermittent Streams are Within Federal Jurisdiction

As described above, Colorado objects to the Proposed Rule's "ephemeral" and "intermittent" categorical definitions. Nonetheless, if the Federal Agencies intend to move forward with the Proposed Rule's categories for "ephemeral" and "intermittent" waters, we request that the Federal Agencies re-notice the Proposed Rule to provide more clarity as to how the Federal Agencies will practically determine jurisdiction using the proposed intermittent tributary definition.

Under the Proposed Rule, intermittent waters may or may not be jurisdictional depending upon whether they contribute surface flow to a traditional navigable water in a typical year. A "typical year" is defined in the Proposed Rule to mean within the normal range of precipitation over a rolling thirty-year period for a particular geographic area, but this 30-year average is intended to represent an entire watershed ("the geographic area proposed to be used by the agencies would be on a watershed-scale basis to ensure specific climatic data are representative of the landscape in relation to the feature under consideration for meeting the tributary definition."). 84 Fed. Reg. at 4177. This proposed definition would generally not include times of drought or extreme flooding. *Id.* at 4173.

Colorado is concerned that two things about this proposed definition need significantly more clarity: (i) the determination of a "typical year"; and (ii) how a stream would be evaluated as to its contribution of flow to traditional navigable waters.

1. The Determination of a "Typical Year" Under the Proposed Rule

Regarding a "typical year," the Federal Agencies state that they "are not proposing to codify specific tools or resources in the regulation to determine a 'typical year.'" At the March 26, 2019 meeting with the western states, the Federal Agencies stated that they are developing, but have not yet finalized, a tool to aggregate National Oceanic and Atmospheric Administration data for watersheds in order to determine whether or not a year is "typical." Until this tool is developed, the State of Colorado does not have a basis for assessing what would constitute a "typical" year for certain watersheds.

2. How a Stream Would be Evaluated as to Its Contribution of Flow to Traditional Navigable Water Under the Proposed Rule

Colorado is also concerned that, even if it was known what constituted a "typical" year for certain waters, whether intermittent waters contributed flow to traditional navigable waters would still be unclear. The Proposed Rule does not explain how the Federal Agencies will evaluate whether those waters contributed flow to traditional navigable waters: will it be through flow gauges? What about for streams that lack such gauges? Will it be biological data? Some other metric? What would be the role of groundwater? Snowpack? For instance, presumably an intermittent stream that usually has continuous seasonal flow in response to melting snowpack would be considered jurisdictional even if it lacks continuous flow after a dry winter. However, this is not certain in the Proposed Rule. At the March 26, 2019 meeting with the western states in Albuquerque, New Mexico, a representative from the Corps told representatives of the State of Colorado that the Federal Agencies were considering using some kind of flow model developed for the Pacific Northwest. This model is not described in the Proposed Rule, if it will in fact be used by the Federal Agencies.

Moreover, in the Proposed Rule's questions, the Federal Agencies propose an entirely different definition of "intermittent" as "water flowing continuously during certain times of a typical year as a result of melting snowpack or when the channel bed intersects the groundwater table." The Proposed Ruled then identifies numerous problems with implementing such a definition.

3. Need for an Additional Opportunity to Comment

Without more information about what would constitute a "typical" year for certain watersheds and the method to be used by the Federal Agencies to evaluate whether those waters contributed flow to traditional navigable waters, Colorado cannot accurately evaluate whether or not its many intermittent streams (or the many wetlands adjacent to them) will be within federal jurisdiction.

The APA requires that "general notice of proposed rulemaking shall be published in the Federal Register," including the "terms or substance of the proposed rule." 5 U.S.C. § 553(b). The straightforward purpose of this requirement is to give the affected public an opportunity to provide meaningfully-informed comment on an agency's proposal. *See Home Box Office, Inc. v. Fed. Commc'n Comm'n,* 567 F.2d 9, 35-36 (D.C. Cir. 1977); *see also Horsehead Res. Dev. Co. v. Browner*, 16 F.3d 1246, 1268 (D.C. Cir. 1994) (an agency's notice "must describe the range of alternatives being considered with reasonable specificity" so that interested persons can focus their comments in a meaningful way). Here, a critical aspect of the Proposed Rule—how the Federal Agencies will determine whether intermittent waters are within federal jurisdiction—is missing. This means that the State of Colorado, is unable to provide comment upon this issue, despite the fact that whether or not these waters are within federal jurisdiction will have immediate and substantial impacts to the State of Colorado.

In order for those affected by the Proposed Rule, including the State of Colorado, to have an opportunity to provide meaningfully-informed comment on the Proposed Rule, Colorado requests that the Federal Agencies re-notice the Proposed Rule to provide more clarity to illustrate what would or would not be jurisdictional as an intermittent tributary, including examples and the details of how the Federal Agencies will evaluate whether a water contributes surface flow to a traditional navigable water in a typical year, including any data tools and models and how they will be used.

B. Threatened and Endangered Species: ESA Consultation Required

By removing federal jurisdiction from all ephemeral streams, some intermittent streams, and all wetlands not connected to a jurisdictional water by surface flow, the Proposed Rule also may adversely affect federally- and state-listed threatened and endangered species in Colorado and elsewhere. These waters provide critical ecosystem needs for many Colorado species, either directly by providing habitat, or indirectly through production of food sources. Some of the species that rely on waters that the Proposed Rule would remove from federal jurisdiction are listed under the federal ESA or have been identified as a Species of Greatest Conservation Need in Colorado. *See* Appendix 1. The loss of CWA jurisdiction over such a large percentage of waters and wetlands will likely degrade and destroy habitat for endangered species, harming or even killing individuals from numerous listed species. *Id.*

EPA and the Corps' discretionary decision to deny countless acres of wetlands and many miles of surface water protection under the CWA is exactly the type of discretionary policy choice that is subject to the ESA's consultation requirement. The Federal Agencies are required under Section 7 of the ESA, 16 U.S.C. § 1536(a)(2), to engage in formal consultation with the U.S. Fish and Wildlife Service to ensure that narrowing the reach of CWA jurisdiction is not likely to jeopardize the continued existence of or destroy or adversely modify the critical habitat of any listed species. *See, e.g., National Parks Conservation Association v. Jewell*, 62

F. Supp. 3d 7, 15-18 (D.D.C. 2014) (formal consultation required for proposed rule changing criteria for waiver of stream buffer zone requirement under the Surface Mining Control and Reclamation Act); *Western Watersheds Project v. Kraayenbrink*, 632 F.3d 472 (9th Cir. 2011) (formal consultation required for proposed change to BLM regulations governing grazing on public lands, where there were large numbers of listed species on affected lands). There is no indication in the Proposed Rule that the Federal Agencies have initiated consultation as required by law.

In addition, Section 7(a)(1) of the ESA requires all federal agencies to "utilize their authorities in furtherance of" conservation of listed species and their habitat. 16 U.S.C. 1536(a)(1). Colorado calls upon the EPA and the Corps to comply with both Sections 1536(a)(1) and (a)(2) prior to adopting a final rule.

Removing federal protections from the waters listed above could also jeopardize existing conservation efforts, result in additional ESA listings for Colorado species through loss of habitat and/or critical populations, and reduce the overall health of aquatic ecosystems. A number of federally endangered fish species, including greenback cutthroat trout, razorback sucker, Colorado pikeminnow, and bonytail, have been found in intermittent streams, some of which may not be protected because of the arbitrary definition in the proposed rule that ties "intermittent" flow to a "typical" year. *See* Appendix 1. The term "typical year" would be used to define the frequency and duration of flow for a tributary. As discussed elsewhere in our comments, Colorado believes the use of "typical year" data to define whether a tributary is "intermittent" or "ephemeral" will not work well in the arid West, where there are typically sparse data on flow in intermittent drainages, and will leave intermittent streams that provide habitat for endangered fish species without CWA protections.

In addition, three federally threatened wetland-dependent plants occur in Colorado (*i.e.*, Penland alpine fen mustard, Colorado butterfly plant, and Ute ladies tresses) as well as two species of endangered mice (*i.e.*, Preble's Meadow Jumping Mouse and New Mexico Jumping Mouse) that depend on riparian vegetation, including that supported by ephemeral streams. Degradation of riparian vegetation is a primary factor in the population decline of New Mexico Jumping Mouse, and habitat protection and restoration are critical components of the Preble's recovery plan. *See* Appendix 1. Moreover, recent research has confirmed that some fish species identified as species of conservation concern in Colorado spawn in ephemeral and intermittent streams. *See, e.g.*, S. Colvin et al., *Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services*, FISHERIES, v. 44, no. 2 (Feb. 2019) at 81-84. Impairment of ephemeral or intermittent headwater streams that meet the Colorado Significant Nexus Test in Colorado would increase the risk that these and other species that rely on headwater streams will decline to the point that they require listing under the ESA. *See Id.*; Appendix 1.

C. Compliance with the NEPA

The Proposed Rule makes no mention of an accompanying NEPA analysis to assess the environmental impacts of the rule, along with those of reasonable alternatives, including a No Action alternative. Although Section 511(c)(1) of the CWA exempts EPA from compliance with NEPA for a rulemaking such as this, the same does not apply to the Corps. Adoption of the Proposed Rule would be a major federal action significantly affecting the quality of the human environment within the meaning of NEPA, and therefore requires preparation of an analysis of the Rule's impacts. Indeed, the Corps performed a NEPA analysis for the 2015

WOTUS Rule, ultimately issuing a Finding of No Significant Impact, based on a determination that the 2015 Rule would result in increased scope of CWA jurisdiction. But, unlike the 2015 WOTUS Rule, the Proposed Rule will not result in an increase in positive jurisdictional determinations. 2015 FONSI at 2 (explaining that the NEPA analysis showed the 2015 Rule would result in a 2.8% to 4.6% increase in jurisdictional determinations). Instead, it will *reduce* federal jurisdiction under the CWA, which will likely result in significant adverse impacts, triggering the need for preparation of an Environmental Impact Statement to inform the public fully of the likely direct, indirect, and cumulative impacts of the Proposed Rule.

VII. RESPONSES TO SOME OF THE QUESTIONS POSED IN THE FR NOTICE

The Proposed Rule requested comment on specific questions associated with administering, implementing, and enforcing the Proposed Rule. Colorado appreciates the opportunity to respond to certain of these questions, both generally as described above and more specifically as noted below. For the avoidance of confusion, Colorado has numbered and will present the question posed in the Proposed Rule below, including its responses immediately thereafter.

1. *Whether the definition of "tributary" should be limited to perennial waters only.*

   No. This is not adequate to protect the chemical, physical, and biological integrity of the nation's waters and would lead to the exclusion of numerous waters from federal jurisdiction that meet the Colorado Significant Nexus Test.

2. *Whether the definition of "tributary" as proposed should indicate that the flow originate from a particular source, such as a requirement for groundwater interface, snowpack, or lower stream orders that contribute flow.*

   No. Water source is not relevant to the chemical, physical, and biological integrity of the nation's water and does not solely determine whether a water body meets the Colorado Significant Nexus Test.

3. *How effluent-dependent streams (e.g., streams that flow year-round based on wastewater treatment plant discharges) should be treated under the tributary definition. As proposed, effluent-dependent streams would be included in the definition of "tributary" as long as they contribute perennial or intermittent flow to a traditional navigable water or territorial sea in a typical year.*

   Colorado defines an effluent dependent stream as "a stream that would be ephemeral without the presence of wastewater effluent, but has continuous or periodic flows for all or a portion of its reach as the result of the discharge of treated wastewater." 5 CCR 1002-31.5(17). Colorado does not believe that effluent-dependent streams should be excluded from WOTUS simply because they are effluent-dependent: rather we request continued federal protection of waters that meet the Colorado Significant Nexus Test.

4. *Whether the tributary definition should include streams that contribute less than intermittent flow to a traditional navigable water or territorial sea in a typical year.*

As discussed in Section VI.A., Colorado objects to the Proposed Rule's "intermittent" categorical definition because it fails to evaluate whether such waters meet the Colorado Significant Nexus Test.

5. *Whether less than intermittent flow in a channel breaks jurisdiction of upstream perennial or intermittent flow and under what conditions that may happen.*

   No. As discussed in Section V.D., Colorado opposes such "breaks" in jurisdiction.

6. *The proposed treatment of natural and man-made breaks regarding the jurisdictional status of upstream waters, including whether these features can convey perennial or intermittent flow to downstream jurisdictional waters.*

   As discussed in Section V.D., man-made structures like dams or concrete channels should not break the jurisdictional status of waters.

7. *The agencies also seek comment on the jurisdictional status of the breaks themselves.*

   As discussed in Section V.D., Colorado opposes such "breaks" in jurisdiction.

8. *As an alternative to the proposed definition of "intermittent," the agencies are soliciting comment on whether the term could instead mean "water flowing continuously during certain times of a typical year as a result of melting snowpack or when the channel bed intersects the groundwater table." Although the identification of groundwater input is found in most definitions for intermittent flow, 30 the agencies note that identifying whether the channel bed intersects the groundwater table may be challenging to accomplish in the field, that gathering the relevant data could be time consuming, and could require new tools and training of field staff and the regulated public. Some options for identifying whether groundwater is providing a source of water to the tributary may involve the installation of monitoring wells or staff gauges to identify the presence of the water table and/or to estimate the base flow using a hydrograph. Identifying the appropriate depth of installation for a monitoring well can be challenging, especially in the case of intermittent streams that have seasonally fluctuating water tables. Installing these devices in certain substrates, such as rocky substrates, can also be challenging. There may be other methods that could be researched and developed by the agencies over time, including the identification of field indicators, which could be regionalized, as well as the development of modeling tools. However, both of these methods (field indicators and modeling tools) would only provide an indication of groundwater generated base flow and would not directly measure its presence. The agencies are soliciting comment on whether these or other methods may be most appropriately used to identify groundwater in the field.*

   As discussed in Section VI.A., Colorado objects to the Proposed Rule's "intermittent" categorical definition because it fails to evaluate whether such waters meet the Colorado Significant Nexus Test. Should the Federal Agencies continue to go forward with the proposed "intermittent" categorical definition, however, Colorado requests that the Federal Agencies provide far more information regarding how jurisdiction will be determined for intermittent

tributaries and re-notice the Proposed Rule for a second round of public comment to allow for meaningful public input on this important matter.

9. *Whether the definition of "intermittent" should contain the requirement of continuous flow for a specific duration, such as "at least one month of the calendar year," instead of the phrase "during certain times of a typical year."*

   No. As discussed in Section VI.A., Colorado objects to the Proposed Rule's "intermittent" categorical definition because it fails to evaluate whether such waters meet the Colorado Significant Nexus Test. Colorado does not support any further narrowing of this definition.

10. *Whether the tributary definition should include specific flow characteristics (e.g., timing, duration, frequency, or magnitude)*

    No. As discussed in Section VI.A., Colorado objects to the Proposed Rule's "intermittent" categorical definition because it fails to evaluate whether such waters meet the Colorado Significant Nexus Test. Colorado does not support any further narrowing of this definition.

VIII. CONCLUSION

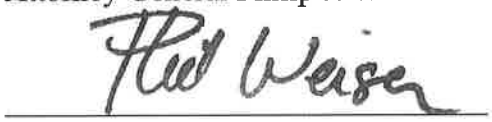
Colorado strongly urges the Federal Agencies to abandon the direction taken in the Proposed Rule, with the exception of its continued protection of state water rights and clarified agricultural exemptions. If enacted, the Proposed Rule will remove huge swaths of Colorado's waters from federal jurisdiction. In doing so, the Proposed Rule will impose significant burdens upon the State of Colorado's government, will degrade water quality in Colorado, will harm Colorado's species, may harm Colorado's endangered species, and may harm Colorado's economy. And yet, the Proposed Rule and its supporting documents do not demonstrate that the Federal Agencies have considered these costs to our state. Moreover, the Proposed Rule's treatment of intermittent waters, ephemeral waters, and wetlands is untethered from basic science and prevailing case law. Specifically, instead of doing away with the Kennedy Significant Nexus Test, the Proposed Rule should adopt the Colorado Significant Nexus Test.

Colorado also strongly believes that the Proposed Rule provides woefully deficient direction and support for how intermittent tributaries are identified. If the Federal Agencies continue to seek to adopt the proposed definitions of intermittent tributaries, Colorado respectfully requests that the Federal Agencies re-notice the Proposed Rule for a second round of public comment to allow for meaningful public input on such an important issue.

STATE OF COLORADO
Governor Jared Polis

Date: April 15, 2019

Attorney General Philip J. Weiser



Date: April 15, 2019