Honorable David Ross  
Assistant Administrator for Water  
United States Environmental Protection Agency  
William Jefferson Clinton Building  
1200 Pennsylvania Avenue, NW, MC 4101M  
Washington, D.C. 20460

Honorable R.D. James  
Assistant Secretary of the Army (Civil Works)  
U.S. Army Corps of Engineers  
108 Army Pentagon, Room 3E446  
Washington, D.C. 20310-0108

RE: Proposed Waters of the United States Rule (2019);  
Docket ID No.: EPA-HQ-OW-2018-0149

Dear Assistant Administrator Ross and Assistant Secretary James:

The Virginia Department of Environmental Quality (DEQ) appreciates the opportunity to comment on the proposed rule defining the scope of waters federally regulated under the Clean Water Act (CWA) as published in the Federal Register (Vol. 84, No. 31, pp. 4154-4220; February 14, 2019). We understand that this proposed “Waters of the United States (WOTUS)” rule (the Rule) intends to increase CWA program predictability and consistency by increasing clarity as to the scope and extent of WOTUS.

The United States Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (the Corps) emphasize the importance of balancing both federal and state roles in implementing the CWA. DEQ agrees that effective administration of the CWA requires the complex balancing of state and federal interests and responsibilities. We are also dedicated to achieving the stated objective of the CWA: “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”, as stated in CWA §101(a).
DEQ supports clarity in definitions, jurisdiction, exclusions, review standards, and procedures. We believe that the Rule’s intended goal of providing this clarity, consistency, and predictability has missed the mark in several key areas highlighted in Attachment A. We believe that some of the proposed revisions will actually cause more ambiguity, confusion, and unpredictability, hence leading to unintended consequences and loss of environmental protection at both the federal and state levels. In addition, we agree with many of the concepts and suggestions put forward in comment letters by both the Association of Clean Water Administrators (ACWA) and Association of State Wetland Managers (ASWM).

Further, we believe that some portions of the proposed rule do not accomplish the stated goal due to the practical field application of the Rule’s concepts. Regional field procedures will be necessary, and Corps personnel and their state co-regulators will need region-specific field training to implement the rule effectively and efficiently.

In Virginia, the proposed rule will not replace or supersede the statutory authority given to DEQ under State Water Control Law (Title 62.1 Code of Virginia) for impacts to state waters. Over several decades, DEQ has worked closely with the Corps’ Norfolk District to implement our complementary authorities in an effective and efficient manner. We appreciate the federal agencies goal of providing more clarity and predictability to the regulated community. However, we believe there are a number of topic areas in the proposed rule that will actually cause more confusion and uncertainty, leading to inconsistent implementation and unintended consequences. Given the amount of time needed to develop regional guidance and regional implementation of field procedures, the Rule should have a delayed effective date to provide both the state and federal partners ample time to thoughtfully develop sound and efficient regulatory procedures and training.

Again, we appreciate the opportunity to comment, and hope that the federal agencies will consider these suggestions to provide further clarity and certainty to the regulated community, reduce unintended consequences, and maintain environmental protection.

Sincerely,

[Signature]
David K. Paylor

DKP:ewf
Attachment
DEQ offers specific topic-related comments with a goal of achieving more clarity, consistency, predictability and environmental protection from the proposed rule:

1. **Ditches**

While we appreciate the agencies’ attempt to provide clarity regarding the distinction between the terms “tributary” and “ditch”, we do not believe that adding “ditches” as a new category of waters achieves the clarity intended. In many parts of Virginia, tributaries have been channelized and used as stormwater conveyances (i.e., streams located along roads that serve as roadside ditches and streams that serve as drainages in certain low-lying localities). These tributaries may colloquially be called ‘ditches’ even though they are actually part of the tributary network. Inherently, ditches are purpose-built structures, constructed to convey surface waters.

However, the proposed rule acknowledges that some ditches will retain federal jurisdiction while others will not. Ditches should not be included as a new category. In the three instances where ‘ditches’ will retain their federal jurisdiction, we suggest that these be included within the “tributary” category. These three instances could be identified as “channelized tributaries”, and a new definition could be included in the Rule.

For a definition of “channelized tributary” we suggest:

**Channelized Tributary** - a tributary that has been widened, deepened, straightened, cleaned or paved. Where a tributary has been relocated into a “ditch”, in whole or in part, the ditch is considered a channelized tributary and is regulated as an (a)(1) water.

Ditches would then be distinguished from channelized tributaries, and considered a purpose-based feature that would be excluded from federal jurisdiction. Specific examples of ditches and their attendant purpose(s) could be identified, such as “roadside ditch”, “agricultural ditch”, “irrigation ditch”, etc. The Rule would then make a clear distinction between ditches (lacking federal jurisdiction) and channelized tributaries (retaining federal jurisdiction).
2. **Flow Regime**

We do not believe the Rule should include or indicate a flow regime. The terms “ephemeral”, “intermittent”, and “perennial” are difficult terms to precisely pinpoint in the field, and several methods to distinguish between these flow regimes take time and personnel to collect field data. It appears that the proposed Rule is intended to include those tributaries that have some amount of predictable surface flow beyond precipitation-only conveyance channels. Both intermittent and perennial channels intercept groundwater during some or all parts of the year, lending to observable physical and biological characteristics easily identified in the field.

Greater development in wetlands and intermittent or ephemeral channels stemming from the rule change would modify the hydrologic regime, particularly in headwater channels, most likely changing the frequency and duration of storm flows. The loss of flow from impoundments, diversions, filling wetlands and/or springs, could cause decreased flow, particularly during low-flow conditions, thus reducing water availability during drought conditions. Presumably, development will cause water to flow directly into stream channels, preventing infiltration into surficial groundwater aquifers, and likely changing base surface flows.

Headwater streams, which comprise the majority of Virginia’s inland water bodies, are the dominant influence on the water quality in many navigable waters and their perennial tributaries. Determining the degree to which surface flow is connected to groundwater, and the use of these results to indicate flow permanence is prohibitively complex for many waters in Virginia. This process would substantially increase the complexity of determining regulatory authority, in direct contradiction to the intended purpose of the rule.

In Virginia, we do not base regulatory decisions on the terms “ephemeral”, “intermittent”, and “perennial” because too much time was spent by consultants and staff trying to determine whether a channel was “ephemeral”, “intermittent”, or “perennial”. While we acknowledge that there are ecological and biological differences between intermittent and perennial channels, both types of streams are regulated; therefore, it seems to be an inefficient use of time to make this distinction when the overall regulatory outcome would be the same.

Detailed flow information will not be available for many tributaries, and it may be difficult to determine flow patterns in a “typical” year, not to mention tracing that flow through various features from headwaters into the navigable waters. Virginia also has many streams and rivers that flow through porous Karst geology. Streams and rivers in these areas often exhibit unique characteristics that defy normal flow regime definitions. For these reasons, at least some states, including Virginia, found the 2015 Rule reliance on physical indicators of regular flow useful in defining the regulated stream channel in the processing of a permit application.
DEQ uses a much more practical, field-observation method: if a channel has a bed, a bank, and an ordinary high water mark, then it is regulated. All three characteristics must be present. The rationale is that an ephemeral channel’s hydrology is precipitation driven, and these channels do not intercept groundwater at any time during the year. Therefore, it is unlikely that such a channel would exhibit all three characteristics. Much like wetland delineations use the presence or absence of hydrology field indicators to aid in the determination, this method allows for direct observations in the field without the need for detailed analyses of any precipitation data or surface or groundwater flow data. We believe a more practical, field observation approach – while not as precise as a detailed data analysis – would be clearer and more understandable to the regulated community.

3. **Surface Water Withdrawals**

In Virginia, many nationwide permits deny or provide conditional Section 401 Water Quality Certification to activities related to surface water withdrawals. If such projects no longer require a nationwide permit because the surface water is no longer a federal-regulated water, then these water withdrawal related construction activities may proceed without review from the federal co-regulators. While a state permit would still be required for these projects, there may be negative downstream effects on federally jurisdictional waters for which the federal partners had no review or input. This situation may present both state and federal co-regulators with unintended consequences related to water quality and quantity issues.

Virginia may need to issue more surface water withdrawal permits for projects previously permitted by the Corps with a nationwide permit and accompanying Section 401 Water Quality Certification. For instance, dredging around a water intake may now require a state permit, where a nationwide permit 19 (Minor Dredging) and unconditionally certified by DEQ was previously used. This may cause confusion and uncertainty with the regulated community.

4. **Adjacent Wetlands**

The CWA has protected wetlands adjacent to traditional navigable waters (TNW’s) since 1977. The term “adjacent” has been previously defined as “bordering, neighboring, or contiguous”. The rule proposes to redefine “adjacent” to mean only wetlands that “abut” or have a direct surface (not groundwater) hydrologic connection to WOTUS, where “abut” is defined as meaning that a wetland physically touches the water in question.

DEQ is concerned about the consequences of changing the definition of “adjacent wetlands” to eliminate a traceable groundwater connection, instead only recognizing continuous surface connections through flood inundation during a typical year of precipitation. While the rule contemplates federal jurisdiction for tributaries having
intermittent and perennial flow – both of which have a groundwater component – the Rule then only contemplates wetlands having a surface flow. This regulatory discrepancy does not follow the ecology or hydrologic cycle logically. Wetlands are not defined by flow regime, and such an assignment is not necessarily applicable to this resource type. Many wetlands are supported at least in part by groundwater, and in many wetlands groundwater is the predominant source of supporting hydrology. These groundwater-supported wetlands are essential to other traditional surface waters by contributing base flow to maintain relatively permanent, perennially or seasonally flowing waters; storing floodwaters; and providing natural water quality and habitat benefits. We do not believe that it is possible to protect traditional navigable waters – as contemplated by the proposed rule – without regulating activities in wetlands hydrologically connected via groundwater to other surface waters. We also predict great difficulty in distinguishing between wetlands that would now be considered “adjacent” under the proposed rule from those lacking the prescribed surface connection during typical years.

5. Establishing a “Typical Year”

The proposed rule establishes six categories of regulated waters, and four of those categories (Tributaries, Ditches, Lakes and ponds, and Adjacent Wetlands) require that jurisdiction be based on a “typical year” of precipitation. The rule states that a typical year “means within the normal range of precipitation over a rolling thirty-year period for a particular geographic area, excluding times of drought or extreme flooding.” A year is considered “typical” when “observed rainfall from the previous three months falls within the 30th and 70th percentiles established by a 30-year rainfall average.” In addition, the Rule proposes a “watershed-scale basis” as the geographic area for determining a typical year. Finally, the definition for intermittent waters also introduced another modifier, describing intermittent waters as surface waters flowing continuously during “certain times of a typical year”. Taken together, “typical year” and the related terms and modifiers have not added clarity to the proposed rule, instead introducing considerable ambiguity and uncertainty.

The National Weather Service (NWS) provides precipitation trends for specific times, and calculates the percent of normal precipitation for a specified period. These data are generally considered over the preceding thirty-years to establish average precipitation amounts across the Commonwealth. This analysis is used to define anticipated storm events occurring at five and ten year intervals, for example, and informs the design parameters for effective storm water controls.

For establishing normal hydrology for regulatory purposes, Virginia uses a variety of precipitation data sources in addition to the NWS information. The Corps’ Norfolk District reviews annual precipitation and soil data from the NWS; compares current precipitation to long-term data from local weather stations; and compares recent groundwater levels to previous years of groundwater level data from local reference
wetland locations. Other data sources include: Natural Resources Conservation Services (NRCS) WETS Tables based on stream gauge stations located throughout the Commonwealth, NASA’s Gravity Recovery and Climate Experiment (GRACE) data, and multiple years of groundwater levels from wetland reference sites located throughout Virginia. The proposed rule’s methodology for establishing a “typical year” should account for the entire range of available data, including regional geographic variances, when used to define regulated waters.

6. **Adjacent Wetlands and Wetlands Separated from Other Jurisdictional Waters**

The proposed rule eliminates federal jurisdiction over wetlands physically separated from jurisdictional waters by upland or by dikes, barriers, or similar structures and that lack a direct hydrologic surface connection to jurisdictional waters. The proposed rule contemplates that federal jurisdiction would be maintained if perennial or intermittent flow were established between the water and the wetland via features such as a culvert or tide gate, or by “overtopping” of the barrier. However, this approach is far more limiting than the traditional rule, which simply provides that such barriers do not break the connection between wetlands and adjacent waters. This approach also disregards the role of natural river processes and the direct surface connection with a river’s floodplain and associated wetlands. We suggest that riverine wetlands separated from jurisdictional waters by natural berms be considered adjacent wetlands with or without a direct hydrologic surface connection to those jurisdictional waters.

Riverine wetlands also connect hydrologically to rivers and streams through shallow subsurface connections, including filtration through natural berms. Undisturbed rivers typically form natural berms because of sediment deposits associated with routine flooding. Flooding patterns are unlikely to be sufficiently documented to determine a “typical” year, but the hydrological connection is maintained regardless through shallow, subsurface flow. Flooding is a growing threat in many areas of Virginia, because of floodplain loss and more frequent storm events.

The proposed rule places a significant burden on the regulatory agencies to find and evaluate hydrologic connections with riverine floodplain wetlands, and to determine whether there is a hydrologic connection in a “typical” year (as defined in the proposed rule, over a rolling 30-year period). We anticipate the result would likely under assess such connections; thus increasing confusion and unpredictability that the Rule portends to reduce.

7. **Interstate Waters**

We are concerned that the Rule proposes to eliminate Interstate Waters as a distinct category of waters. Because of EPA’s function as a federal partner who can help mitigate and manage water quality impacts from upstream to downstream states, we believe that
eliminating this category of waters makes it difficult for downstream states to address water quality issues not solely in control of one, or more than one, state due to the movement of pollutants downstream. EPA must consider the unintended consequences created by removal of interstate waters as a de facto jurisdictional category, particularly where a waterbody is not in itself a Traditional Navigable Water or tributary to one.

Further, the proposed rule may remove certain waters from water quality monitoring and discharge regulation under the current CWA Section 402 requirements, resulting in downstream states receiving impaired water from an upstream state. This may lead to jurisdictional issues between the Commonwealth and adjacent states, including ambiguity and conflict resolution, as well as state waters being adversely affected by the actions of an adjoining state over which the Commonwealth has no jurisdiction. The proposed rule should recognize that, for purposes of maintaining water quality, river and stream systems transcend geopolitical boundaries. A watershed approach to defining waters protected under a new rule is necessary to maintain water quality, regardless of state boundaries.

8. **Streams in Karst Topography**

Virginia’s Valley and Ridge physiographic province is located in the mountainous western region of the Commonwealth, and is often underlain by porous Karst topography. Whole river systems might flow underground for some distance and then resurface. The connection between ground water and surface water plays a major role in ground water recharge in the Valley and Ridge, where streams often cross fault zones recharging aquifers. The streams and rivers that flow through Karst topography exhibit characteristics that defy conventional flow regime definitions. The proposed rule could exclude many of these complex hydrologic features from existing regulatory protections.

9. **Region-Specific Guidance**

Virginia’s geology is diverse and ranges from the mountainous region in the west, where high gradient streams flow through topography often underlain by Karst geology, through the piedmont with a variety of soil types and stream geomorphology, out onto the broad coastal plain characterized by sandy, silty soils and broad, slow moving stream systems, often with tidal interfaces. This geologic diversity requires that the Rule contemplate the unique geographic characteristics of individual states, regions, or ecoregions. For this reason, regional field procedures will be necessary, and Corps personnel and their state co-regulators will need region-specific field training to implement the Rule effectively and efficiently.
10. **Defining Prior Converted Croplands**

“This 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.”

This is contrary to “Under this proposed rule, prior converted cropland is considered abandoned if it is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years.” Conservation or agricultural purposes is not defined, and the existing assumption has been that allowing cropland to remain idle or fallow for the preceding five years is outside of normative agricultural production cycles and thus agricultural uses no longer apply. In addition, we are unclear why conservation purposes are a consideration for converted cropland, as the purpose of conservation through the Natural Resource Conservation Service (NRCS) is to reduce degradation caused by agricultural conversion.

11. **Point Source Discharges/Section 402 CWA Program**

Virginia statute defines state waters more broadly than does the proposed Rule. According to State Water Control Law, “State waters means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.” While the proposed revision to the federal definition does not intend to limit or supersede state statutory authority, it could draw future challenges of the state definition and make our authority vulnerable to legislative actions. The narrower scope of the proposed Rule may also have the unintended consequence of encouraging discharges to more environmentally sensitive headwaters streams where the discharge would not be regulated. We anticipate this would have adverse environmental impacts not just on the headwater streams but also on downstream waters that ultimately would receive the unregulated discharges. In addition, Virginia is concerned that permits issued to discharges defined as state waters, but not meeting the federal definition, may no longer be recognized as National Pollution Discharge and Elimination System (NPDES) permits. We do not fully understand the possibly consequences of reduced EPA oversight of, and grant funding for, the NPDES program.

12. **Total Maximum Daily Load (TMDL) Program**

The proposed Rule will likely effect TMDL implementation, as nearly 1,000 TMDLs have been developed for impaired waters in Virginia based on the watershed approach. An important component of TMDLs includes Waste Load Allocations (WLAs) assigned to applicable regulated facilities, using Virginia Pollution Discharge and Elimination System (VPDES) permits. Resource expenditures, in terms of direct cost and staff time associated with TMDL modifications may be increased and their effectiveness decreased
with a loss of reasonable assurance. Examples of TMDLs that may be affected by the rule include:

- TMDL watersheds containing ephemeral streams assigned TMDL equations for existing sources of pollutants;
- Permitted facilities discharging pollutants of concern to impaired waters that are redefined and no longer regulated, requiring the assigned WLAs to be reassigned as Load Allocations (LA), a non-point source component of the TMDL;
- Removal of interstate waters as a regulated category, which may result in the Commonwealth receiving impaired water from an upstream state.

13. State Resources/Funding

In Virginia, maintaining water quality standards, as defined by Federal and State law, is dependent on the protection of headwater streams and the wetland systems that buffer runoff, attenuate floodwaters and support the biologic diversity of benthic macro invertebrates and other aquatic species vital to maintaining water quality. If the rule reduces protections to these systems at the federal level, Virginia, and other states, must then replace those protections at the state level. This will require states to hire and train new personnel to fill the gap left by the federal withdrawal of protections to those waters currently funded by federal tax dollars. A transition to a less protective rule should incorporate some level of federal funding to allow states to maintain their water quality standards as required by CWA Section 401.