



Navigable Waters Protection Rule

Overview of the Navigable Waters Protection Rule

On January 23, 2020, the U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) fulfilled yet another promise of President Trump by finalizing the Navigable Waters Protection Rule to define “waters of the United States” (WOTUS). For the first time, the agencies are streamlining the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. Congress, in the Clean Water Act, explicitly directed the Agencies to protect “navigable waters.” The Navigable Waters Protection Rule regulates these waters and the core tributary systems that provide perennial or intermittent flow into them. The final rule fulfills [Executive Order 13788](#) and reflects legal precedent set by key Supreme Court cases as well as robust public outreach and engagement, including pre-proposal input and comments received on the proposed rule.

The Navigable Waters Protection Rule protects the environment while respecting states, localities, tribes, and private property owners. It clearly delineates where federal regulations apply and gives state and local authorities more flexibility to determine how best to manage waters within their borders. Assertions have been made that the new rule will reduce jurisdiction over thousands of stream miles and millions of acres of wetlands. These assertions are incorrect because they are based on data that is too inaccurate and speculative to be meaningful for regulatory purposes. The final rule along with state, local, and tribal regulations and programs provide a network of protective coverage for the nation’s water resources.

THE FINAL REVISED DEFINITION

The Navigable Waters Protection Rule outlines four clear categories of waters that are considered “waters of the United States.” These four categories protect the nation’s navigable waters and the core perennial and intermittent tributary systems that flow into those waters.

Territorial seas and traditional navigable waters (TNWs)

- Under the final rule, the territorial seas and traditional navigable waters include large rivers and lakes—such as the Mississippi River, the Great Lakes, Chesapeake Bay, and the Erie Canal—and tidally-influenced waterbodies used in interstate or foreign commerce.

Tributaries

- Under the final rule, tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year—such as College Creek, which flows into the James River near Williamsburg, Virginia.
- These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.

- Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other “waters of the United States,” through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.

Lakes, ponds, and impoundments of jurisdictional waters

- Lakes, ponds, and impoundments of jurisdictional waters, such as Lake Pepin in Minnesota and Lake Travis in Texas, are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other “waters of the United States,” through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a “water of the United States” in a typical year, such as certain oxbow lakes that lie along the Mississippi River.

Adjacent wetlands

- Wetlands that physically touch other jurisdictional waters are “adjacent wetlands,” such as Horicon Marsh along the Rock River in Wisconsin.
- Wetlands separated from a “water of the United States” by only a natural berm, bank or dune are also “adjacent.”
- Wetlands inundated by flooding from a “water of the United States” in a typical year are “adjacent.”
- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are “adjacent” so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

The final rule also outlines what are not “waters of the United States.” The following waters/features are not jurisdictional under the rule:

- Waterbodies that are not included in the four categories of “waters of the United States” listed above—this distinction will provide clarity that where a water or feature is not identified as jurisdictional in the final rule, it is not a jurisdictional water under the Clean Water Act.
- Groundwater, including groundwater drained through subsurface drainage systems, such as drains in agricultural lands.
- Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools.

- Diffuse stormwater run-off and directional sheet flow over upland.
- Many farm and roadside ditches.
- Prior converted cropland retains its longstanding exclusion, but is defined for the first time in the final rule. The agencies are clarifying that this exclusion will cease to apply when cropland is abandoned (*i.e.*, not used for, or in support of, agricultural purposes in the immediately preceding five years) and has reverted to wetlands.
- Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.
- Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.
- Stormwater control features excavated or constructed in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off.
- Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention and infiltration basins and ponds, that are constructed in upland or in non-jurisdictional waters.
- Waste treatment systems have been excluded from the definition of “waters of the United States” since 1979 and will continue to be excluded under the final rule. Waste treatment systems are defined for the first time in this rule.
 - A waste treatment system includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater or stormwater prior to discharge (or eliminating any such discharge).

FEDERAL-STATE RELATIONSHIP

- With this final rule, there is a clear distinction between federal waters and waters subject to the sole control of the states, their governmental subdivisions, and tribes.
- The Clean Water Act envisions an approach whereby states, localities, tribes, and the federal government work in partnership to protect the nation’s waters from pollution.
- The final rule is in line with that intent and appropriately identifies waters that should be subject to federal regulation under the Clean Water Act.
- Many states, localities, and tribes have existing regulations and programs that apply to waters within their borders, whether or not they are considered “waters of the United States.” The federal government remains committed to helping all states and tribes enhance their capacity to regulate, protect, and restore their waters.
- Together, the final revised definition and existing state, local, and tribal regulations and programs will provide a network of protective coverage for the nation’s water resources.

EFFECTS OF THE FINAL RULE

- The Navigable Waters Protection Rule provides clarity, predictability, and consistency so that regulators and the public can understand where the Clean Water Act applies and where it does not. Such straightforward regulations will continue to protect the nation’s navigable waters, help sustain economic growth, and provide greater regulatory certainty.
- The role of federal government under the Clean Water Act ultimately derives from Congress’ commerce power over navigation. The Clean Water Act explicitly directs the agencies to protect “navigable waters.” The Navigable Waters Protection Rule regulates these waters and the core tributary systems that provide perennial or intermittent flow into them.
- The agencies developed an illustrative economic analysis for the final rule that looks at the potential costs, benefits, and economic impacts of the revised definition of “waters of the United States” relative to the October 2019 “Definition of ‘Waters of the United States’—Recodification of Pre-Existing Rules” final rule baseline practice.
- The agencies have identified, where possible, how the final rule may affect categories of water resources across the country and potential effects on Clean Water Act programs. The agencies have also highlighted longstanding and continuing data limitations that prevents them from developing quantitative national estimates of impacts for most Clean Water Act programs.
- The final rule becomes effective 60 days from publication in the Federal Register.

KEY CHANGES FROM PROPOSAL IN RESPONSE TO COMMENTS

- Ditches and impoundments are no longer separate categories of jurisdictional waters.
- The preamble to the final rule provides additional useful clarification on traditional navigable waters.
- In the final rule, the agencies have clarified and simplified the types of connections to the perennial and intermittent tributary network that can make lakes, ponds, and impoundments jurisdictional.
- Perennial and intermittent tributaries upstream of ephemeral reaches are jurisdictional when they have a surface water connection to a downstream jurisdictional water in a typical year. Under the proposal, ephemeral reaches would have severed jurisdiction for upstream waters.
- The final rule expands and clarifies the factors that determine whether wetlands are considered adjacent, and thus covered by the Clean Water Act. Under the proposal, wetlands physically separated by a natural or artificial barrier from another jurisdictional water would not have been subject to Clean Water Act jurisdiction. Many of these wetlands will be covered by the final rule.

FOR MORE INFORMATION

- See the photo appendix to this Overview Factsheet for illustrative examples of applying the Navigable Waters Protection Rule: <https://www.epa.gov/nwpr/navigable-waters-protection-rule-factsheets>
- Additional fact sheets along with copies of the final rule and supporting analyses are available on EPA's website at <https://www.epa.gov/nwpr>.



Navigable Waters Protection Rule

Implementing the Navigable Waters Protection Rule

On January 23, 2020, the U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) fulfilled yet another promise of President Trump by finalizing the Navigable Waters Protection Rule to define “waters of the United States” (WOTUS). For the first time, the agencies are streamlining the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. Congress, in the Clean Water Act, explicitly directed the Agencies to protect “navigable waters.” The Navigable Waters Protection Rule regulates these waters and the core tributary systems that provide perennial or intermittent flow into them. The final rule fulfills [Executive Order 13788](#) and reflects legal precedent set by key Supreme Court cases as well as robust public outreach and engagement, including pre-proposal input and comments received on the proposed rule.

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GENERAL IMPLEMENTATION OF THE FINAL RULE

- Certain tools, data and approaches to determining jurisdiction will facilitate implementation in the field. This fact sheet highlights how the agencies intend to implement key aspects of the final rule.
- The agencies will typically consider all relevant sources of information when completing an approved jurisdictional determination, which may include on-site observations, field-based indicators of hydrological conditions, maps, remote tools, and reliable datasets that are available for the waterbody under evaluation.
- The availability, accuracy, completeness, reliability, and applicability of these various methods, tools, and sources of information may vary regionally and for site-specific reasons. The agencies are not mandating the use of specific data or tools to implement the final rule.
- The agencies will continue the longstanding practice of evaluating waters based on the weight of evidence from the best available sources of information available for that waterbody.

IDENTIFYING AND DELINEATING SURFACE WATER FEATURES

- A variety of remote tools and resources may be used to identify the presence of a potential jurisdictional waterbody on the landscape. For example, U.S. Geological Survey (USGS) topographic data, state and local maps, aerial photography and satellite imagery, the USGS National Hydrography Dataset (NHD), U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) maps, or the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) Soil Surveys may be used to indicate the presence of a stream, river or ditch; a lake, pond, or impoundment; or a wetland within the review area.
- These tools were not designed to indicate the jurisdictional status of a waterbody, and limitations associated with these tools often require field-verification for accuracy.
- Selection of the specific, appropriate tool(s) and resource(s) will also depend on the type of surface water feature under evaluation. For example, determining the jurisdictional status of a ditch requires a determination of whether the ditch was constructed in or relocated a tributary, or was constructed in an adjacent wetland, which may require the use of one or more of the following data sources: historic maps and historic aerial photographs, local and state records and surface water management plans, agricultural records, street maintenance data, historic permitting and jurisdictional determination records, certain hydrogeomorphological or soil indicators, wetlands and conservation programs and plans, and/or data from functional assessments and monitoring efforts.
- The agencies will also continue to use existing resources and methods to verify the presence of potential jurisdictional waterbodies, delineate the boundaries of jurisdictional waters, and determine the lateral extent of jurisdiction, where applicable. For example, the agencies will continue to use the Army Corps of Engineers' (Corps) 1987 Wetland Delineation Manual to verify the presence of a wetland and to delineate its boundaries. The agencies will also continue to use the Corps' ordinary high water mark manuals, as well as any other applicable guidance documents to determine the lateral limits of jurisdiction for tributaries.

DETERMINING PERENNIAL OR INTERMITTENT FLOW CLASSIFICATIONS

- A stream or river, or other surface water channel, must be perennial or intermittent in a typical year to meet the definition of "tributary" under the final rule.
- The agencies have been using flow classifications to make jurisdictional determinations for more than a decade. To determine whether a surface water channel is perennial or intermittent in a typical year, the agencies may use a compilation of the best available mapping sources, including the NHD or local maps, as well as other remote tools and datasets such as aerial photographs, NRCS hydrologic tools and soil maps, desktop tools that estimate the discharge sufficient to generate intermittent or perennial flow (*e.g.*, a regional regression analysis or hydrologic modeling), USGS topographic data, or modeling tools using drainage area, precipitation data, weather, topography, land use, vegetation cover, geology, and/or other publicly available information.
- One example of a tool that could inform determinations of a channel's flow classification is the USGS StreamStats web application, including the Probability of Streamflow Permanence

(PROSPER) tool. StreamStats allows users to obtain estimates of streamflow statistics for user-selected ungaged sites, and is available at: <https://streamstats.usgs.gov/ss/>.

- In some cases, one or more site visits may be needed to perform on-site observations of surface hydrology or collect field-based indicators of perennial or intermittent flow (e.g., the presence of riparian vegetation, or certain aquatic macroinvertebrates). The agencies may also use existing rapid, field-based streamflow duration assessment methods (SDAMs) that use physical and biological indicators to determine the flow duration class of a stream reach.
 - The agencies have previously used existing SDAMs developed by federal and state agencies to identify perennial or intermittent streams, and will continue to use these tools whenever they are determined to be a reliable source of information for the specific water feature of interest. One example of an existing SDAM is *The Streamflow Methodology for Identification of Intermittent and Perennial Streams and Their Origins*, developed by the North Carolina Division of Water Quality, which is available at: https://files.nc.gov/ncdeq/Water%20Quality/Surface%20Water%20Protection/401/Policies_Guides_Manuals/StreamID_v_4point11_Final_sept_01_2010.pdf.
 - The EPA, the Corps, and the state of Oregon previously developed a regionalized SDAM that has been validated for use throughout the Pacific Northwest since 2015 and is available at: <http://www.epa.gov/measurements/streamflow-duration-assessment-method-pacific-northwest>.
 - The agencies are currently working to develop regionally-specific SDAMs for nationwide coverage, which will promote consistent implementation across the United States. As the agencies work to develop these methods, the agencies will provide opportunities for the public to comment on the use of these methods, and seek scientific peer-review, before regional methods are finalized. Additional information on the agencies' efforts to develop SDAMs will be available on the EPA's website.

DETERMINING CONTRIBUTION OF FLOW DOWNSTREAM

- A perennial or intermittent river, stream, or other naturally occurring surface water channel must contribute surface water flow to a traditional navigable water or territorial sea in a typical year to meet the definition of "tributary" and be jurisdictional under the final rule. Similarly, a lake, pond, or impoundment of a jurisdictional water may be jurisdictional if it contributes surface water flow to a traditional navigable water or territorial sea in a typical year.
- To determine whether a waterbody contributes surface water flow to a traditional navigable water or territorial sea in a typical year, one may use, for example, USGS maps, state and local maps, aerial photography, or other remote sensing information or models that have been verified to be reliable to assess a feature's flow path.
- For example, a tool that may be used to determine the contribution of surface water flow downstream is a trace analysis in a Geographic Information System (GIS), which allows users to select a point on a map and the flow path will be traced downstream along the stream

network until the network ends. The USGS StreamStats incorporates such a tool called the “Flow (Raindrop) Path,” available at: <https://streamstats.usgs.gov/ss/>.

DETERMINING INUNDATION BY FLOODING

- A lake, pond, or impoundment of a jurisdictional water may meet the definition of a “water of the United States” if it is inundated by flooding from a jurisdictional water in a typical year. A wetland that is inundated by flooding from a jurisdictional water in a typical year is an “adjacent wetland” under the final rule.
- To determine whether a waterbody is inundated by flooding during a typical year one may use, for example, on-site visual observations and field-based indicators of recent inundation (*e.g.*, the presence of water marks, sediment and drift deposits, water-stained leaves, or algal mats), or remote tools and datasets such as USGS stream gage records, recurrence intervals of peak flows, wetland surface water level records, flood records, aerial photography and satellite imagery, or inundation modeling techniques and tools (*e.g.*, tools available from the USGS Flood Inundation Mapping (FIM) program).
- A site-specific modeling tool that may be used to evaluate inundation is the Hydrologic Engineering Center’s River Analysis System (HEC-RAS) software, which allows users to perform two-dimensional hydraulic calculations for natural and constructed channels, and to perform inundation mapping and create inundation depth and floodplain boundary datasets. The HEC-RAS software is available at: <https://www.hec.usace.army.mil/software/hec-ras/>.

DETERMINING A DIRECT HYDROLOGIC SURFACE CONNECTION

- A wetland that is physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure may be determined to be adjacent and therefore a “water of the United States” under the final rule so long as that structure allows for a direct hydrologic surface connection between the wetland and the jurisdictional water in a typical year (*e.g.*, through a culvert, tide gate, pump, or similar artificial feature). An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.
- To determine whether a wetland is separated only by an artificial structure that allows for a direct hydrologic surface connection in a typical year, such artificial features may be identified through on-site observations or remotely using construction design plans, permitting data, state and local information, or levee or drainage district information.

DETERMINING SURFACE FLOW AND SURFACE WATER CONNECTIONS IN A “TYPICAL YEAR”

- Under the final rule, determining the jurisdictional status of a waterbody is generally informed by understanding the normal periodic range of precipitation and other climactic variables for that waterbody (*i.e.*, “typical year”).

- Tools, methods, datasets, observations and other sources of information used to evaluate surface flow and surface water connections should be interpreted in the context of a *typical year*. This ensures that the hydrologic conditions being evaluated are representative of the normal periodic range of conditions (*e.g.*, seasonally, annually) for the waterbody of interest, and that determinations are not based on conditions that are too wet or too dry, such as during a period of drought or after an extreme flood event. When conditions are not “typical,” for example where a stream is dry during conditions of drought, the agencies will use the best available sources of information to evaluate whether that stream would flow intermittently in a typical year.
- A variety of tools and datasets are available to ensure that the time period of evaluation is neither too wet nor too dry. The agencies will generally use a web-based antecedent precipitation tool (APT) developed by the Army Corps of Engineers that collects National Oceanic and Atmospheric Administration (NOAA) precipitation data from nearby weather stations and compares precipitation from the period of interest to the past 30 years of precipitation. For example, the tool can be used to compare precipitation data from the most recent summer to the range of precipitation from the past 30 summers. For more information on the APT, see the agencies Fact Sheet on “Typical Year” for the final revised definition of “Waters of the United States” Rule.
- Other climactic factors like temperature or drought patterns may be considered along with precipitation. For example, drought periods may be identified by examining trends in drought indices, such as the Palmer Drought Severity Index (PDSI), which takes into account not only precipitation but also temperature, which affects evapotranspiration, and soil moisture conditions. Time-series plots of PDSI values by month or year are available from the National Climatic Data Center (NCDC) at: <https://www.ncdc.noaa.gov/temp-and-precip/drought/historical-palmers/psi/201811-201910>.
- One may need to consider whether the sources of information being evaluated are representative of the “typical year.” The Web-based Water-Budget Interactive Modeling Program (WebWIMP) is one source for approximate dates of wet and dry seasons for any terrestrial location based on average monthly precipitation and estimated evapotranspiration, and is available at: <http://climate.geog.udel.edu/~wimp/>.
- In certain parts of the country and during certain times of the year, melting snowpack may have a more significant influence on flow and surface water connections than rainfall. Sources of information on snowpack can be found using NOAA’s National Snow Analyses available at: <https://www.nohrsc.noaa.gov/nsa/>, or using NRCS’s Snow Telemetry (SNOTEL) data and products, available at: <https://www.wcc.nrcs.usda.gov/snow/>.



Navigable Waters Protection Rule

Mapping and the Navigable Waters Protection Rule

On January 23, 2020, the U.S. Environmental Protection Agency (EPA) and the Department of the Army (Army) fulfilled yet another promise of President Trump by finalizing the Navigable Waters Protection Rule to define “waters of the United States” (WOTUS). For the first time, the agencies are streamlining the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. Congress, in the Clean Water Act, explicitly directed the Agencies to protect “navigable waters.” The Navigable Waters Protection Rule regulates these waters and the core tributary systems that provide perennial or intermittent flow into them. The final rule fulfills [Executive Order 13788](#) and reflects legal precedent set by key Supreme Court cases as well as robust public outreach and engagement, including pre-proposal input and comments received on the proposed rule.

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EXISTING TOOLS CANNOT ACCURATELY MAP THE SCOPE OF CLEAN WATER ACT JURISDICTION

- Due to existing data and mapping limitations, it is not possible to accurately determine the full scope of waters that are “in” or “out” under any WOTUS definition.
- When the *Navigable Waters Protection Rule* was proposed, some claimed that 51% of the nation’s wetlands and more than 18% of the nation’s streams would lose CWA protection.
- These estimates are highly unreliable and are based on stream and wetland datasets that were not created for regulatory purposes and which have significant limitations.
- Purported statistics of jurisdictional changes are unreliable and inherently inaccurate, in part because:
 - there are currently no comprehensive datasets through which the agencies can depict the universe of “waters of the United States,” and
 - the datasets used to generate these figures – the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) and the U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI) – were not developed for regulatory purposes and have significant technical limitations that prevent the agencies from using them to identify CWA jurisdiction, regardless of the regulatory definition of “WOTUS.”

- While the NHD and NWI are the most comprehensive hydrogeographic datasets mapping waters and wetlands in the United States and are useful resources for a variety of federal programs, including CWA programs, they cannot be used as standalone tools to determine the scope of CWA jurisdiction.
- Importantly, the *Navigable Waters Protection Rule* covers tributaries with intermittent flow and excludes other features with only ephemeral flow, but the NHD—even at high resolution—cannot differentiate between intermittent or ephemeral flow in most parts of the country.
- Further, the NWI uses a different definition of “wetlands” than the agencies’ regulatory definition of “wetlands.” The NWI also does not contain information sufficient to evaluate whether those mapped wetlands meet the definition of “adjacent wetlands” under previous regulations or under the final rule. For example, the NWI does not identify whether a wetland is inundated by the nearest jurisdictional water.
- The NHD has other limitations that prevent its use for accurately mapping the scope of jurisdictional waters under the CWA, including:
 - errors of omission (*e.g.*, failure to map streams that exist on the ground),
 - errors of commission (*e.g.*, mapping streams that do not exist on the ground),
 - horizontal positional inaccuracies,
 - misclassification of stream flow permanence, particularly in headwaters, and
 - inconsistent mapping in different parts of the country.
- The NWI also has additional limitations, including:
 - errors of omission (*e.g.*, failure to map wetlands that exist on the ground),
 - errors of commission (*e.g.*, mapping wetlands that do not exist on the ground), and
 - potentially inaccurate wetland boundary identification.
- While early in the regulatory process the agencies attempted to use the NHD and NWI to assess the potential change in CWA jurisdiction as a result of the proposed rule, the agencies ultimately concluded that the limitations of these datasets preclude their use for quantifying the extent of waters whose jurisdictional status could change under the proposal.
- Due to these limitations, which were confirmed during the public comment period for the proposed rule and an extensive evaluation by the agencies, the agencies did not use the NHD or NWI to assess potential changes in jurisdiction as a result of the final rule.

IT IS THE CONSISTENT POSITION OF THE AGENCIES THAT NO MAPS EXIST THAT IDENTIFY THE SCOPE OF “WOTUS”

- It has been the consistent position of the agencies that the NHD and the NWI do not represent the scope of waters subject to CWA jurisdiction.
- Of note, the agencies did not use these maps to estimate changes in jurisdiction when the 2003 *SWANCC* Guidance was issued, when the 2008 *Rapanos* Guidance was issued, or when the 2015 Rule was promulgated.
- As the agencies promulgated the 2015 Rule, EPA stated at the time that they “do not have maps depicting waters of the United States under either present regulatory standards or those

in the final [2015] rule.”¹ This remains true today; the agencies do not have maps of WOTUS under the 2015 Rule, under the 2019 Rule, or under this final rule.

- In 2015, former EPA Administrator McCarthy testified before Congress² about the NHD and the NWI—the very same datasets some have used to inaccurately estimate changes in jurisdiction under the proposed *Navigable Waters Protection Rule*. According to Administrator McCarthy’s testimony, those datasets:
 - were “not used to determine jurisdiction and not intended to be used for jurisdiction;”
 - “are not relevant to the jurisdiction of the ‘waters of the U.S.,”
 - “are not consistent with how we look at the jurisdiction of the Clean Water Act;” and
 - have “nothing to do, as far as I know, with any decision concerning jurisdiction of the Clean Water Act.”
- Under the previous administration, EPA Office of Water Acting Assistant Administrator Nancy Stoner wrote to the House Committee on Science, Space, and Technology that “no national or statewide maps have been prepared by any agency, including EPA, showing the scope of waters subject to the Clean Water Act.... To develop maps of jurisdictional waters requires site-specific knowledge of the physical features of water bodies, and *these data are not available*[.]”³
- Former EPA Office of Water Deputy Assistant Administrator Ken Kopocis wrote a similar letter to the House Science Committee, stating: “These [USGS] maps were not prepared for the purpose of, nor do they represent, a depiction of the scope of waters protected under the Clean Water Act.”⁴
- And in 2014, an EPA blog post entitled “Mapping the Truth” stated, “While these [U.S. Geological Survey and Fish & Wildlife Service] maps are useful tools for water resource managers, they cannot be used to determine Clean Water Act jurisdiction – now or *ever*.”⁵

¹ See *Response to Comments for the Clean Water Rule*, Clean Water Rule Comment Compendium Topic 8: Tributaries, Docket ID. No. EPA-HQ-OW-2011-0880-20872, p. 442, <https://www.regulations.gov/document?D=EPA-HQ-OW-2011-0880-20872>.

² Impact of the Proposed “Waters of the United States” Rule on State and Local Governments Before the H. Comm. on Transp. & Infrastructure and the S. Comm. on Env’t & Pub. Works, 114th Cong. (2015) (testimony of Gina McCarthy, Adm’r, EPA).

³ Letter from Nancy Stoner, Acting Assistant Adm’r, EPA Office of Water, to Lamar Smith, Chairman, Comm. on Science, Space, and Tech., U.S. House of Representatives (July 28, 2014) (emphasis added), available at https://web.archive.org/web/20180919173837/https://science.house.gov/sites/republicans.science.house.gov/files/documents/epa_releases_maps_letter.pdf.

⁴ Letter from Kenneth J. Kopocis, Deputy Assistant Adm’r, EPA Office of Water, to Lamar Smith, Chairman, Comm. on Science, Space, and Tech., U.S. House of Representatives (Jan. 8, 2015)

⁵ U.S. EPA, *Mapping the Truth*, THE EPA BLOG (Aug. 28, 2014), available at <https://blog.epa.gov/2014/08/28/mapping-the-truth/>

MAPPING THE FUTURE

- The agencies acknowledge that prior Administrations have taken the position that “maps of all the jurisdictional or non-jurisdictional waters are not feasible,” and that maps “cannot be used to determine Clean Water Act jurisdiction – now or ever.”
- Rather than declaring the task too difficult, however, the agencies under this Administration have decided to initiate development of state-of-the-art geospatial data tools through federal, state, and tribal partnerships to provide an enhanced, publicly-accessible platform for critical CWA information, such as:
 - the location of federally jurisdictional waters;
 - the applicability of state and tribal water quality standards;
 - permitted facility locations;
 - impaired waters; and
 - other significant features.
- For federal, state and tribal agencies, such geospatial datasets could improve the administration of CWA programs and attainment of water quality goals.
- Geospatial datasets and resulting future maps that indicate waters likely subject to federal jurisdiction could allow members of the regulated community to more easily and quickly know if a water or wetland is a WOTUS and regulated under the CWA.
- To help inform this effort, the agencies are engaging with stakeholders and our federal partners in a number of ways to make progress on these WOTUS mapping goals, including forming a work group of participants from other federal agencies with interest and expertise in geospatial mapping.
- Maps of CWA jurisdiction, when fully developed, will promote greater regulatory certainty, relieve some of the regulatory burden associated with determining the need for a permit, and play an important part in helping to attain the goals of the CWA.

The Navigable Waters Protection Rule: Definition of “Waters of the United States”

FEBRUARY 13, 2020

Technical Support Questions

The Navigable Waters Protection Rule:
Definition of
"Waters of the United States"

FEBRUARY 13, 2020

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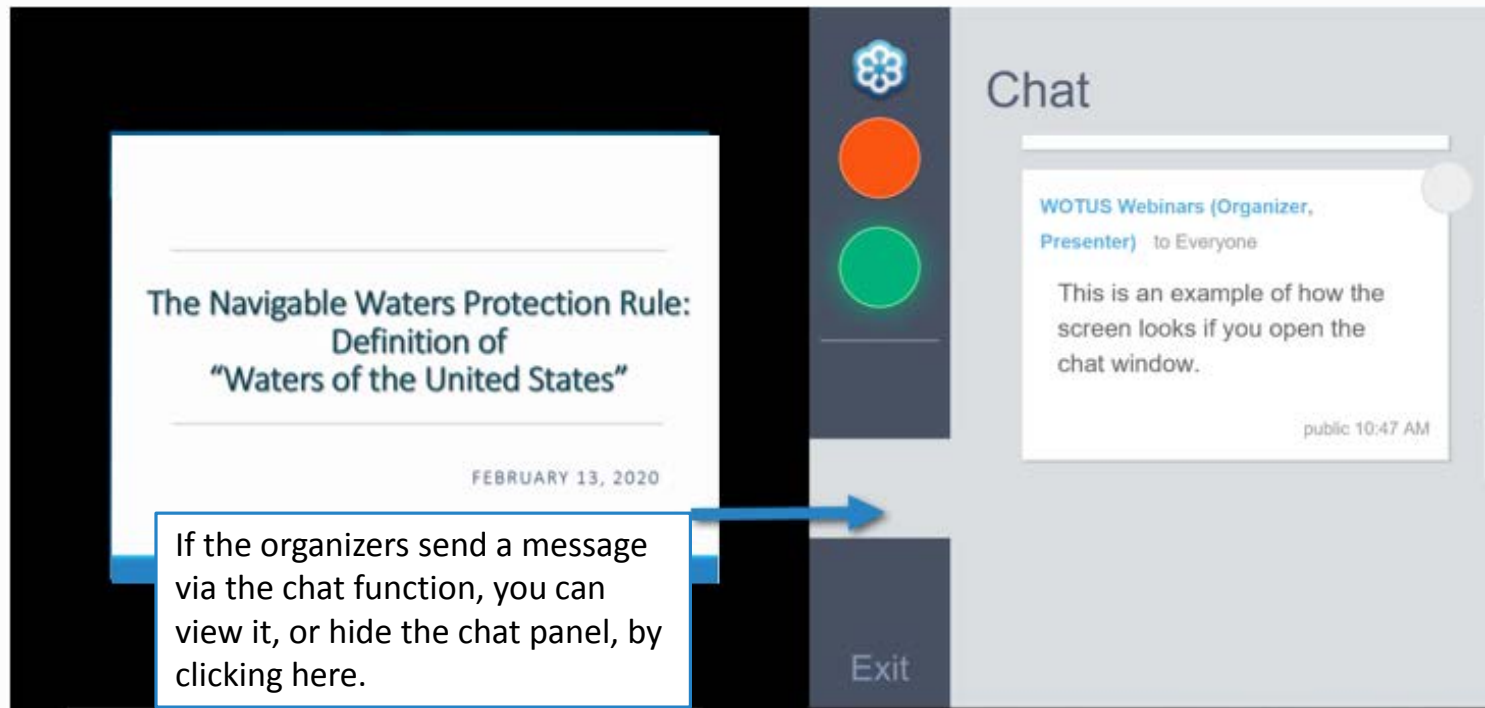
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The Navigable Waters Protection Rule:
Definition of
"Waters of the United States"

FEBRUARY 13, 2020

Chat

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Today's Presentation

- Background on the “waters of the United States” (WOTUS) rulemakings
- Overview of the final Navigable Waters Protection Rule: Definition of “Waters of the United States”
- Key changes from the 2019 Rule (*i.e.*, pre-2015 Rule practice)
- Implementation of the final rule
- Next steps

“Waters of the United States” and the Clean Water Act

- “Waters of the United States” (WOTUS) is a threshold term in the Clean Water Act and establishes the scope of federal jurisdiction under the Act.
- Clean Water Act regulatory programs address “navigable waters,” defined in the statute as “the waters of the United States, including the territorial seas.”
- The Clean Water Act does not define WOTUS; Congress left further clarification to the agencies.
- The EPA and the Department of the Army (Army) have defined WOTUS by regulation since the 1970s.

Background: Executive Order 13778

- On February 28, 2017, the President signed the Executive Order on “Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ‘Waters of the United States’ Rule.”
- The E.O. directs the EPA and the Army to review the final 2015 Waters of the United States Rule (2015 Rule) and “publish for notice and comment a proposed rule rescinding or revising the rule....”
- The EPA and the Army implemented a two-step rulemaking to provide certainty to the regulated community and the public while the agencies developed the revised definition of "waters of the United States."

Background: Rulemaking Process

- **The 2019 Rule (Step 1):** Repeals the 2015 Rule and recodifies prior regulations.
 - Final rule published October 22, 2019.
 - Effective date was December 23, 2019.
- **The Navigable Waters Protection Rule (Step 2):** Revises the definition of WOTUS, replaces the 2019 Rule.
 - The 60-day public comment period closed on April 15, 2019.
 - The agencies received over 620,000 comments.
 - The final rule was signed on January 23, 2020.
 - The final rule becomes effective 60 days after publication in the Federal Register.

Goals of the Final Rule

- Operate within the scope of the federal government's authority to regulate "navigable waters" under the Clean Water Act and the U.S. Constitution.
- Restore and maintain the integrity of the nation's waters while preserving the traditional sovereignty of states and tribes over their land and water resources.
- Increase predictability and consistency through a clearer definition of "waters of the United States."

Final Rule: Categories of WOTUS

- Territorial seas and traditional navigable waters - (a)(1)
- Tributaries - (a)(2)
- Lakes and ponds, and impoundments of jurisdictional waters - (a)(3)
- Adjacent wetlands - (a)(4)

Key Changes

Key changes from the 2019 Rule (*i.e.*, pre-2015 Rule practice):

- Four categories of jurisdictional waters and twelve categories of excluded waters/features.
- Combines the categories of traditional navigable waters and territorial seas.
- No standalone interstate waters category.
- No case-specific significant nexus analysis.
- New category of lakes, ponds, and impoundments of jurisdictional waters.

(a)(1) Territorial seas and traditional navigable waters (TNW):

The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide.

Key changes from the 2019 Rule:

- Combines the categories of traditional navigable waters and territorial seas.
- No substantive changes.



Traditional navigable waters include those waters used for interstate commerce, like Lake Winnebago in Wisconsin.

(a)(2) Tributaries:

- “Tributary” means a naturally occurring surface water channel that contributes surface water flow to a paragraph (a)(1) water in a typical year either directly or through one or more paragraph (a)(2)-(4) waters. A tributary must be perennial or intermittent in a typical year.
- A tributary does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a subterranean river, through a culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature.
- The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to satisfy the flow conditions of the definition.
- The term *tributary* includes a ditch that either relocates a tributary, is constructed in a tributary, or is constructed in an adjacent wetland as long as the ditch satisfies the flow conditions of this definition.

(a)(2) Tributaries:

Key changes from the 2019 Rule:

- No significant nexus test.
- All ephemeral streams are non-jurisdictional, whereas some may be found jurisdictional under 2019 Rule.

The final rule does not change existing regulations for establishing the lateral limits of federal jurisdiction for tributaries.



Tributaries include those perennial or intermittent streams that flow in response to snowpack melt, like Hayes Creek in Colorado that contributes surface flow to the Crystal River.

Key Definitions in the Final Rule

Perennial:

- The term *perennial* means surface water flowing continuously year-round.

Intermittent:

- The term *intermittent* means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (*e.g.*, seasonally when the groundwater table is elevated or when snowpack melts).

Ephemeral:

- The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (*e.g.*, rain or snow fall).

Snowpack:

- The term *snowpack* means layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation (*e.g.*, in northern climes or mountainous regions).

(a)(3) Lakes and ponds, and impoundments of jurisdictional waters:

- The term means standing bodies of open water that contribute surface water flow to a paragraph (a)(1) water in a typical year either directly or through one or more paragraph (a)(2)-(4) waters.
- A lake, pond, or impoundment does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature (*e.g.*, an ephemeral stream, non-jurisdictional ditch), through a culvert, dam, tunnel, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature.
- A lake, pond, or impoundment is also jurisdictional if it is inundated by flooding from a paragraph (a)(1)-(3) water in a typical year.

(a)(3) Lakes and ponds, and impoundments of jurisdictional waters:

Key changes from the 2019 Rule:

- Similar to the 2019 Rule approach of regulating lakes and ponds as part of the tributary network, but clarifies that other kinds of surface hydrologic connections (*e.g.*, inundation by flooding from an (a)(1)-(3) water) can also render lakes, pond, and impoundments jurisdictional.
- Impoundments of jurisdictional waters are non-jurisdictional if they do not contribute surface water flow to a downstream TNW or territorial sea in a typical year.



Lakes, ponds, and impoundments of jurisdictional waters include open bodies of surface water that contribute surface flow to a traditional navigable water, like Christian Pond in Wyoming.

(a)(4) Adjacent wetlands:

The term means wetlands that:

- abut, meaning to touch at least at one point or side of, a paragraph (a)(1)-(3) water;
- are inundated by flooding from a paragraph (a)(1)-(3) water in a typical year;
- are physically separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature; or
- are physically separated from a paragraph (a)(1)-(3) water only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection in a typical year through a culvert, flood or tide gate, pump, or similar artificial feature.

An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

(a)(4) Adjacent wetlands:

The final rule does not change the agencies' longstanding definition of "wetlands."

Key changes from the 2019 Rule:

- Revises longstanding definition of "adjacent."
- Wetlands physically separated from an (a)(1) - (a)(3) water by an artificial berm, dike, or similar artificial feature must have a direct hydrologic surface connection to the jurisdictional water in a typical year to be considered adjacent.
- No wetlands are evaluated by a significant nexus test.



Adjacent wetlands include wetlands with manmade structures that allow for a direct hydrologic surface connection to an (a)(1)-(3) water in a typical year, like these wetlands in the Mississippi river Delta region of Louisiana.

Ditches

The term *ditch* means a constructed or excavated channel used to convey water.

Ditches are not an independent category of WOTUS; ditches are jurisdictional where they are:

- TNWs, including those subject to the ebb and flow of the tide (*i.e.*, are (a)(1) waters);
- Either constructed in or relocate a tributary, or are constructed in an adjacent wetland, and satisfy the flow conditions of the tributary definition (*i.e.*, are (a)(2) waters); or
- Constructed in an adjacent wetland and develop wetland characteristics (*i.e.*, are (a)(4) waters).

Key changes from the 2019 Rule:

- Codifies that ditches constructed in upland (other than TNWs and rerouted tributaries), certain ditches constructed in wetlands, and ditches with ephemeral flow are not jurisdictional.

Definition of “Typical Year”

The term *typical year* means: “when precipitation and other climatic variables are within the normal periodic range (*e.g.*, seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.”

“Typical year” is a key concept for establishing jurisdiction based on surface water flow between a relatively permanent body of water (*i.e.*, a perennial or intermittent surface water channel, a standing body of open water) and TNWs, and between wetlands and other jurisdictional waters.

Application of the typical year concept ensures that the hydrologic flows and surface water connections necessary to establish jurisdiction are characterized based on normal climatic conditions (*i.e.*, neither too wet or too dry).

When determining whether climatic conditions are typical, the period of time examined may be a year, or a shorter or longer time period, depending on factors relevant to the water resource of interest.

Waters/Features Excluded from Final WOTUS Definition

- Waters not listed as WOTUS
- Groundwater
- Ephemeral features
- Diffuse stormwater run-off
- Ditches not identified as WOTUS
- Prior converted cropland (PCC)
- Artificially irrigated areas
- Artificial lakes and ponds
- Water-filled depressions incidental to mining or construction activity
- Stormwater control features
- Groundwater recharge, water reuse, and wastewater recycling structures
- Waste treatment systems

Key Elements of Exclusions

Upland:

- The term *upland* means any land area that under normal circumstances does not satisfy all three wetland factors (*i.e.*, hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.
- Features constructed or excavated in upland or in non-jurisdictional waters must be constructed/excavated wholly in upland or non-jurisdictional waters to meet applicable exclusions.

Exclusions as surface water connections:

- Certain excluded features may convey surface water flow to a downstream jurisdictional water in a typical year, thereby serving as a connection for upstream and downstream jurisdictional tributaries, lakes, ponds, and impoundments. This does not include groundwater or diffuse stormwater runoff/overland sheet flow.
- Excluded features that convey surface water flow between jurisdictional waters in a typical year do not become WOTUS themselves.

Waters/Features Excluded from Final WOTUS Definition

(b)(1) Waters not listed as WOTUS:

- Categorically excludes all waters not listed as WOTUS in paragraph (a) of the regulation.
- Clarifies that a feature is not jurisdictional just because it is not explicitly excluded in paragraph (b).
- Intended to avoid confusion caused by features being called different names across the country.
- No change in practice, effectively how the 2019 Rule is implemented.

(b)(2) Groundwater:

- Excludes groundwater, including groundwater drained through subsurface drainage features.
- The agencies have never interpreted WOTUS to include groundwater, and the approach is unchanged from the 2019 Rule.

Waters/Features Excluded from Final WOTUS Definition

(b)(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools:

- Emphasizes that ephemeral streams and other ephemeral features are not WOTUS under the final rule. These features may serve as connections between upstream relatively permanent waters and downstream jurisdictional waters that maintain jurisdiction of upstream waters.
- No categorical exclusion for ephemeral features in the 2019 Rule; some ephemeral streams were found jurisdictional as tributaries under 2019 Rule following a significant nexus test.

(b)(4) Diffuse stormwater run-off and directional sheet flow over upland:

- Clarifies that diffuse run-off and directional sheet flow over upland are excluded. These features cannot serve as connections to enable upstream perennial and intermittent waters to be jurisdictional.
- No specific exclusion for diffuse run-off or sheet flow in the 2019 Rule, but effectively how the 2019 Rule is implemented.

Waters/Features Excluded from Final WOTUS Definition

(b)(5) Ditches not identified as WOTUS:

- Ditches are excluded from WOTUS except where they meet the conditions of paragraph (a)(1) or (a)(2) waters (*i.e.*, they are a TNW, or a tributary) or where they were constructed in an adjacent wetland and develop wetland characteristics.
- Approach balances exclusion with need to preserve jurisdiction over tributaries and adjacent wetlands.
- 2019 Rule generally excludes ditches excavated wholly in uplands, draining only uplands, and having less than relatively permanent flow.



The ditch exclusion includes many roadside ditches as well as many farm ditches.

Waters/Features Excluded from Final WOTUS Definition

(b)(6) Prior converted cropland (PCC):

- The term *prior converted cropland* means any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible.
- An area is no longer considered *prior converted cropland* for purposes of the Clean Water Act when the area is abandoned and has reverted to wetland. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years.

The final rule only uses the abandonment principle, and no longer considers “change in use” which was implemented under the 2019 Rule.

Waters/Features Excluded from Final WOTUS Definition

(b)(7) Artificially irrigated areas:

- Excludes artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease.

(b)(8) Artificial lakes and ponds:

- Excludes artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters.

(b)(9) Water-filled depressions incidental to mining or construction activity:

- Excludes water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel.

Waters/Features Excluded from Final WOTUS Definition

(b)(10) Stormwater control features:

- Excludes stormwater control features constructed or excavated in upland or non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff.
- Exclusion helps to avoid disincentives to environmentally beneficial practices such as green infrastructure for controlling stormwater.

(b)(11) Wastewater recycling structures:

- Excludes groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters.
- Exclusion helps to avoid discouraging, or creating barriers to, water reuse and recycling projects.

Waters/Features Excluded from Final WOTUS Definition

(b)(12) Waste treatment systems:

- The term *waste treatment system* includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).
- Waste treatment systems have been excluded from the definition of WOTUS since 1979. The final rule defines waste treatment systems and the components of the exclusion in the regulation for the first time.

Implementation of the Final Rule

Determining contribution of flow downstream:

- May use, for example, USGS maps, state and local maps, aerial photography, or other remote sensing information or models that have been verified to be reliable to assess a feature's flow path.
- A trace analysis in a Geographic Information System (GIS), can be used to trace the flow path from a user selected point on a map, downstream along the stream network until the network ends. The USGS StreamStats application incorporates such a tool called the "Flow (Raindrop) Path," available at: <https://streamstats.usgs.gov/ss/>.

Implementation of the Final Rule

Determining perennial or intermittent flow:

- May use a combination of the best available mapping sources, including the NHD* or local maps, as well as other remote tools and datasets such as aerial photographs, NRCS hydrologic tools and soil maps, NOAA snow maps, desktop tools that estimate the discharge sufficient to generate intermittent or perennial flow, or modeling tools.
- Site visits may be needed to perform on-site observations of hydrology or collect indicators of perennial or intermittent flow.
- Where available, streamflow duration assessment methods (SDAMs) that use physical and biological indicators to determine the flow duration class of a stream reach in a single site visit may be used.

* As described in the Resource and Programmatic Assessment for the final rule, the agencies note that NHD at High Resolution does not distinguish intermittent from ephemeral features in most parts of the country and may not accurately identify on-the-ground flow conditions.

Implementation of the Final Rule

Sources of information used to evaluate surface flows and surface water connections should be interpreted within the context of the “typical year” concept (*i.e.*, based on normal climatic conditions that are neither too wet or too dry).

Determining surface flow and surface water connections that occur in a typical year:

- The agencies have developed an Antecedent Precipitation Tool (APT) that collects NOAA precipitation from nearby weather stations and compares precipitation from the time period of interest with precipitation data from the past 30 years, that may be used to determine whether precipitation conditions fall within the normal range.
- Other data sources and tools that may be used to inform whether hydrologic flows or surface water connections occur under normal climatic conditions include: drought indices, water-budget models, snow telemetry data, continuous flow monitor data, physical and biological indicators of typical flow conditions, or remote sensing data and hydrologic models.

Implementation of the Final Rule

Determining adjacency:

- A variety of remote tools and resources may be used to inform a wetland jurisdictional determination, including, federal, state and local maps, aerial photography and satellite imagery.
- The agencies will continue to use existing resources, methods, and practices to verify the presence of wetlands and to delineate wetland boundaries (*e.g.*, the Corps' 1987 Wetland Delineation Manual).
- Natural berms, banks, dunes, or similar natural features that physically separate wetlands from jurisdictional waters may in certain instances be identified through on-site observations or remotely using aerial photography and satellite imagery, or other remote sensing information.
- Artificial structures that allow for a direct hydrologic surface connection (*e.g.*, through a culvert, tide gate, pump, or similar artificial feature) may in certain instances be identified through on-site observations or remotely using construction design plans, permitting data, state and local information, or levee or drainage district information.

Implementation of the Final Rule

Determining inundation by flooding:

- May use a combination of remote tools and datasets such as USGS stream gage records, recurrence intervals of peak flows, wetland surface water level records, flood records, aerial photography and satellite imagery, or inundation modeling techniques and tools.
- The Corps' Hydrologic Engineering Center's River Analysis System (HEC-RAS) software allows users to perform inundation mapping and create inundation depth datasets. The HEC-RAS software is available for download at: <https://www.hec.usace.army.mil/software/hecras/>.
- Site visits may be needed to perform on-site observations of hydrology or field-based indicators of recent inundation (*e.g.*, the presence of water marks, sediment and drift deposits, water-stained leaves, or algal mats).

Next Steps

- Upon publication in the Federal Register, additional supporting documents (*e.g.*, the agencies' Response to Comments document) will be available in the public docket, identified by Docket ID No. EPA-HQ-OW-2018-0149, to the Federal eRulemaking Portal:
<https://www.regulations.gov>.
- A beta-version of the Antecedent Precipitation Tool (APT) will be made publicly available for download on the EPA's website in the near future.
- Regionally-specific SDAMs will be released over time and opportunities for the public to provide comment on the use of these methods will be provided. Additional tools may be developed in the future.
- New guidance may be developed, or existing guidance may be updated, if and as necessary, to facilitate implementation of the final rule.

For Further Information

Visit <https://www.epa.gov/nwpr> for more information about the final rule, including the pre-publication copy, supporting analyses, and fact sheets.

Additional questions may be directed to the EPA at: CWAwotus@epa.gov or to the Corps at: [USACE CWA Rule@usace.army.mil](mailto:USACE_CWA_Rule@usace.army.mil).