



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.

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.

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.noahrs.noaa.gov/nsa/>, or using NRCS’s Snow Telemetry (SNOTEL) data and products, available at: <https://www.wcc.nrcs.usda.gov/snow/>.