“Typical Year” 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.

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.

“TYPICAL YEAR” IS AN IMPORTANT CONCEPT IN THE NAVIGABLE WATERS PROTECTION RULE

- Under the final Navigable Waters Protection Rule, determining the jurisdictional status of a waterbody is generally informed by understanding conditions in a “typical year” – i.e., the normal periodic range of precipitation and other climactic variables for that waterbody.
- “Typical year” is a term that ensures the agencies are considering normal (i.e., typical) hydrologic flows or surface water connections that occur under normal conditions, rather than making jurisdictional determinations based on conditions that are abnormally wet or dry, such as extreme flooding or drought.
- Under the WOTUS definition, for example, a tributary, or lake may meet the definition of a “water of the United States” if it contributes surface water flow directly or indirectly to a traditional navigable water or territorial sea in a typical year.
- Importantly, understanding a “typical year” allows the agencies to take into account that a waterbody might have more or less water than “typical” when completing an approved jurisdictional determination, or in other contexts when they need to distinguish between jurisdictional and non-jurisdictional waters.
• The term is meant to provide a standard context for using information and interpreting field observations and methods, remote sensing data and imagery, and various models that inform an approved jurisdictional determination of a waterbody under question.

HOW IS “TYPICAL YEAR” DEFINED IN THE RULE?

• Determining if conditions associated with a given waterbody meet the definition of “typical year” requires comparing precipitation, drought and other climatic factors from a period of interest (e.g., from the past season or year) with the normal range of those factors that would be expected, based on the past 30 years of data.
• By considering 30 years of data on precipitation, drought and other climatic factors for a given location, the agencies determine the “normal” conditions for the area.
  o Using data from a shorter period of time could potentially exaggerate the effects of short-term trends of drought or excessively rainy periods.
  o To be most effective and up to date, the most recent 30 years of data is continuously updated on a rolling basis.
• Normal precipitation, drought and other climatic conditions should be determined based on the most accurate long-term data for a given waterbody (e.g., data continuously collected at nearby, representative weather monitoring stations).
• Hydrologic flows or surface water connections that occur during a “typical year” may not necessarily occur in every calendar year, due to seasonal variation within years as well as variation among typical years.

HOW IS “TYPICAL YEAR” USED IN THE FINAL RULE?

• **Perennial or Intermittent Flow in a Typical Year**: For a surface water channel like a river, stream, or ditch to meet the definition of a “water of the United States,” the channel must be perennial or intermittent (i.e., flowing continuously year-round or flowing continuously during certain times of the year and more than in direct response to a single precipitation event) in a typical year.
• **Contribution of Surface Water Flow in a Typical Year**: A tributary, lake, pond, or impoundment of a jurisdictional water meets the definition of a “water of the United States” if it contributes surface water flow directly or indirectly to a traditional navigable water or territorial sea in a typical year.
• **Inundation by Flooding in a Typical Year**: One of the ways a lake, pond, impoundment of a jurisdictional water, or a wetland meets the definition of “waters of the United States” is if such waterbody is inundated by flooding from a jurisdictional water in a typical year.
• **Direct Hydrologic Surface Connection in a Typical Year**: One of the ways a wetland meets the conditions of “adjacent” and therefore meets the definition of “waters of the United States” is if it is only separated from a jurisdictional water by an artificial structure (e.g., a pump or tide gate) that allows for a direct hydrologic surface connection between the wetland and the jurisdictional water in a typical year.
WHAT IF CONDITIONS DO NOT MEET THE DEFINITION OF “TYPICAL YEAR”? 

- Hydrology during atypically wet or dry periods may not accurately represent hydrology during “typical year” conditions.
- The presence of flow or a surface water connection during abnormally wet periods does not necessarily mean a waterbody meets the definition of a “water of the United States.”
- Similarly, the lack of flow or a surface water connection during abnormally dry periods does not necessarily mean a waterbody does not meet the definition of a “water of the United States.”
- When completing approved jurisdictional determinations during wet or dry periods, it may be necessary to rely more heavily on aerial photography, data from hydrologic instrumentation, or remote sensing imagery that was collected during “typical year” conditions. Physical or biological indicators that are suggestive of normal conditions may also be used.
- The agencies will also consider the expected seasonality of flows or surface water connections when determining the jurisdictional status of waterbodies.
  - For instance, some streams only flow in late spring due to snowpack melt. The lack of flow during other times of the year does not necessarily mean the stream is non-jurisdictional, even if the lack of flow occurs under normal weather conditions.

HOW DO THE AGENCIES CURRENTLY DETERMINE “TYPICAL YEAR”? 

- The United States Geological Survey (USGS) and some state agencies maintain continuous flow monitors on certain waterbodies, which can serve to establish whether observed conditions are considered “typical.”
- Some locations in the country have ample data to determine flow conditions or surface water connections in a “typical year” and may not need to use additional tools like local precipitation, drought and other climatic factors to provide context for approved jurisdictional determinations.
- In the absence of or with limited availability of site-specific flow or surface water connection data, the agencies will generally use a web-based antecedent precipitation tool (APT) to determine if precipitation, drought and other climatic conditions from the period of interest (e.g., the past season or year) are “wet,” “normal,” or “dry” compared to precipitation patterns from the most recent 30-year record.
  - The tool collects National Oceanic and Atmospheric Administration (NOAA) precipitation data for a given location from nearby weather monitoring stations and compares recent precipitation data from the period of interest to the past 30 years of precipitation data. 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.
  - The tool also provides other relevant information, such as drought indices, to inform if precipitation, drought and other climatic conditions are normal.
  - The APT tool is a useful way of determining if conditions are normal. The 30 years of weather data provides a distribution, showing the range of normal and extreme precipitation conditions. The APT defines “normal” as within the 30th and 70th
percentiles of the 30 years of data; i.e., under “normal” conditions, no less than 30% of the values are drier, and no less than 30% of the values are wetter.

- This understanding, combined with other information, can inform the agencies when completing an approved jurisdictional determination of the waterbody under evaluation. Thus, using the APT method can allow for a reliable and predictable decisions as part of approved jurisdictional determinations, as it accounts for 30 years of precipitation data for a location and characterizes a “typical year.”

- In summary, “typical year” is simply a calculation of normal precipitation, drought and other climatic conditions over a rolling 30-year period at a location of interest.

**WHAT OTHER TOOLS ARE AVAILABLE FOR DETERMINING “TYPICAL YEAR”?**

- The agencies will generally use the APT method to determine “typical year,” however the agencies will use the best information available for the resource it is evaluating.
- There are other complementary data sources and tools for determining whether flows or surface water connections occur in a “typical year.” Examples include:
  - The Web-based Water-Budget Interactive Modeling Program (WebWIMP, [http://climate.geog.udel.edu/~wimp/](http://climate.geog.udel.edu/~wimp/))
  - NOAA’s National Snow Analyses ([https://www.nohrsc.noaa.gov/nsa/](https://www.nohrsc.noaa.gov/nsa/))
  - Natural Resources Conservation Service (NRCS) Snow Telemetry Data (SNOTEL, [https://www.wcc.nrcs.usda.gov/snow/](https://www.wcc.nrcs.usda.gov/snow/))
  - Continuous flow monitors
  - Physical and biological field indicators
  - Remote sensing data and hydrologic models

- More information on tools that may inform implementation of the final revised definition of “waters of the United States” is available in a fact sheet entitled “Implementing the Navigable Waters Protection Rule,” available at: [https://www.epa.gov/nwpr/navigable-waters-protection-rule-factsheets](https://www.epa.gov/nwpr/navigable-waters-protection-rule-factsheets)