



# Waters of the United States

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Land and Waters  
Acknowledgement



# Agenda

Overview: What is WOTUS,  
and Why is It Important?

History of WOTUS: How We  
Got Here

Current Practice: Navigable  
Waters Protection Rule

Tools and Technical Resources  
to Identify Waters & WOTUS

The background of the slide features a photograph of a forest with a prominent blue horizontal band across the center. The word "Overview" is written in white text within this blue band.

# Overview

What is WOTUS, and why does it matter for WQS?

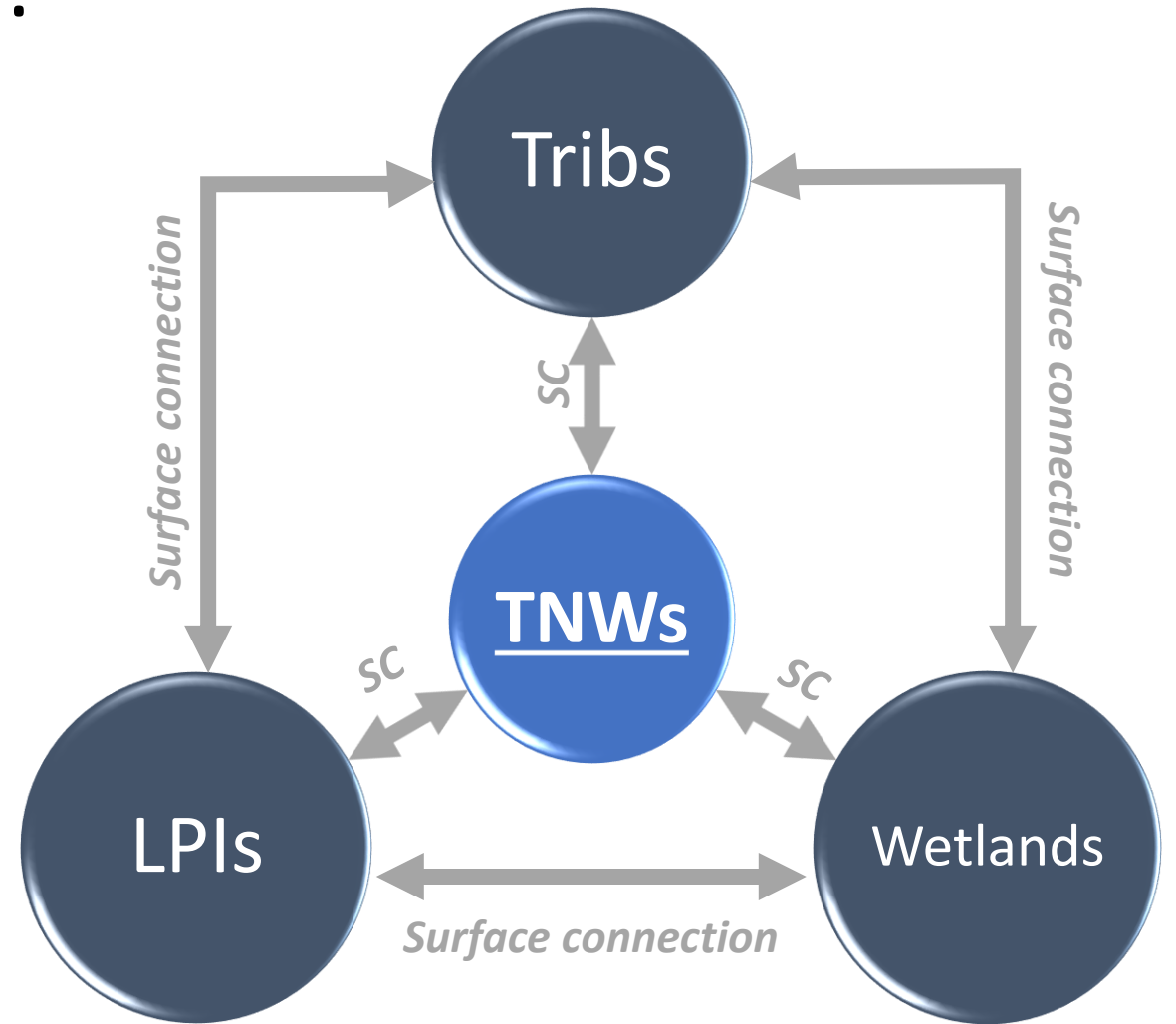


# *What is WOTUS?*

- Waters of the US (WOTUS) is:
  - A **legal (not scientific)** term,
  - Interpreting the **limits of federal authority (not tribal or state)**,
  - Under the **regulatory (not grant/funding)** programs of the Clean Water Act
- WOTUS is important for WQS because it defines where:
  - WQS are required, and
  - CWA regulatory implementation programs apply

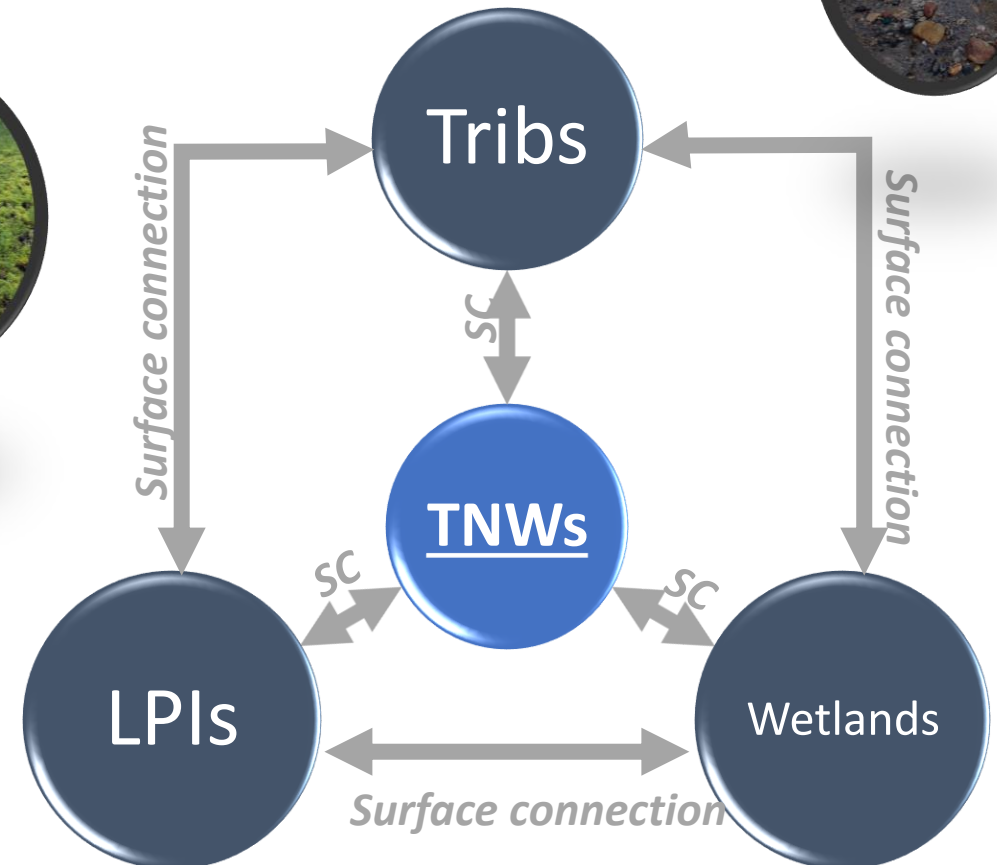
# What counts as WOTUS?

- WOTUS is defined by EPA and USACE through federal rulemaking.
- Current rule: **Navigable Waters Protection Rule** (NWPR, 2020)
- Four categories of WOTUS:
  - **Traditionally Navigable Water (TNWs)**, tidal waters, territorial seas
  - **Intermittent & Perennial** tributary streams with a **surface connection** to TNW
  - Lakes, Ponds & Impoundments (LPIs) with a surface connection to TNW
  - **Adjacent** Wetlands with a surface connection to TNW



# What is left out under NWPR?

- 12 categories of exclusions (discussed more later)
  - Ephemeral streams
  - Ditches constructed only in uplands
  - Waste treatment systems
- Geographically isolated waters w/o surface connections – desert springs, many wetland types, waters in closed basins.
- *Take home:* NWPR is mostly guided by **arcane legal concepts, not knowledge of waters.**



# My Take: Develop WQS for important waters (including WOTUS)

The WOTUS definition is important because it reflects what must be protected under Clean Water Act, and what can be protected using CWA regulatory programs.

The WOTUS definition does not represent the limits of tribal authority, and it does not prevent tribes from using CWA grant programs to develop WQS and programs of implementation for non-WOTUS.

*EPA Region 9 believes that all waters are important, and we are ready to assist tribes with protecting their waters, regardless of current or future WOTUS definitions.*



# History of WOTUS

How we wound up with this mess, and where we might be going

# WOTUS in the 1972 Clean Water Act

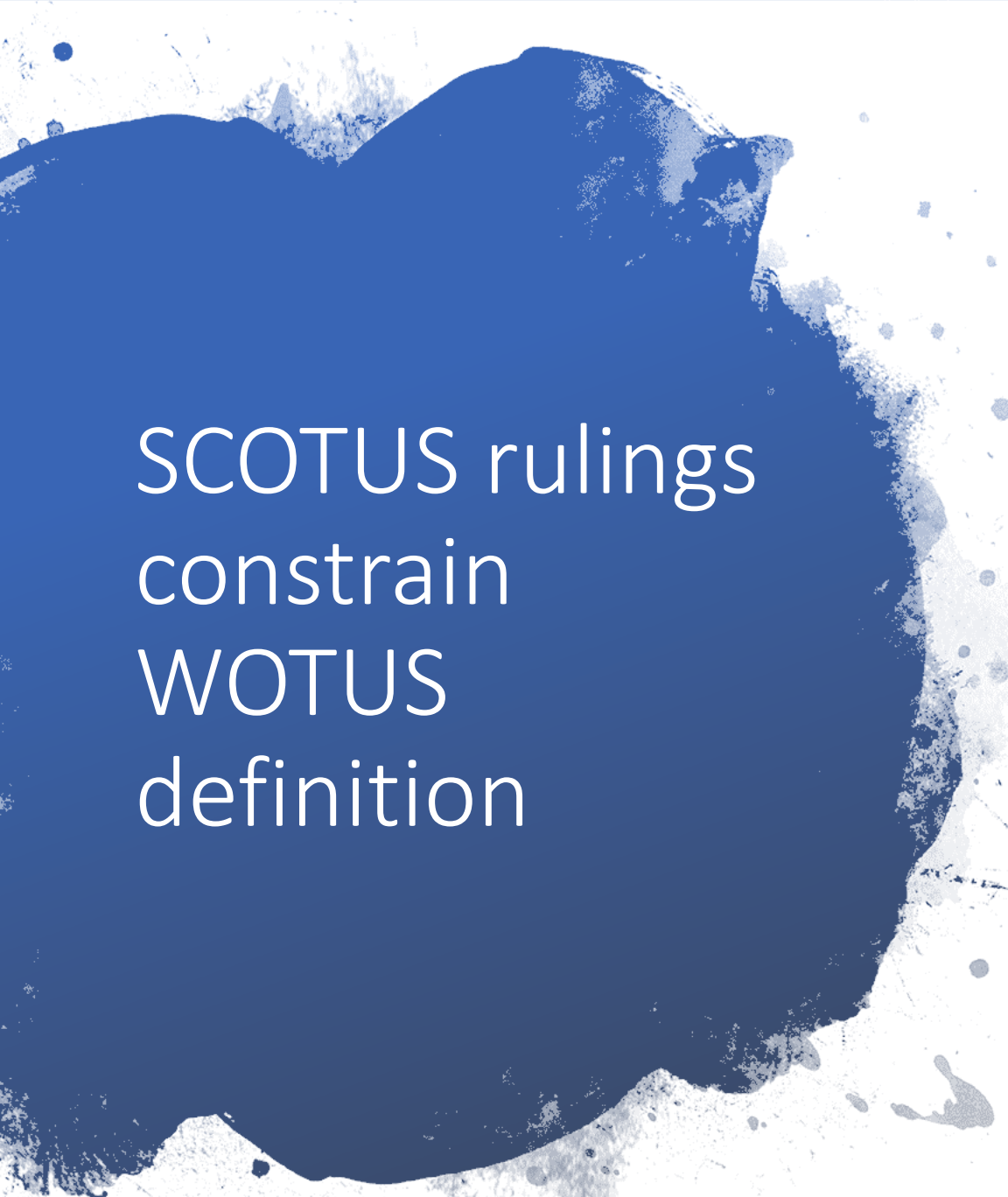
- CWA refers to “navigable waters” throughout but defines them as “waters of the United States” (WOTUS) at §502.
  - Intentionally vague & broad
- EPA and Corps delegated responsibility to define WOTUS with little direction from Congress other than it should be broad, and constitutional.



## Early approaches broadly define WOTUS

- Agencies' early WOTUS definitions are very broad, limited only by Commerce Clause
- Migratory Bird Rule used potential for migratory waterfowl habitat as connection to interstate commerce
- Backed up by 1985 Riverside Bayview SCOTUS decision: Wetlands can be WOTUS!

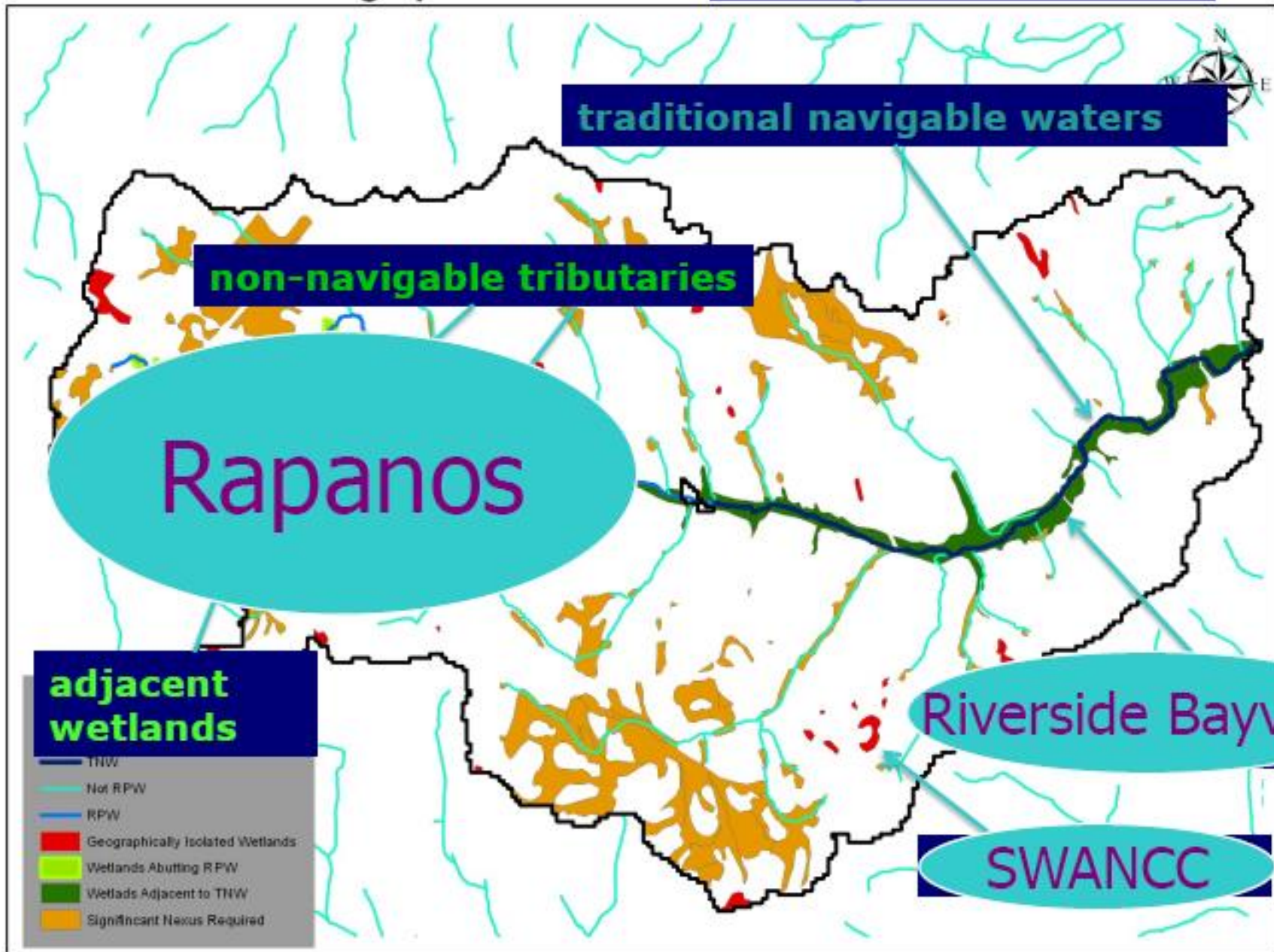


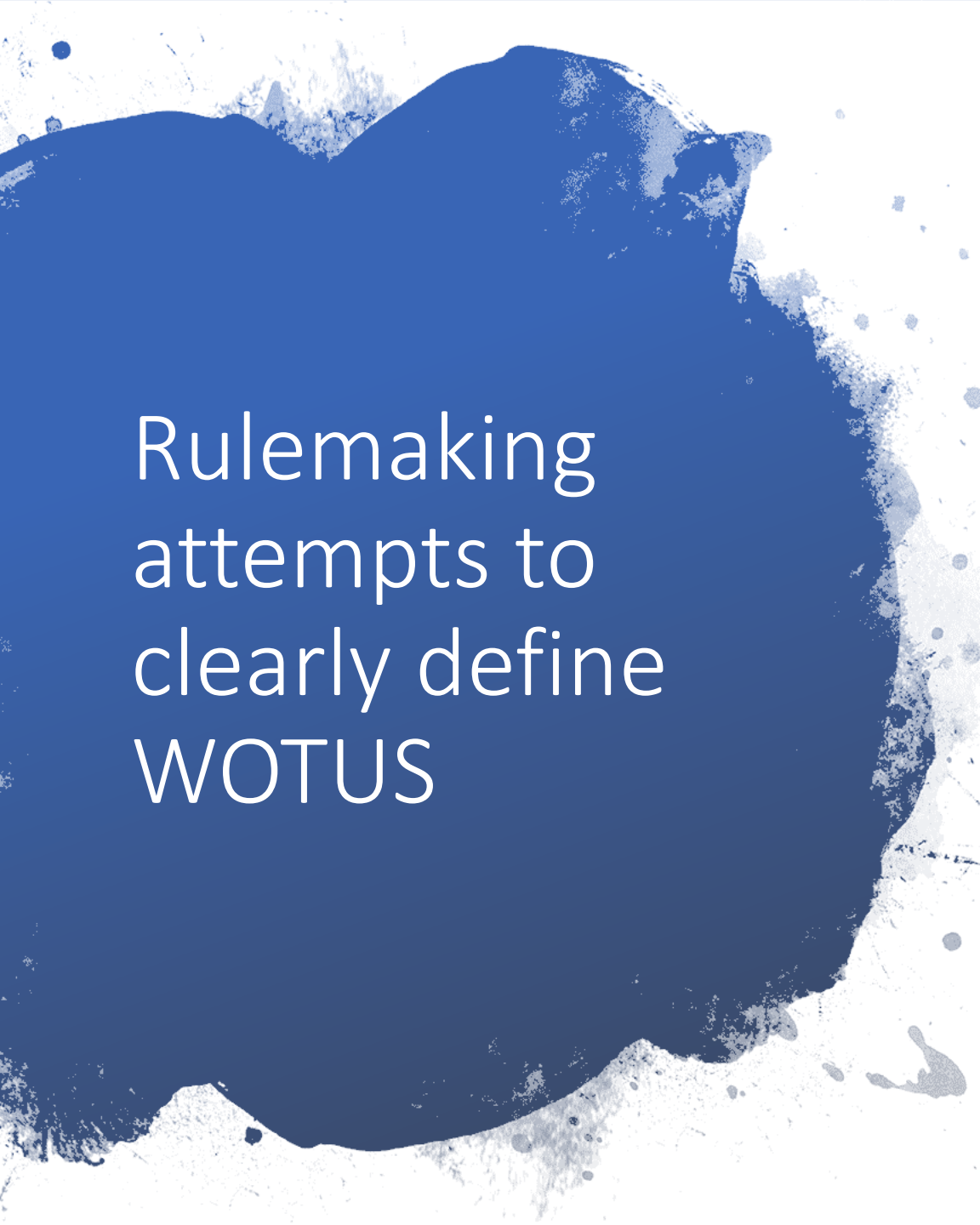


# SCOTUS rulings constrain WOTUS definition

- 2001 – SWANCC – First SCOTUS decision placing limits on definition of WOTUS
  - WOTUS must have some connection to **navigable waters**, no “isolated waters”
  - Migratory Bird Rule not valid as a sole basis for WOTUS determinations
  - Did not invalidate existing regulations
- 2008 – Rapanos & Carabell – Fractured SCOTUS decision establishes two judicial tests.
  - Scalia: WOTUS must be “**relatively permanent**” & have **continuous surface connection** with traditionally navigable water (TNWs)
  - Kennedy: WOTUS should have a “significant nexus” with TNWs

# Illustrative Geographic Jurisdiction





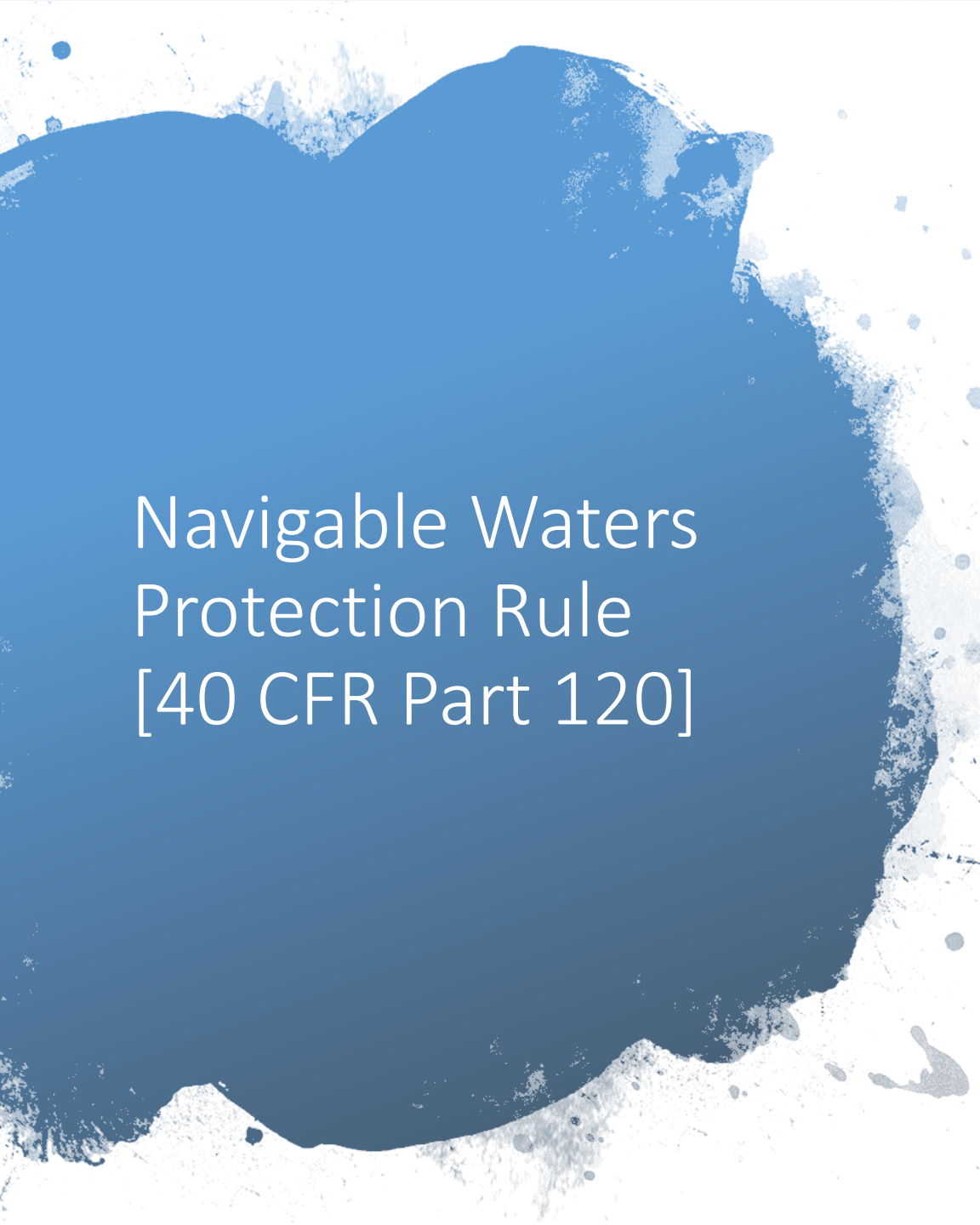
# Rulemaking attempts to clearly define WOTUS

- 2015 – EPA/Corps issue Clean Water Rule
  - Develop clear, uniform standards for 3 classes of waters:
    - Waters that are always WOTUS
    - Waters that are never WOTUS
    - Waters that require site-specific significant nexus determination
- 2017-2020 – EPA/Corps review, withdraw and develop a replacement for Clean Water Rule
  - EO 13778 specifically calls for EPA to consider a new standard based on the Scalia “relatively permanent” test
  - Navigable Waters Protection Rule finalized in early 2020



# Navigable Waters Protection Rule

The current rule defining Waters of the U.S.



# Navigable Waters Protection Rule [40 CFR Part 120]

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What it is: The current rule defining WOTUS for all Clean Water Act regulatory programs, effective in all U.S. states, territories, and tribal lands.

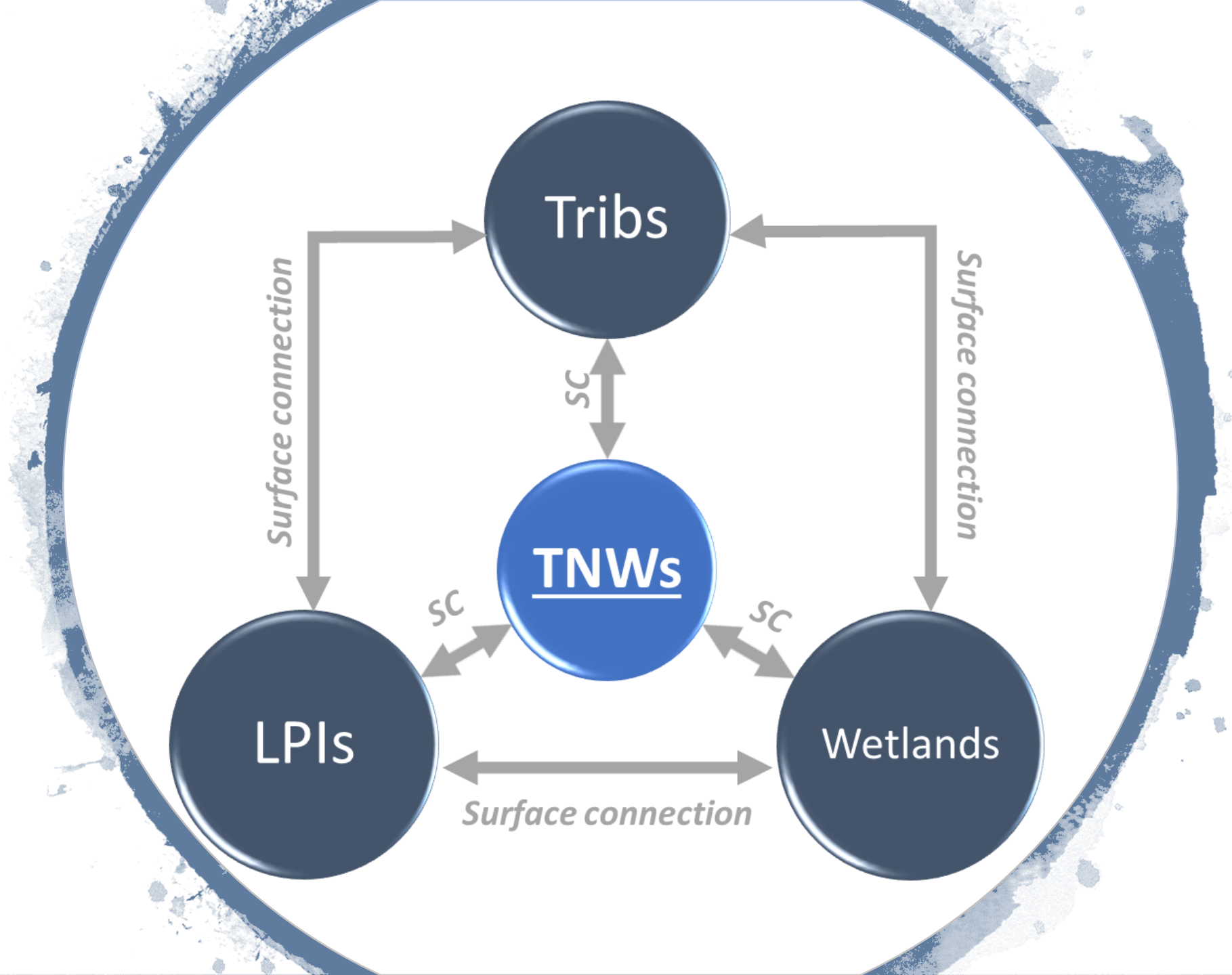
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Four categories of included waters, 12 categories of excluded waters (no case-specific significant nexus tests)

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Consistent with Scalia standard, requires WOTUS to be “relatively permanent” with surface connections to navigable waters







# NWPR Important Concepts

Navigability

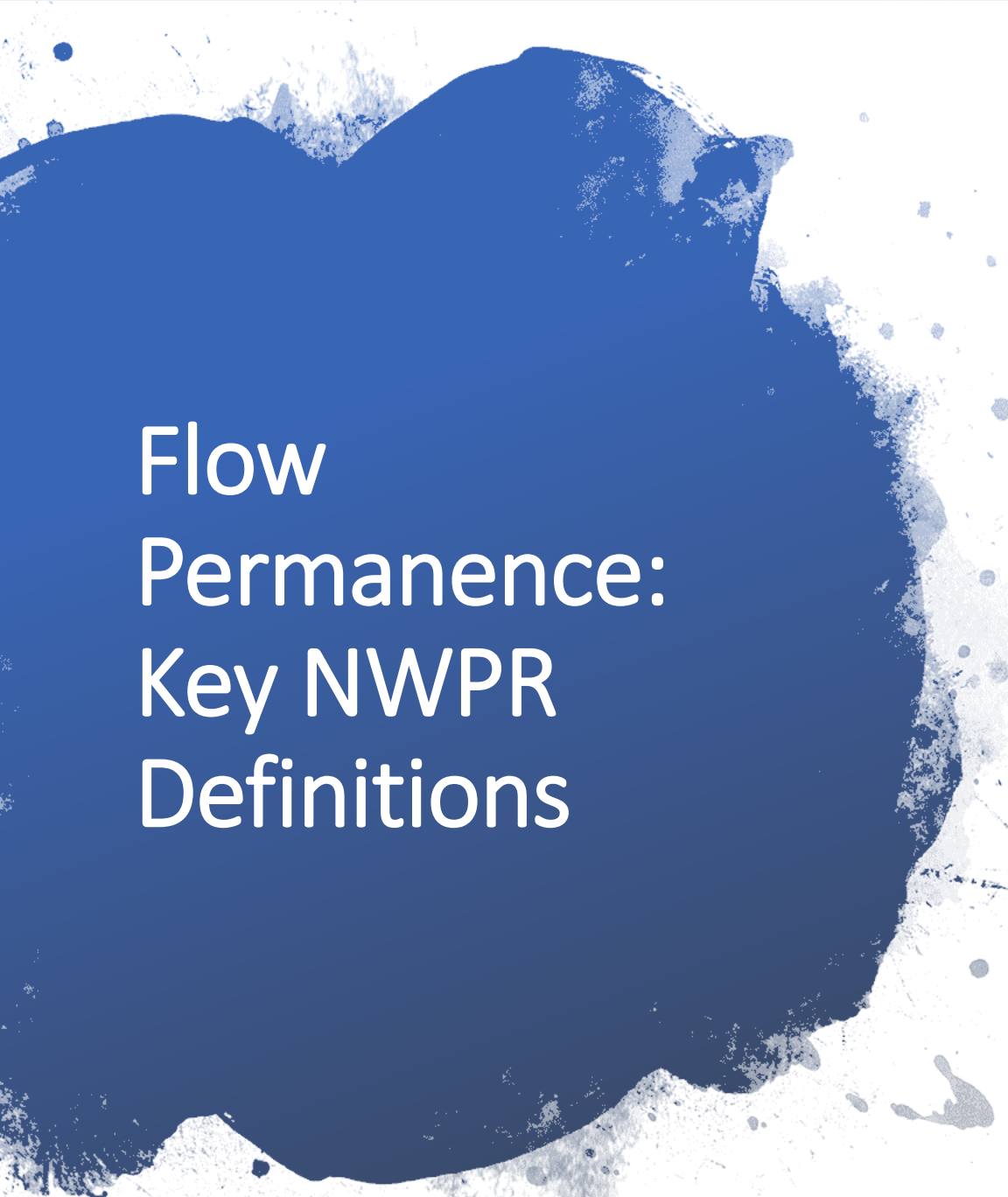
Flow duration

Surface connections

## (1)(ii) Tributaries:

- Tributaries must still have Ordinary High Water Mark (OHWM) to be considered streams.
- Streams must **contribute surface water flow** to a downstream TNW in a typical year (can be through certain non-WOTUS).
- Ephemeral streams are not jurisdictional.





# Flow Permanence: Key NWPR Definitions

- **Perennial:**
  - Surface water flowing continuously year-round.
- **Intermittent:**
  - 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:**
  - Surface water flowing or pooling **only in direct response to precipitation** (*e.g.*, rain or snow fall).

(1)(iii) Lakes and ponds, and impoundments of jurisdictional waters:

- **Surface hydrologic connections** to TNWs required for lakes, pond, and impoundments to be jurisdictional; can include flooding by (1)(ii) tributary, artificial connections, reservoir releases.
- Impoundments must **contribute surface water flow** to a downstream TNW or territorial sea in a typical year.



## (1)(iv) Adjacent wetlands:

- The final rule does not change the agencies' longstanding definition of "wetlands."
- Wetlands must be adjacent in a typical year:
  - Directly abut (touch) an 1(i)-1(iii) water;
  - Be inundated by flooding by an 1(i)-1(iii) water;
  - Physically separated by 1(i)-1(iii) water only by natural feature (berm, dune, etc.); or
  - Physically separated from 1(i)-1(iii) water by an artificial structure, as long as the structure allows for flow between the wetland and 1(i)-1(iii) water.



# Ditches

*Ditch* means a constructed or excavated channel used to convey water.

Ditches are jurisdictional where they are:

- TNWs, including those subject to the ebb and flow of the tide (*i.e.*, are (1)(i) 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 (1)(ii) waters); or
- Constructed in an adjacent wetland and develop wetland characteristics (*i.e.*, are (1)(iv) waters).

Ditches are excluded from WOTUS in all other cases:

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

# Waters/Features Excluded from Final WOTUS Definition [40 CFR 120.2(2)]

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



# NWPR: Current Status

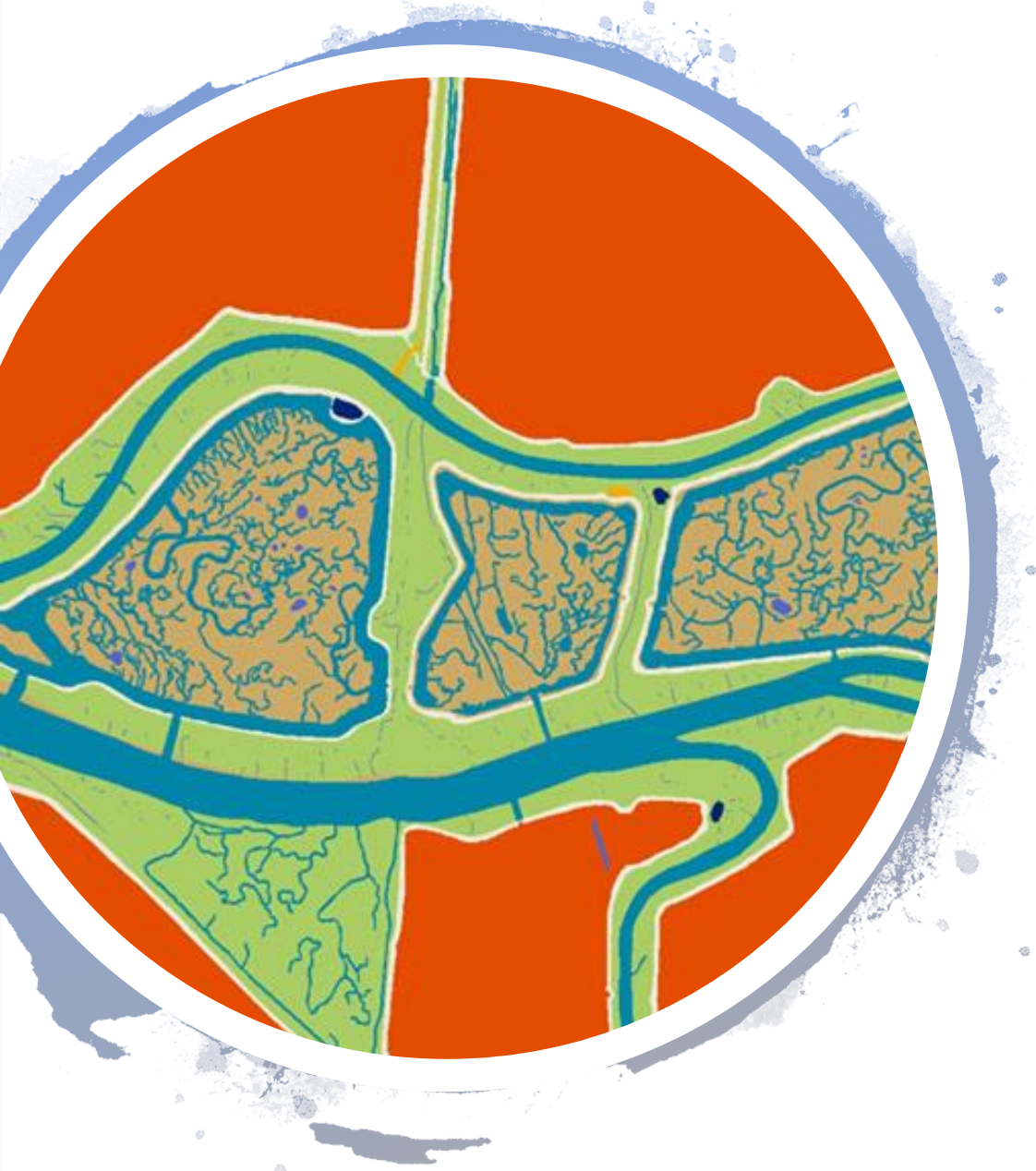
- NWPR is the active rule defining WOTUS: it is being implemented by EPA and the Corps nationwide
- Executive Order 13990 has identified NWPR among many other recent EPA rules for review under the new administration
- Any further actions to change the definition of WOTUS will require full rulemaking procedures, including tribal consultation.



# Tools and Technical Resources

Tools to identify waters, and tools to identify WOTUS

*You don't need to  
determine if a water  
body is WOTUS to  
develop WQS for it.*



# Desktop and field tools to identify waters

## GIS tools showing locations of waterbodies:

- National Hydrography Dataset
- National Wetlands Inventory
- Regional/statewide aquatic resource inventories (CARI)

## Field assessments:

- Wetland delineation manual & regional supplements
- Ordinary high water mark manual



# Tools to identify WOTUS

- GIS/remote sensing tools:
  - Corps & EPA websites AID websites
  - Aerial imagery
  - FEMA floodplain maps
  - Streamgauge, wellhead data
- Field tools:
  - Streamflow Duration Assessment Methods (SDAMs)
- More to come



Questions?

Thank you for your time!

# Resources: Regulations, Connectivity & CWA History

## Regulations:

- USEPA. (2020) *Navigable Waters Protection Rule [40 CFR Part 120]* <https://www.epa.gov/nwpr> (also see *Resource & Programmatic Assessment* discussing impacts to different CWA programs)

## Connectivity of Waters:

- USEPA. (2015) *Connectivity of Streams and Wetlands To Downstream Waters: A Review and Synthesis of the Scientific Evidence*. <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414>
- Acuña, V. et al. (2017). Managing temporary streams and rivers as unique rather than second-class ecosystems. *Biological Conservation*, 211, 12-19. <https://doi.org/10.1016/j.biocon.2016.12.025>

## CWA History:

- Wittenberg, A. (2017). What does 'waters of the U.S.' mean? We asked the authors. *Greenwire* <https://www.eenews.net/greenwire/stories/1060056818/>
- Gardner, R.C. (2011). What's a wetland (for purposes of Clean Water Act jurisdiction)? Book chapter in *Lawyers, Swamps, and Money: US Wetland Law, Policy, and Practice*. Island Press: Washington, DC

# Tools and technical resources

- USGS. National Hydrography Dataset. <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>
- USFWS. National Wetlands Inventory. <https://www.fws.gov/wetlands/>
- San Francisco Estuary Institute. California Aquatic Resources Inventory. <https://www.sfei.org/cari>
- USACE. Wetland Delineation Manual & Regional Supplements. [https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg\\_supp/](https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/)
- USACE. Ordinary High Water Mark Resources. <https://www.erdc.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/486085/ordinary-high-water-mark-ohwm-research-development-and-training/>
- EPA & USACE. Streamflow Duration Assessment Method: Arid West Beta Method. <https://www.epa.gov/streamflow-duration-assessment/beta-streamflow-duration-assessment-method-arid-west>