

THE PROPOSED 'WOTUS' RULE: OVERVIEW AND ACTION STEPS

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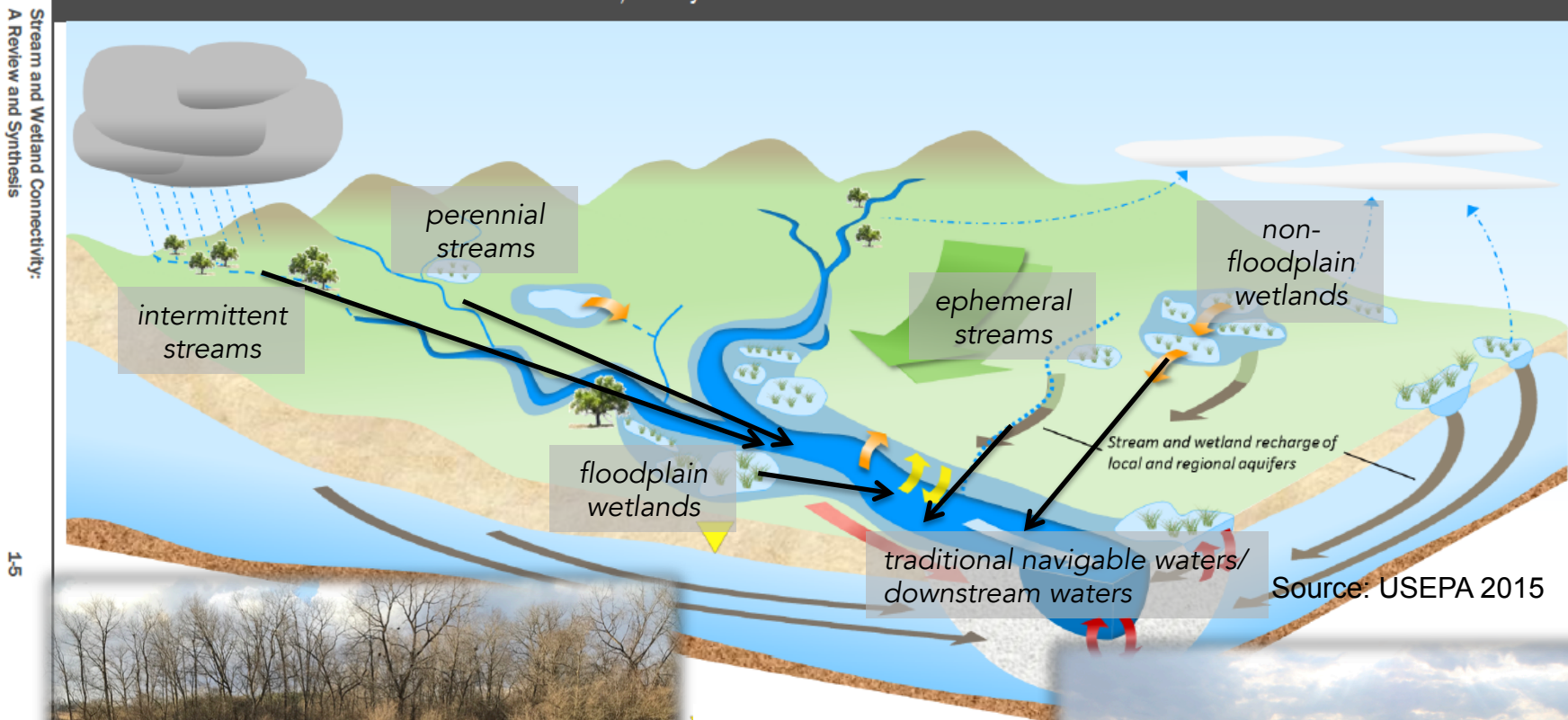


OVERVIEW

1. CONNECTIVITY OF WATERS
2. SCOPE OF REVISED DEFINITION
3. HOW THE NEW RULE IS INCONSISTENT WITH THE
BEST AVAILABLE SCIENCE
4. IMPACTS OF THE NEW RULE
5. ACTION STEPS

CONNECTIVITY OF WATERS

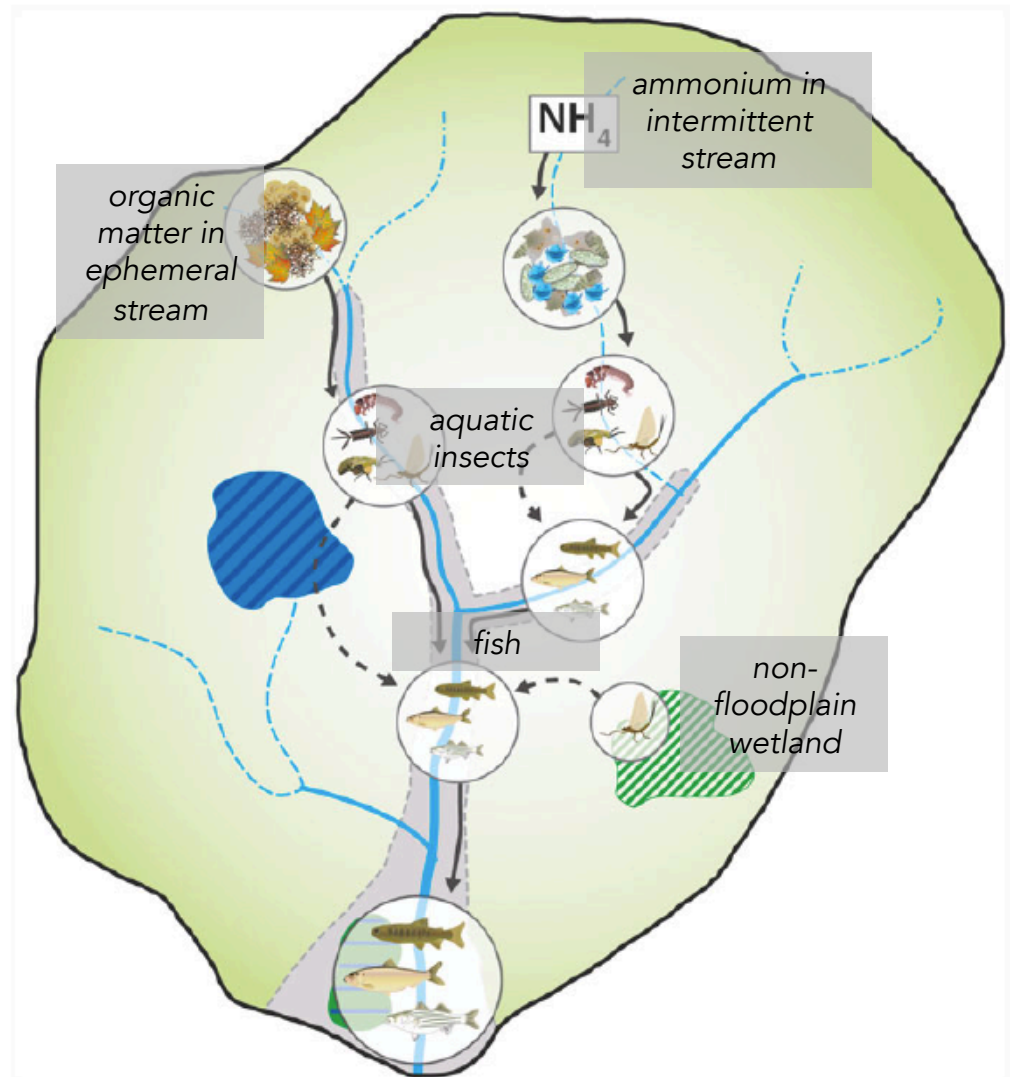
Figure 1-1A. Hydrologic flowpaths. Arrows are representative of surface-water and ground-water flows occurring throughout the watershed. Subsurface flows are shown within the cross section, and by faded arrows outside the cross section.



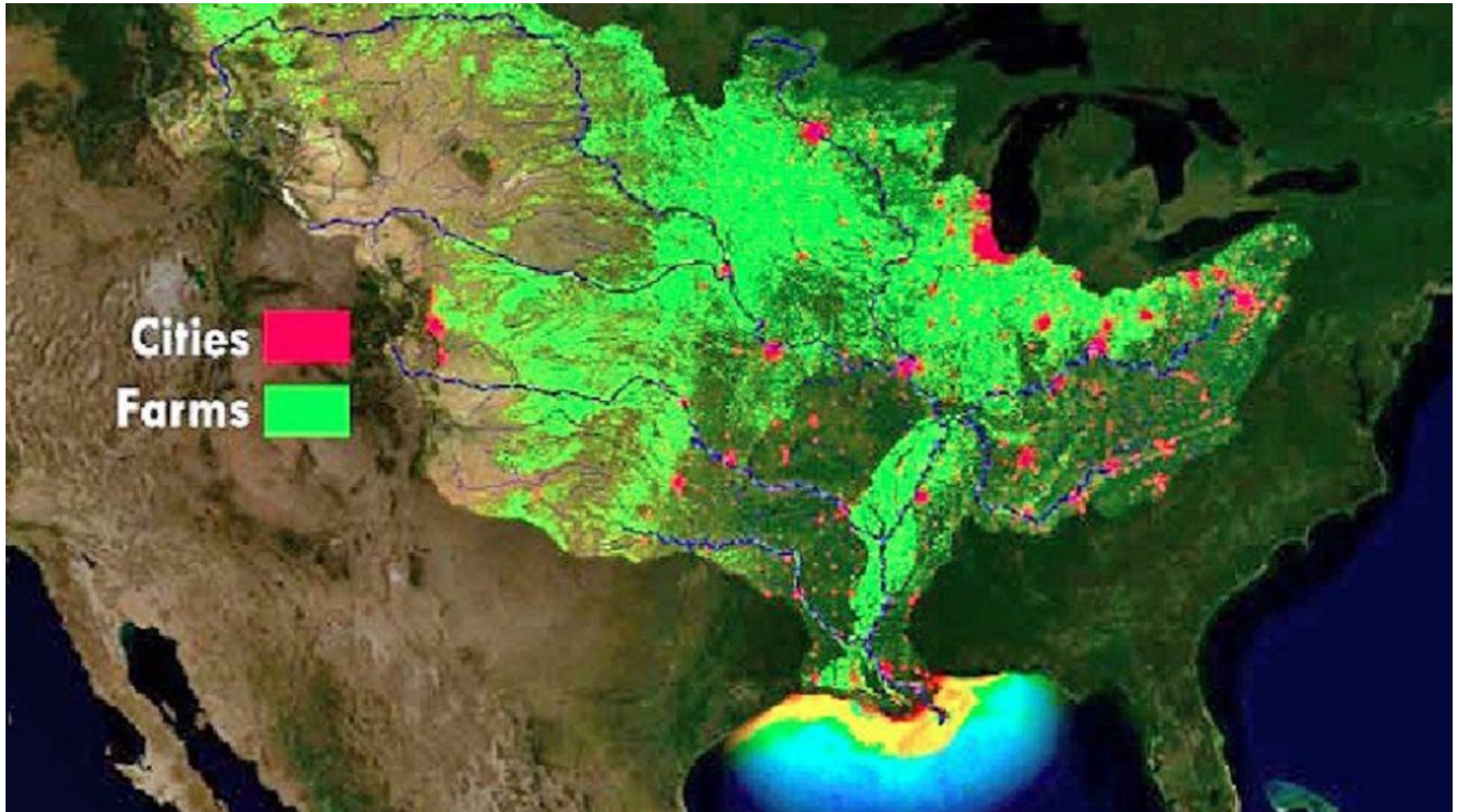
← Non-floodplain
wetland in Ohio prairie
Source: S.M.P. Sullivan.
Ephemeral stream in
Colorado. Source: D.A.
Allan. →



- **Physical connections**
 - Transport/exchange of non-living materials that do not chemically change en route from streams and wetlands to downstream waters
- **Chemical connections**
 - Transport/exchange of non-living materials that can chemically change en route to downstream waters
- **Biological/ecological connections**
 - Transport/exchange of living organisms (or their products) to downstream waters
- **Connectivity not constant**
 - Can vary over time



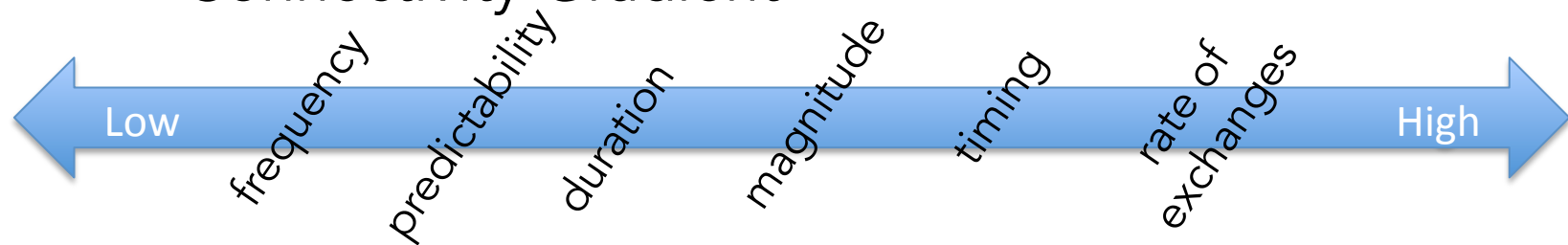
Source: USEPA 2015



Source: Institute for Global
Environmental Strategies and
MotherJones.com

WHY IS CONNECTIVITY CRITICAL?

- Key scientific concept at cornerstone of legislation and regulation
- Critical to water quality and ecosystem function
- All parts of a watershed are connected but not to the same degree
 - EPA's Science Advisory Board (SAB) recommended "Connectivity Gradient"



Degree and downstream effects of connections variable

SCOPE OF PROPOSED RULE

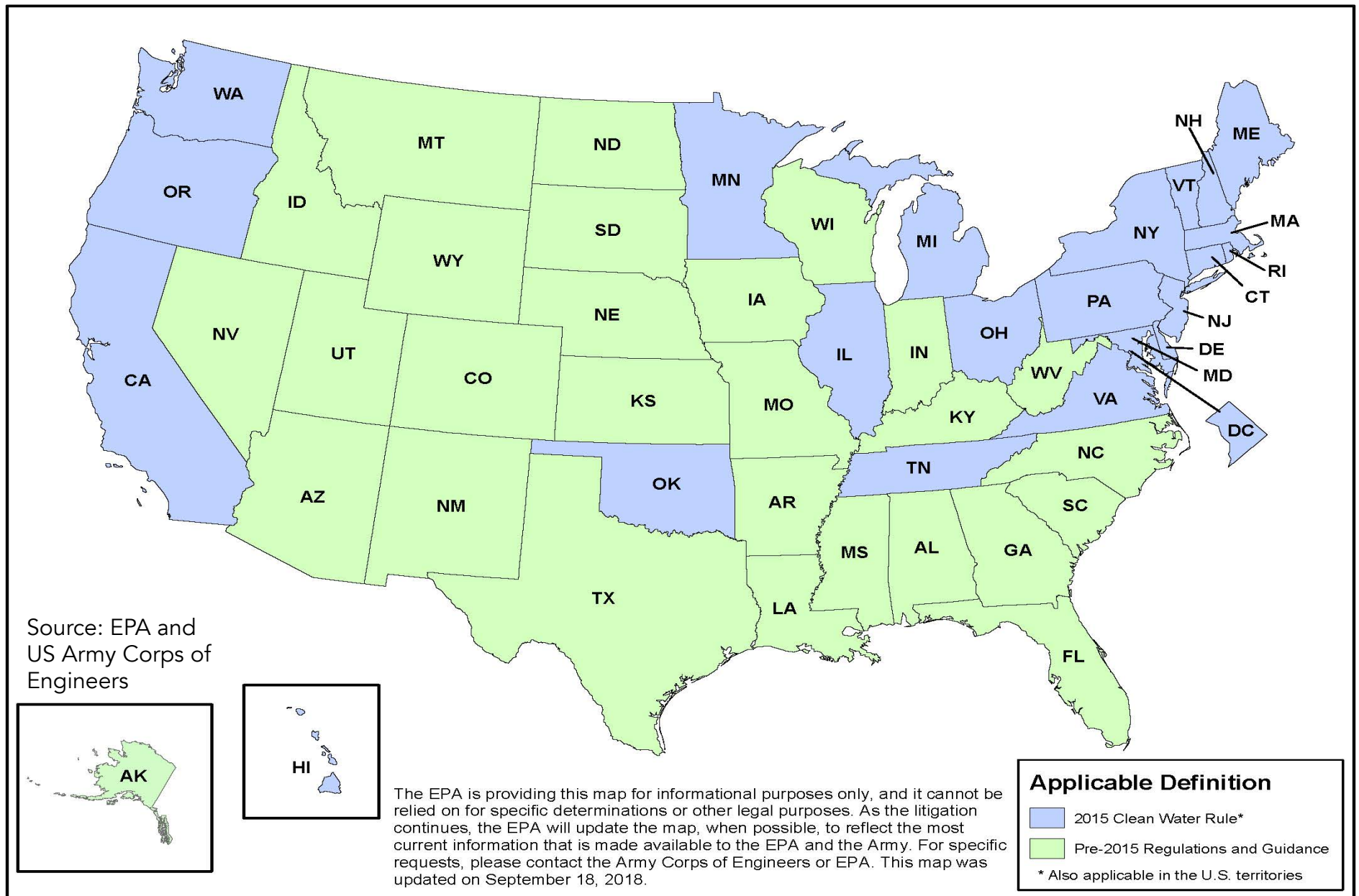
- EPA and US Army Corps Propose Rule to Revise the Definition of “Waters of the United States”

Would revise both 2015 Clean Water Rule (CWR) and pre-2015 definitions of WOTUS.



Non-floodplain wetlands, Alaska. Source: M.C. Rains

2015 Clean Water Rule is currently in effect in light blue states. Pre-2015 regulations and guidance are in effect in green states.



2015 CWR & Pre-2015 Jurisdiction vs. Proposed Rule

OVERVIEW

2015 CWR & Pre-2015 Jurisdiction

- Based on the agencies' interpretation of Justice Kennedy's 2006 Rapanos "significant nexus" test for jurisdiction.
- Traditional navigable waters – no change.
- Interstate waters – independent category of jurisdiction, jurisdictional by virtue of being "interstate".

Proposed Rule to Revise CWR

- Eliminates Justice Kennedy's 2006 Rapanos "significant nexus" test for jurisdiction. Based on Justice Scalia's 2006 Rapanos opinion, as directed by President Trump's 2/28/2016 Executive Order.
- Traditional navigable waters – no change.
- Interstate waters – no longer an independent category, and only jurisdictional if they meet conditions of another category of jurisdictional waters.

TRIBUTARIES & DITCHES

2015 CWR & Pre-2015 Jurisdiction

- **Tributaries** – All streams with identifiable bed, bank, and high-water mark protected (under 2015 CWR).
- **Ditches** – jurisdictional when **they are tributary**, including ditches with perennial or intermittent flow in upland. Exclusions for maintenance of drainage ditches, and for normal agriculture, silviculture, ranching activities, agricultural stormwater discharges, and irrigation return flows.

Proposed Rule to Revise CWR

- **Tributaries** – must contribute perennial or intermittent flow to downstream navigable waters in a “typical” year to be jurisdictional. **Ephemeral streams are excluded from jurisdiction.**
- **Ditches** – Reduction in jurisdictional ditches. **No ditches constructed in upland and no ditches with ephemeral flow are jurisdictional.** Maintains existing exclusions.

LAKES, PONDS & IMPOUNDMENTS

2015 CWR & Pre-2015 Jurisdiction

- **Lakes and Ponds** – Not in a separate category. Non-navigable, isolated lakes and ponds are jurisdictional if considered adjacent or neighboring, per the agencies' interpretation of Justice Kennedy's "significant nexus" opinion.
- **Impoundments of jurisdictional waters** – More waters (with associated impoundments) are jurisdictional under 2105 CWR and Pre-2015 CWR than under Proposed Rule.

Proposed Rule to Revise CWR

- **Lakes and Ponds** – Now in a separate category. Non-navigable, isolated lakes and ponds are no longer jurisdictional due to elimination of Justice Kennedy's "significant nexus" concept.
- **Impoundments of jurisdictional waters** – Regulated as they are under 2015 CWR and Pre-2015 regulations and guidance. However, **fewer waters are jurisdictional**, thus likely leading to reduction in jurisdictional impoundments.

WETLANDS & ADJACENCY

2015 CWR & Pre-2015 Jurisdiction

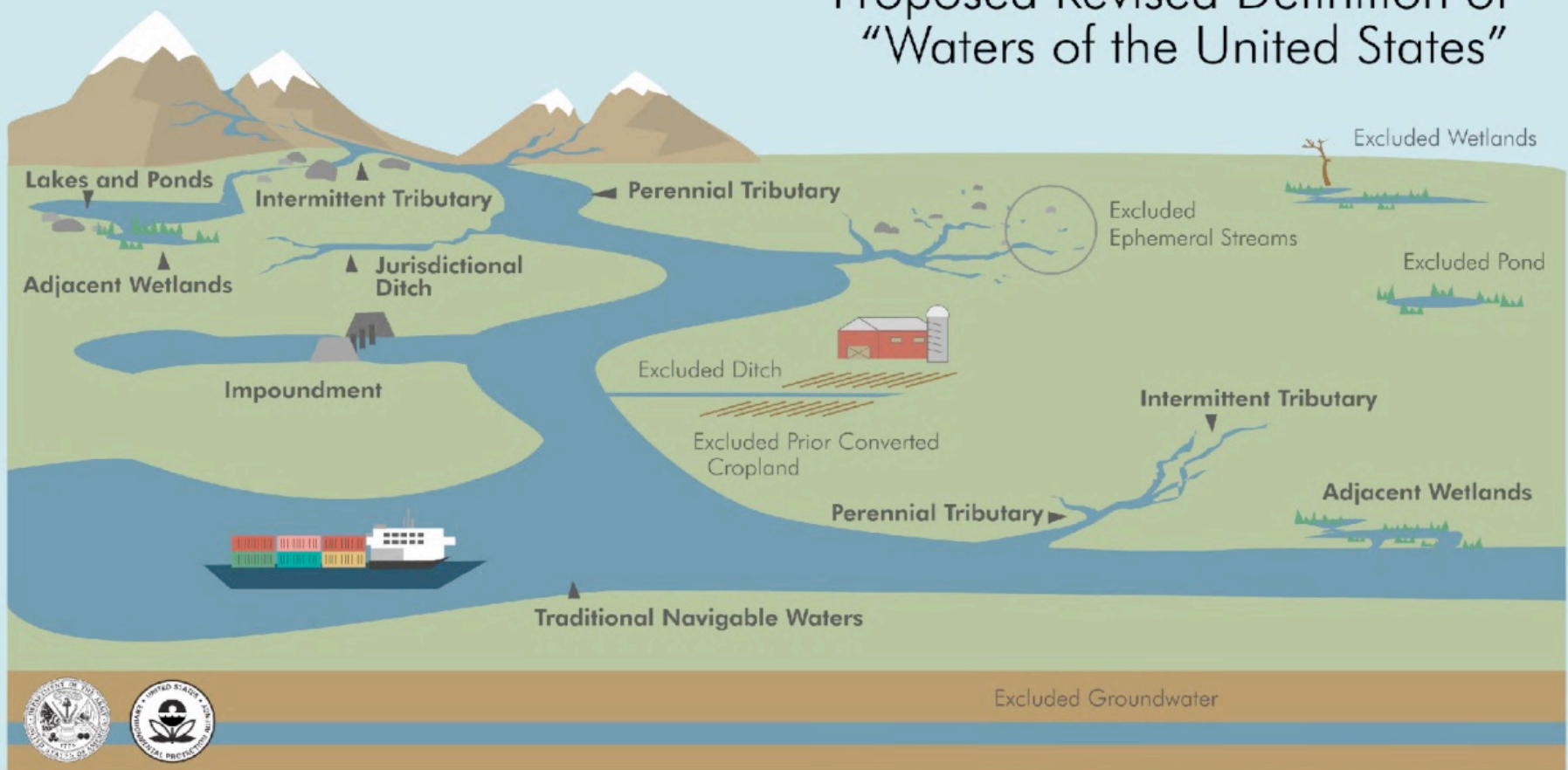
- **Adjacent Wetlands** – Definition reliant on agencies' interpretation of Justice Kennedy's "significant nexus" opinion and underlying science. Wetlands behind berms or dikes may be considered "adjacent" and therefore jurisdictional due to their functional "significant nexus".
- **2015 CWR** – By categorical treatment of many waters and wetlands, **reduces need for case-by-case "significant nexus" analysis, compared to pre-2015 jurisdiction.**

Proposed Rule to Revise CWR

- **Adjacent Wetlands** – More limited jurisdiction over wetlands. **Wetlands must either abut jurisdictional waters or have direct hydrological surface connection to jurisdictional waters in a "typical" year.** If wetlands are physically separated from jurisdictional waters by a berm, dike or barrier, and lack a direct hydrologic surface connection in a typical year, they are not jurisdictional (i.e., non-floodplain wetlands).
- Attempts to **eliminate** need for case-specific "significant nexus" test through categorical treatment of tributaries and adjacent wetlands. "Significant nexus" is no longer a jurisdictional test.

EPA infographic showing jurisdiction of proposed Rule to Revise the definition of WOTUS. Proposed jurisdictional waters are in **bold**. Note that coastal waters are not addressed in the infographic.

Proposed Revised Definition of “Waters of the United States”



* For illustrative purposes only. Proposed jurisdictional waters in **bold**.

PROPOSED RULE *NOT* SUPPORTED BY BEST AVAILABLE SCIENCE

Reliant on hydrological connectivity only, ignores other types of physical connectivity as well as biological, and chemical connectivity

Critical to consider *all three* given the intent of the CWA: “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”

- Example 1: Definition of tributaries fails to include appropriate measures of physical connectivity.
 - Proposed rule relies on flow permanence, which is a flawed approach.
 - Multiple physical parameters indicate connectivity, such as bed, banks, and high-water marks, as in the current 2015 rule.
 - These features serve as indisputable indicators of the connectivity of all streams to downstream waters, *including all intermittent and ephemeral streams*.
- Example 2: Biological and chemical connectivity are completely ignored.
 - SAB noted importance of biological connectivity and provided numerous scientific studies as support.
 - Ignoring chemical and biological integrity goes against intent of CWA.
 - *Without biological connectivity, aquatic ecosystems would not function properly.*

Proposed rule misinterprets or ignores natural gradients and the importance of considering the cumulative effects of connectivity

- “This proposal is intended to establish categorical bright lines that provide clarity and predictability for regulators and the regulated community ... ” (84 Fed. Reg. 31).
- Goes against scientific evidence that connectivity and other landscape features occur along a gradient.
 - The SAB clearly articulated the importance of recognizing gradients of waterbody connectivity (vs. a binary property: connected, not connected).
 - *Even low, or infrequent levels of connectivity can be important to downstream waters.*
- The proposed rule *removes all non-floodplain wetlands and ephemeral streams from protection*, irrespective of their degree of connectivity and the consequences of alterations of that connectivity to downstream water quality.
- Considering waterbodies in aggregate critical yet is not sufficiently addressed.

Proposed rule does *not* appropriately recognize how watersheds function

- Trying to overly simplify a complex issue
- Proposed rule focuses on waterbody connections in isolation, and misses their functional importance
 - Key recommendation of the SAB was to view waterbodies as part of larger systems
- Rule overly reliant on using case law to delineate watersheds and landscapes instead of basing the Rule on a solid scientific understanding of how they function
 - Leads to unsupported calls to remove protections for critical components of watersheds, such as ephemeral streams, that can have important downstream effects

Proposed rule disregards groundwater connectivity

- Scientists have long know that surface water and groundwater are a single resource.
- Over short spatio-temporal scales, distinguishing between surface water and groundwater is inappropriate
 - Wetlands and streams are linked by integrated surface-water and groundwater flow systems, modulating both the local storage of water and the rate at which water flows to downstream waters.
- To disregard groundwater connectivity – especially over small distances and short time spans – is to disregard the reality of how the Nation's natural waters function.

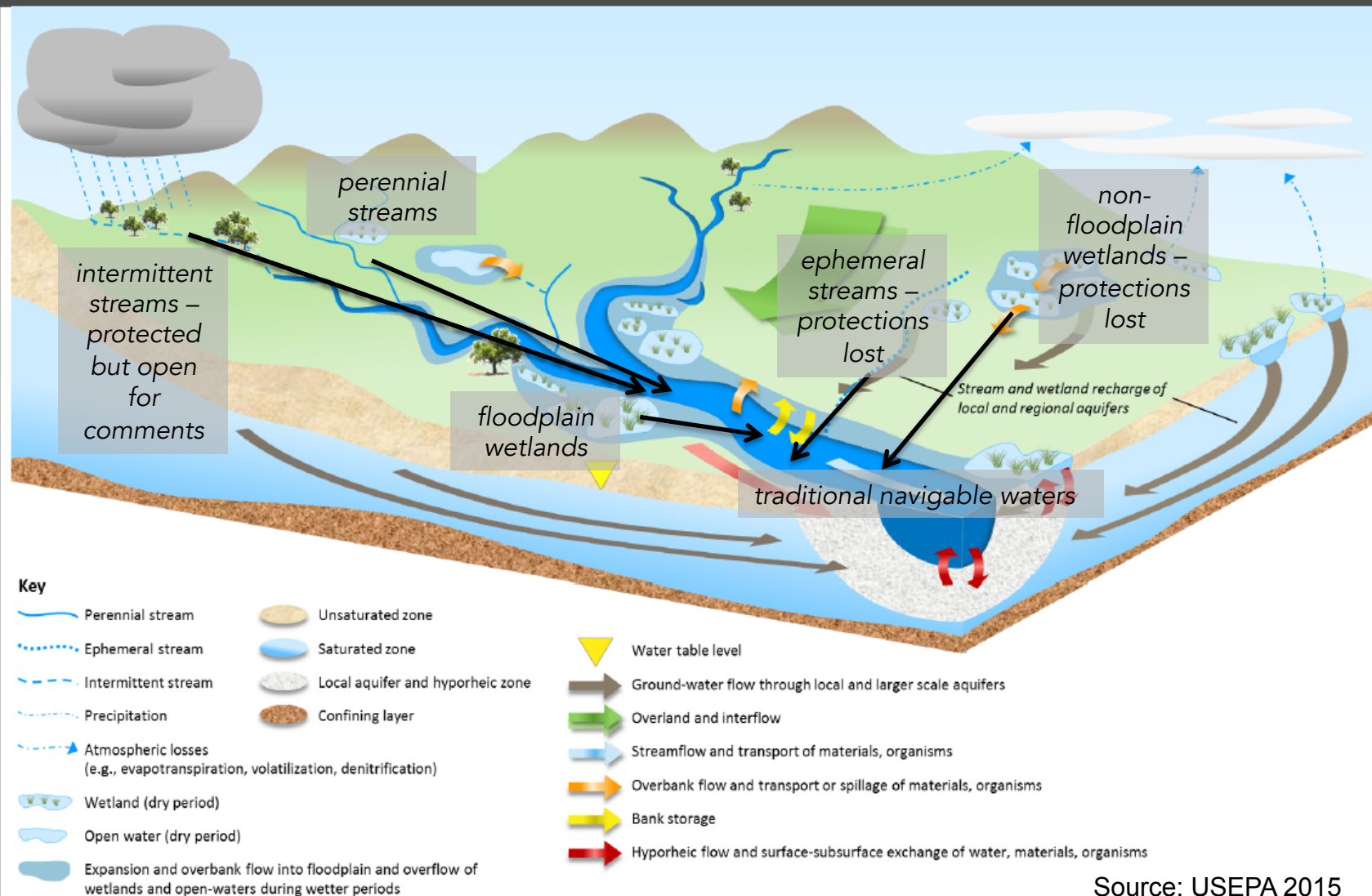
THE PROPOSED RULE IS NOT CLEAR OR DEFENSIBLE

- Eliminates case-specific *significant nexus* tests. Yet, the proposed Rule acknowledges the need for case-specific site analysis, and for complex, professional-level site evaluations to determine jurisdiction in a variety of situations.
 - e.g., precise way jurisdictional (perennial and intermittent) streams will be evaluated.
- Seeking public comments on numerous issues that could further weaken protections.

The 2015 CWR is supported by EPA's 2015 "Connectivity Report", findings from the EPA's Science Advisory Board, and by new publications/reports, which document the state of the science in support of the 2015 CWR. *The agencies do not provide any comparable body of peer-reviewed science to support the proposed rule.*

IMPACTS OF NEW RULE

Figure 1-1A. Hydrologic flowpaths. Arrows are representative of surface-water and ground-water flows occurring throughout the watershed. Subsurface flows are shown within the cross section, and by faded arrows outside the cross section.



Source: USEPA 2015

The proposed rule leaves open the possibility that human activities can lead to removing waters from protection.

- Perennial streams that shift to ephemeral could lose protection.
- Certain wetlands may also become non-permanent in the future, losing protection.
- Ditches must also continue to meet definition of tributary even after human alterations.



Ephemeral stream flowing and dry (AZ).
Source: M.T. Bogan.



IN A NUTSHELL

- Proposed rule *inconsistent* with current science & the intent of the CWA -

- Loss of protection for some of our Nation's most vulnerable waters
 - Headwater streams comprise 79% of our nation's stream networks; wetlands outside of floodplains comprise 6.59 million hectares in the conterminous U.S.
- Loss or impairment of ecological functions not only within headwater regions, but also in downstream rivers, lakes, and coastal areas.
- Loss of biodiversity
 - Loss or degradation of habitat for many endemic and threatened fish species as well as species supporting economically important fisheries.
- Headwater streams and wetlands are culturally important for many segments of U.S. society, with particularly high significance for many Native peoples.
- Human activities could lead to future loss of protections.

Impairment or loss of chemical, physical, and biological integrity of our Nation's waters - and thus loss of water quality - is assured under the proposed WOTUS rule, and would have severe and long-lasting negative consequences for environmental conditions throughout the U.S.

ACTION STEPS

Comment Letter

- *Serve as clear opposition to the proposed rule*
- *Provide information to multiple groups and agencies as this process continues*
- *Who should comment:*
 - *Individuals and groups (e.g., chapters, societies, etc.)*
- *Comment period*
 - *60-d period endings April 15th*
- *Where to comment:*
 - <https://www.regulations.gov>
- *Docket ID:*
 - *No. EPA-HQ-OW-2018-0149*

Comment Letter – What to include

- **Include the Docket No.**
 - EPA-HQ-OW-2018-0149
- **Introduction**
 - State expertise
 - Include information about your group
 - Indicate position on proposed Rule
- **Body of the letter**
 - Explain what the proposal will mean for for your state or region
 - Give details and specific examples
 - Explain why the proposed rule is not using science properly
 - Do not have to comment on every issue in a proposal
 - Avoid name-calling, personal attacks, and inflammatory rhetoric
- **Conclusion**
 - Re-state your position and urge the agencies to amend the Rule accordingly

Garnering support



- Encourage others to comment
- Using social media and other modern communication channels
- Seek coverage from traditional media
- Write opposition letters to lawmakers