# Waters of the United States (WOTUS) and What does it mean "On the Ground"

Presented by:

Ben Rosner P.W.S., P.W.D., C.E., C.T.



## What are WOTUS?

a **DAVEY** company

 WOTUS = Waters of the United States







#### WOTUS

## Why does it matter to you?

To "impact" a Waters of the United States (WOTUS)

- U.S. Army Corps of Engineers approval
  - √ § 404 Clean Water Act (CWA) or § 10 Rivers and Harbors Act (RHA)
- State § 401 Certification/other
  - ✓ State Approvals
- Trigger's the National Historic Preservation Act (NHPA) and the Endangered Species Act (ESA)
- Other Local/State Regulations
  - ✓ Permits and/or Buffers

Need to know where WOTUS exists to avoid or permit impacts.



## The Current (2015) Rule

- Three decades of conflicting Circuit Court cases and Supreme Court (3) decisions
- Rapanos vs. United States, June 19, 2006 Case led to guidance – more confusion

#### 2015 Rule Goal

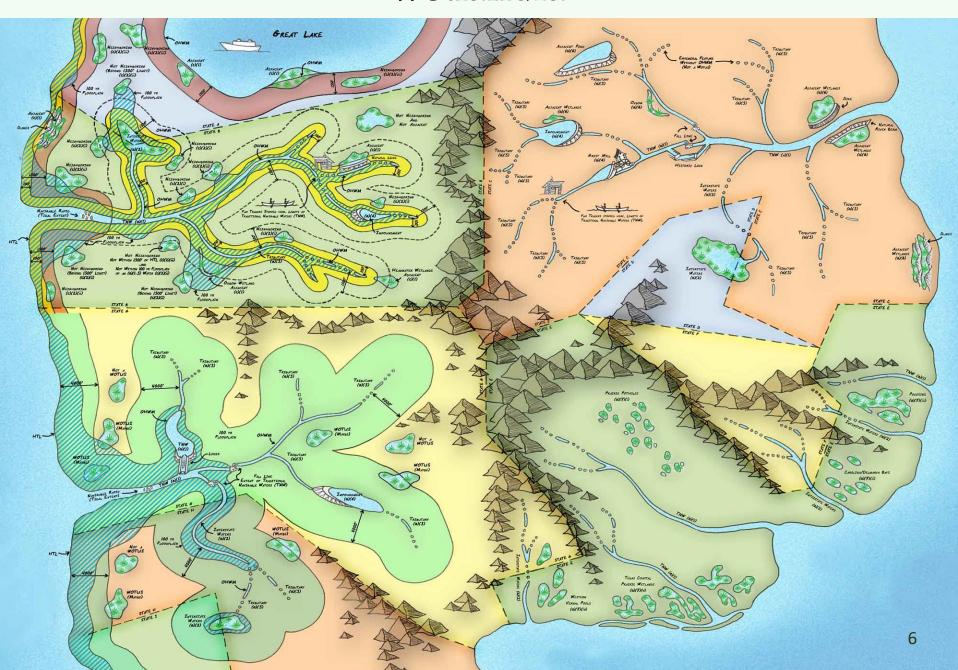
- ✓ Clarity in Jurisdiction
- ✓ "Bright Lines" of Regulation
- ✓ Less costly and complex Permits



#### **WOTUS** can be broken out into these categories:

- **A.** Jurisdictional by Rule § 328.3 (a) (1-6)
- **B.** Similarly situated Isolated Wetlands based on case by case decision § 328.3 (a) (7)
- C. Waters needing individual case-specific Significant Nexus decisions § 328.3 (a) (8)
- **D.** Waters that are neighboring or adjacent § 328.3 (c) (1-2)



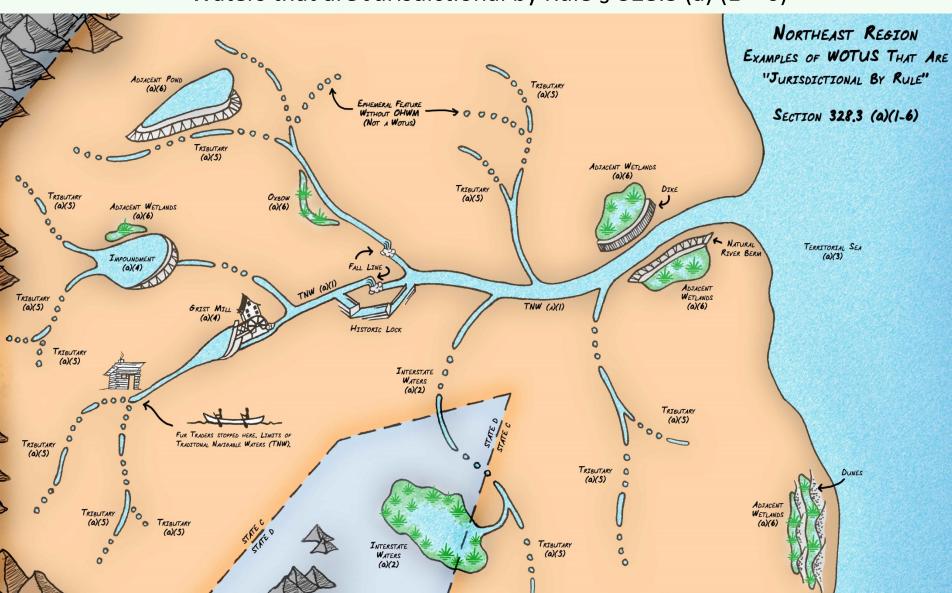


#### Waters that are Jurisdictional by Rule § 328.3 (a)(1-6)

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) The territorial seas;
- (4) All impoundments of waters otherwise identified as waters of the United States under this section;
- (5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;
- (6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;



Waters that are Jurisdictional by Rule § 328.3 (a) (1-6)



#### Similarly situated Isolated Wetlands based on case by case decision § 328.3 (a) (7)

(7) All waters in paragraphs (i) through (v) of this paragraph where they are determined, on a case-specific basis, to have a significant nexus to waters identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (i) through (v) of this paragraph are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through(3) of this section. Water identified in this paragraph shall not be combined with waters identified in paragraph(a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

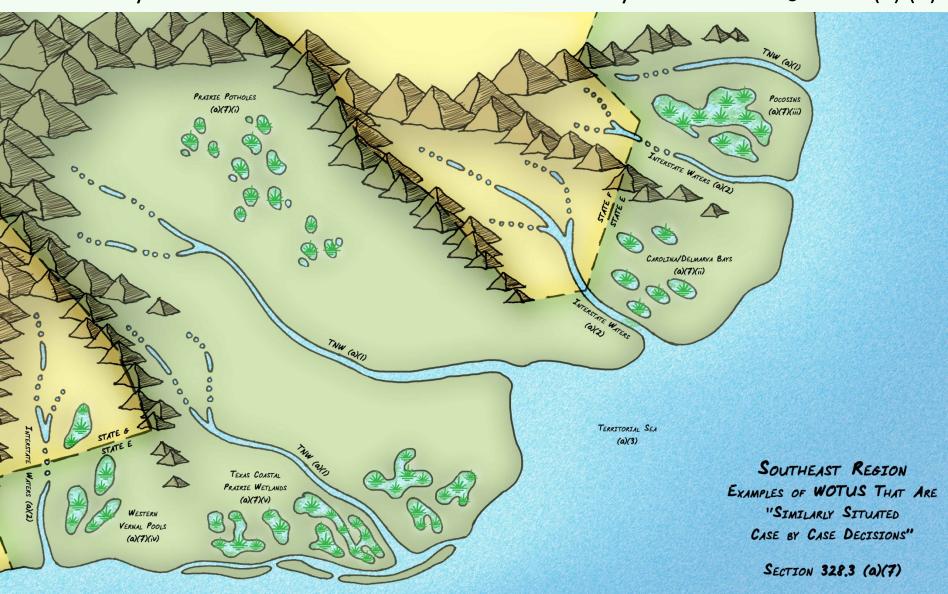


#### Similarly situated Isolated Wetlands based on case by case decision § 328.3 (a) (7)

- (i) *Prairie potholes*. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.
- (ii) *Carolina bays and Delmarva bays*. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.
- (iii) *Pocosins*. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.
- (iv) *Western vernal pools*. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depressions, soils with poor drainage, mild, wet winters and hot, dry summers.
- (v) *Texas coastal prairie wetlands*. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.



Similarly situated Isolated Wetlands based on case by case decision § 328.3 (a) (7)



#### Waters needing individual case-specific Significant Nexus decisions § 328.3 (a) (8)

(8) All waters located within the 100-year floodplain of a water identified in (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph(a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus is required.

## Significant Nexus § 328.3 (c) (5)

(5) Significant nexus. The term significant nexus means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. The term "in the region" means the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (a)(1) through (3) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (i) through (ix) of this paragraph. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (a)(1) through (3) of this section.



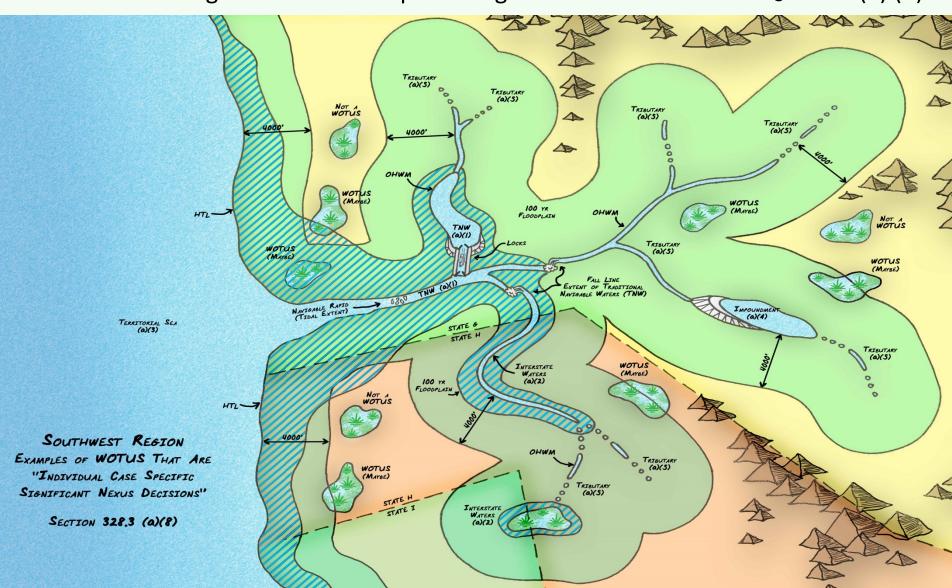
## Significant Nexus § 328.3 (c) (5)

Functions relevant to the significant nexus evaluation are the following:

- (i) Sediment trapping,
- (ii) Nutrient recycling,
- (iii) Pollutant trapping, transformation, filtering, and transport,
- (iv) Retention and attenuation of flood waters,
- (v) Runoff storage,
- (vi) Contribution of flow,
- (vii) Export of organic matter,
- (viii) Export of food resources, and
- (ix) Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (a)(1) through (3) of this section.



Waters needing individual case specific Significant Nexus decisions § 328.3 (a) (8)



#### Waters that are neighboring or adjacent § 328.3 (c) (1-2)

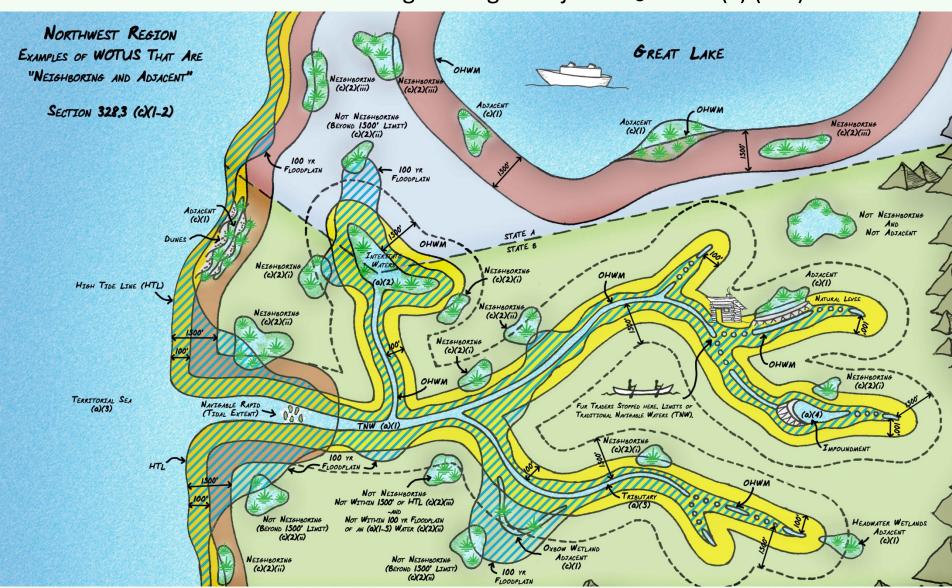
(1) Adjacent. The term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through(5) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and re-bordering, contiguous, or neighboring such waters. Waters being used for established normal farming, ranching, or silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

#### Waters that are neighboring or adjacent § 328.3 (c) (1-2)

#### (2) *Neighboring*. The term neighboring means:

- (i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;
- (ii) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;
- (iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

Waters that are neighboring or adjacent § 328.3 (c) (1-2)







**b(1) Waste Treatment Systems** 

**b(1)** Waste Treatment Lagoons



b(2) Prior converted cropland



#### b(3) The following ditches



b(3) (i) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary



b(3) (ii) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands

b(3) (iii) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a) (1) through (3) of this section.



## WOTUS

## **Ditches with perennial flow are WOTUS**





#### b(4) The following features



b(4) (i) Artificially irrigated areas



b(4) (ii) Artificial, constructed lakes and ponds



b(4) (iii) Artificial reflecting pools or swimming pools



b(4) (iv) Small ornamental waters created in dry land



b(4) (v) Water-filled depressions created in dry land incidental to mining or construction activity



b(4) (vi) Erosional features, including gullies



b(4) (vii) Puddles



b(5) **Groundwater, including groundwater drained through** subsurface drainage systems



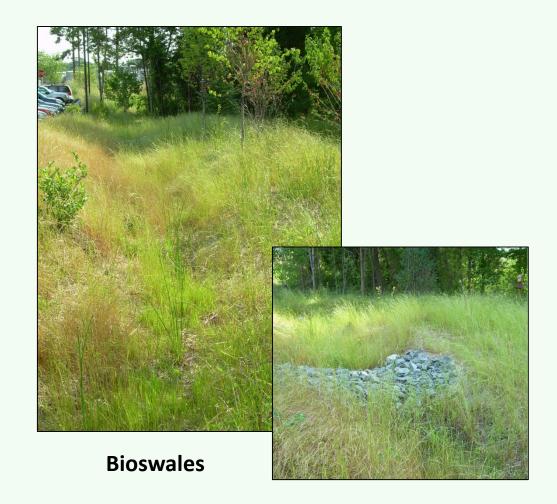
#### **b(6)** Stormwater control features



Stormwater management ponds (dry or wet)



**Rain gardens** 



#### b(7) Wastewater recycling structures constructed in dry land



**Groundwater recharge basins** 



## So then this happened...

#### A <u>NEW</u> WOTUS Rule was proposed in February

- Swings the pendulum back the other way
- Would drop out a lot of features regulated under the 2015 rule AND previous rules.



## The Big Changes & No Changes

- No changes to: Wetlands, High Tide Line (HTL) and Ordinary High Water Mark (OHM)
- Ephemeral Streams not regulated
- Isolated Wetlands <u>clearly</u> "OUT"
- Ditches slightly clearer
- The word "Adjacent" is redefined: 1986 vs 2019

(c) The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."

(c)(1) Adjacent wetlands. The term adjacent wetlands means wetlands that abut or have a direct hydrologic surface connection to a water identified in paragraphs (a)(1) through (5) of this section in a typical year. Abut means to touch at least at one point or side of a water identified in paragraphs (a)(1) through (5) of this section. A direct hydrologic surface connection occurs as a result of inundation from a paragraph (a)(1) through (5) water to a wetland or via perennial or intermittent flow between a wetland and a paragraph (a)(1) through (5) water. Wetlands physically separated from a paragraph (a)(1) through (5) water by upland or by dikes, barriers, or similar structures and also lacking a direct hydrologic surface connection to such waters are not adjacent.



## 1986 (a) The term "waters of the United States" means (1) All waters which are currently used, or were used in the past, or implementing regulations, subject to the exception of the United States implementing regulations.

- may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (j) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
- (5) Tributaries of waters identified in paragraphs (a) (1)\_(4) of this section;
- (δ) The territorial seas;
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)\_\_(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

- (a) For purposes of the Clean Water Act, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term "waters of the United States" means:
- (1) Waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including the territorial seas and waters which are subject to the ebb and flow of the tide;
- (2) Tributaries of waters identified in paragraph (a)(1) of this section;
- (3) Ditches that satisfy any of the conditions identified in paragraph
- (a)(1) of this section, ditches constructed in a tributary or that relocate or alter a tributary as long as those ditches also satisfy the conditions of the tributary definition, and ditches constructed in an adjacent wetland as long as those ditches also satisfy the conditions of the tributary definition;
- (4) Lakes and ponds that satisfy any of the conditions identified in paragraph (a)(1) of this section, lakes and ponds that contribute perennial or intermittent flow to a water identified in paragraph (a)(1) of this section in a typical year either directly or indirectly through a water(s) identified in paragraphs (a)(2) through
- (6) of this section or through water features identified in paragraph
- (b) of this section so long as those water features convey perennial or intermittent flow downstream, and lakes and ponds that are flooded by a water identified in paragraphs (a)(1) through (5) of this section in a typical year;
- (5) Impoundments of waters identified in paragraphs (a)(1) through
- (4) and (6) of this section; and
- (6) Adjacent wetlands to waters identified in paragraphs (a)(1) through (5) of this section.

## 33 CFR § 328.3 - Definitions.

1986	2018
(b) The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.	(c)(15) Wetlands. The term wetlands means areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
(c) The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by manmade dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."	(c)(1) Adjacent wetlands. The term adjacent wetlands <a href="mailto:means">means</a> wetlands that abut or have a direct hydrologic surface connection to a water identified in paragraphs (a)(1) through (5) of this section in a typical year. Abut means to touch at least at one point or side of a water identified in paragraphs (a)(1) through (5) of this section. A direct hydrologic surface connection occurs as a result of inundation from a paragraph (a)(1) through (5) water to a wetland or via perennial or intermittent flow between a wetland and a paragraph (a)(1) through (5) water. Wetlands physically separated from a paragraph (a)(1) through (5) water by upland or by dikes, barriers, or similar structures and also lacking a direct hydrologic surface connection to such waters are not adjacent.

## 33 CFR § 328.3 - Definitions.

1986	2018
(d) The term "high tide line" means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.	(c)(4) High tide line. The term high tide line means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds, such as those accompanying a hurricane or other intense storm.
(e) The term "ordinary high water mark" means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.	(c)(6) Ordinary <u>high water</u> mark. The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

#### Sources

- Federal Register, Vol. 51, No. 219, Nov. 13, 1986 (41250-41251)
- Pre-publication 2018.12.11 version of the proposed language (not published in FedReg as of Feb. 4, 2019)

## Is There an Effect?

- Saint Mary's University of Minnesota Study
  - GIS study with 3 scenario assumptions and 3 watersheds (MN, CO and NM)
    - Midpoint Scenario is similar to 2018/2019 WOTUS proposal
  - Reduction in WOTUS ranged from:
    - MN 16% to 22% to 36%
    - CO 3% to 15% to 55%
    - NM 11% to 18% to 69%
  - See: https://www.aswm.org/pdf lib/final annoucement wotus.pdf

#### This model uses three different analysis scenarios:

- Most Restrictive Scenario This scenario limits protection of wetlands to those directly adjacent to perennial (permanent) streams/rivers only.
- Very Restrictive Scenario This scenario limits protection of wetlands to those adjacent to protected perennial (permanent) and intermittent (seasonal) streams/rivers.
- Less Restrictive Scenario This is the least restrictive of the modeled scenarios
  and limits protection of wetlands to those adjacent to protected perennial, intermittent
  and ephemeral (temporary) streams, and ditched or channelized streams.

## Is There an Effect Locally?

- Local Assessment: 4 sites in NOVA (5,991 acres)
  - Real sites delineated and surveyed
  - 3 sites less than 5 % reduction (2 in Loudoun and one in Prince William)
  - 1 site greater than 50% reduction (Loudoun County)
  - Same physiographic province, close proximity different geology
  - Shale/Siltstone vs. Igneous/metamorphic

Answer: It depends where you are



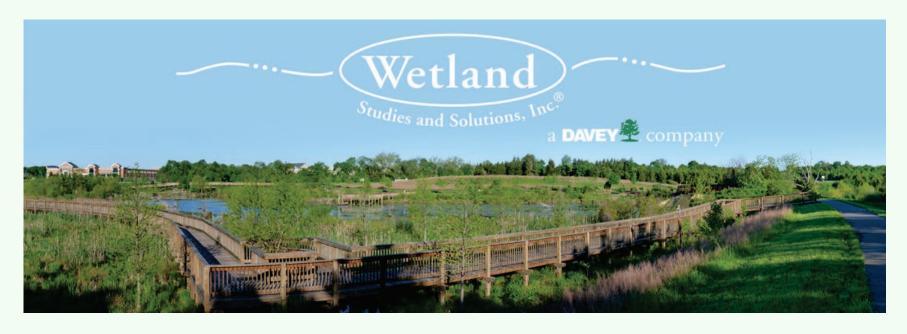
## **Potential Headwinds**

- Almost 700,000 comments received
- If final rule is adopted, will likely get caught in litigation immediately





## Questions?



Northern Virginia Office

5300 Wellington Branch Drive

Suite 100

Gainesville, Virginia 20155 703.679.5600

irginia 20155 <u>Maryland Office</u> 2 5600 1131 Benfield Boulevard, Suite L

Millersville, Maryland 21108

410.672.5990

Southwestern Virginia Office 5450 Peters Creek Road, Suite 110 Roanoke, Virginia 24019 540.795.6180

**Central Virginia Office** 

717 N. Courthouse Road, Suite 101 Richmond, Virginia 23236 804.253.9880

#### <u>Tidewater Office</u> 08 Old Virginia Beach Road, Su

1008 Old Virginia Beach Road, Suite 200 Virginia Beach, Virginia 23451 757.963.2008