
Navigable Waters Protection Rule (NWPR) Training for Florida

AUGUST 3, 2021

Training Overview

- Regulatory Background
- (a)(1) Territorial Seas and Traditional Navigable Waters
- (a)(2) Tributaries
- (a)(3) Lakes and Ponds, and Impoundments of Jurisdictional Waters
- (a)(4) Adjacent Wetlands
- Ditches
- Exclusions

“Waters of the United States” and the Clean Water Act

- “Waters of the United States” (WOTUS) is a threshold term in the Clean Water Act and establishes the scope of federal jurisdiction under the Act.
- Clean Water Act regulatory programs address “navigable waters,” defined in the statute as “the waters of the United States including the territorial seas.”
- The Clean Water Act does not define WOTUS; Congress left further clarification to the agencies.
- The EPA and the Department of the Army (Army) have defined WOTUS by regulation since the 1970s.
- The Navigable Waters Protection Rule became effective in June 2020.

NWPR Regulatory Citations

- Army, Title 33—Navigation and Navigable Waters, Part 328—Definition of WOTUS, § 328.3, **(a)(1-4), (b)(1-12), and (c)(1-16).**
- EPA, Title 40—Protection of Environment, Part 120—Definition of WOTUS, § 120.1 Purpose and scope, § 120.2 **(1)(i-iv), (2)(i)-(xii), 3(i)-(xvi).**

(a)(1) Territorial Seas and Traditional Navigable Waters (TNW):

- The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide.



Traditional navigable waters include those waters used for interstate commerce.

(a)(2) Tributaries:

- Contributes surface water flow to an (a)(1) water in a typical year, either directly or through one or more (a)(2)-(4) waters. A tributary must be **perennial or intermittent** in a typical year.
- Does not lose its jurisdictional status if it **contributes surface water flow** to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature (e.g., an ephemeral stream).
- The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to satisfy the flow conditions of the definition.



Tributaries include those perennial or intermittent streams that flow in response to snowpack melt, like Hayes Creek in Colorado that contributes surface flow to the Crystal River.

Key Definitions in the Final Rule

Perennial:

- The term *perennial* means surface water flowing continuously year-round.

Intermittent:

- The term *intermittent* means 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:

- The term *ephemeral* means surface water flowing or pooling only in direct response to precipitation (*e.g.*, rain or snow fall).

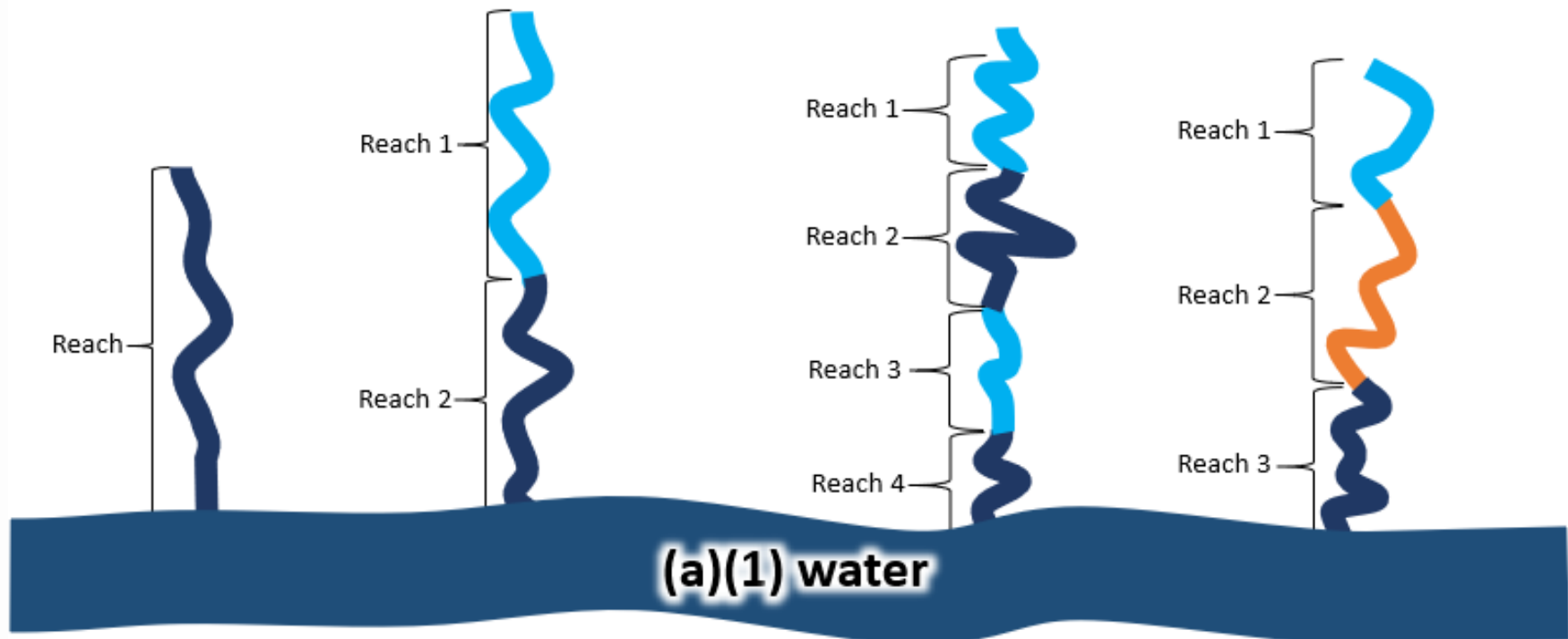
Definition of “Typical Year”

- The term typical year means: “when precipitation and other climatic variables are within the normal periodic range (e.g., seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.”
- “Typical year” is a key concept for establishing jurisdiction based on surface water flow between a relatively permanent body of water (i.e., a perennial or intermittent surface water channel, a standing body of open water) and TNWs, and between wetlands and other jurisdictional waters.
- Application of the typical year concept ensures that the hydrologic flows and surface water connections necessary to establish jurisdiction are characterized based on normal climatic conditions (i.e., neither too wet or too dry).

Tributary Questions

How does the concept of tributary reach work?

Tributaries - Reach



Perennial Tributary
(Jurisdictional)



Intermittent Tributary
(Jurisdictional)



Ephemeral Channel
(Not Jurisdictional)

Tributary “reach” means a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope. If a perennial tributary becomes intermittent and then ephemeral and then perennial again, it may be viewed as four separate reaches (*e.g.*, perennial reach, intermittent reach, ephemeral reach, perennial reach), especially if they also share other similarities with respect to depth, slope, or other factors. In general, a reach can be any length of a stream or river, but the length is bounded by similar flow characteristics.

Tributary Questions (Cont'd)

How do we determine if a tributary is perennial or intermittent?

What type of field indicators should be considered when determining if a tributary is ephemeral, intermittent, or perennial?

What information should be used to supplement field indicators, to reinforce determinations that a tributary is ephemeral, intermittent, or perennial?

Can a WOTUS (or surface water connection) assessment be made without a field visit, and solely through the review of other sources (e.g., topographic maps, USGS gage station information)?

Determining Flow Classification

- Observations of persistent flows during dry times of the year could be a strong indicator of perennial or intermittent flows.
- Persistent flows at any time throughout the year may indicate flow that is intermittent or perennial, so long as it hasn't rained very recently.
- Observations should be interpreted in the context of a typical year (i.e., representative of normal climate conditions). The **Antecedent Precipitation Tool** is one tool that can be used to inform whether observations of flow are representative of normal conditions.
 - <https://www.epa.gov/wotus/antecedent-precipitation-tool-apt>
- Distinguishing between intermittent and ephemeral flows may require a combination of onsite observations, physical and biological indicators of sustained flow durations, and remote evidence.

Implementation Tools & Resources for Tributaries

- Point-in-time data sources
 - Aerial photographs (current and historic)
- Physical and biological indicators
- LIDAR/Digital Elevation Model (DEM) data
- USGS topographic maps
- NHD
- NWI
- Soil surveys (current and historic)
- Stream gage data
- Other data

Tributary Questions (Cont'd)

Could a tributary be considered intermittent if it has water flowing continuously during the rainy season, or would it be considered ephemeral and not jurisdictional?

Ephemeral vs. Intermittent Flow

More than direct response to precipitation?

- Use of the term “direct” in the rule is intended to distinguish between flow solely caused by individual precipitation events (including multiple, individual back-to-back storms), and continuous flow resulting, for example, from weeks- or months-long accumulation of precipitation like an elevated groundwater table that provides baseflow to the channel bed.
- Ephemeral flow may occur simply because it is raining or has very recently rained. For example, ephemeral flow could be the result of a small, brief storm event, one long storm event producing rainfall for several days without pause, or several back-to-back storms.
- Continuous flow occurring more than in direct response to precipitation could include “seasonal” flow, such as when snowpack melts or when groundwater is elevated and provides baseflow to the channel bed.

Ephemeral vs. Intermittent Flow

More than direct response to precipitation?

- Streamflow that occurs during the rainy season in certain parts of the country may be ephemeral or intermittent, with the distinction made according to the definition of each term in the final rule.
 - For example, a stream in the arid West is ephemeral if it flows only in direct response to rainfall, even if the flow may appear relatively continuous as a result of multiple, individual storms during the monsoon season.
 - On the other hand, when monsoon floodwaters locally recharge the riparian aquifer through bank infiltration and supply sustained baseflow to streams in the arid West when it is not raining or has not recently rained, such streams meet the rule's definition of "intermittent" if they flow seasonally, for example.

Tributary Questions (Cont'd)

Do streams with an ephemeral reach, or another non-jurisdictional feature such as a dam or boulder field, occurring between a lower and upper intermittent or perennial reach retain jurisdiction of the upper intermittent or perennial reach?

Are there any hydrologic features that do not maintain jurisdiction between upstream and downstream waters?

How far does a surface water connection need to be followed in the field to make a proper WOTUS assessment?

Contribution of Surface Water Flow: Natural and Artificial Features

- A tributary does not lose its jurisdictional status if it contributes surface water flow to a downstream jurisdictional water in a typical year through the following features:
 - A channelized non-jurisdictional surface water feature (e.g., ephemeral stream, non-jurisdictional ditch)
 - A subterranean river
 - A culvert, dam, tunnel, or similar artificial feature
 - A debris pile, boulder field, or similar natural feature

Channelized Non-Jurisdictional Surface Water Feature



This type of feature includes non-jurisdictional ditches or ephemeral streams which are not themselves jurisdictional but may provide a channelized surface water connection for upstream perennial or intermittent waters in a typical year.

Subterranean River

A subterranean river is a natural channel that temporarily flows underground as a channelized river or stream, maintaining the same or very nearly the same flow volume underground and at the downstream point where it returns to the surface. Similarly, urban areas can have artificial buried underground tunnel systems that act in the same way.



Culvert, Dam, Tunnel, or Similar Artificial Feature

A culvert, dam, tunnel, or other similar artificial feature can convey surface water flows from upstream jurisdictional waters to downstream jurisdictional waters. If those surface water flows are conveyed in a typical year, jurisdiction of the upstream waters is not severed.



Debris Piles, Boulder Fields, or Similar Natural Features

Natural features can also convey surface water flows from upstream jurisdictional waters to downstream jurisdictional waters. If those flows are conveyed in a typical year, jurisdiction of the upstream waters is not severed.



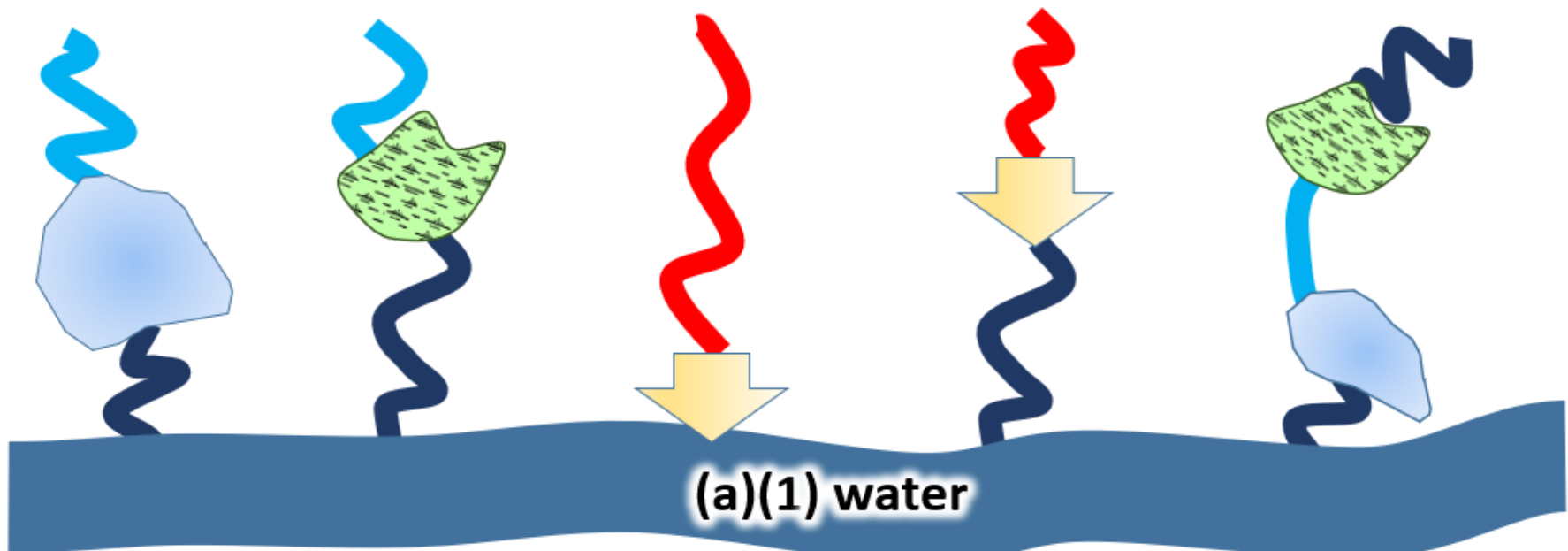
Photo: Stream with debris pile.

Connections That Sever Jurisdiction

The following connections sever jurisdiction upstream:

- Stream channel breaks that do not contribute surface water flows to downstream jurisdictional waters in a typical year.
 - These stream breaks may only convey surface water flows during precipitation events that generally do not occur in a typical year (e.g., 10-, 25-, 50-, 100- or 500-year storms or floods).
- Surface stream channels that disappear underground and become part of the ground water aquifer.
 - They never reconnect with the downstream tributary system (other than possibly via groundwater) and as such are not jurisdictional.

Tributaries – Contribution of Flow

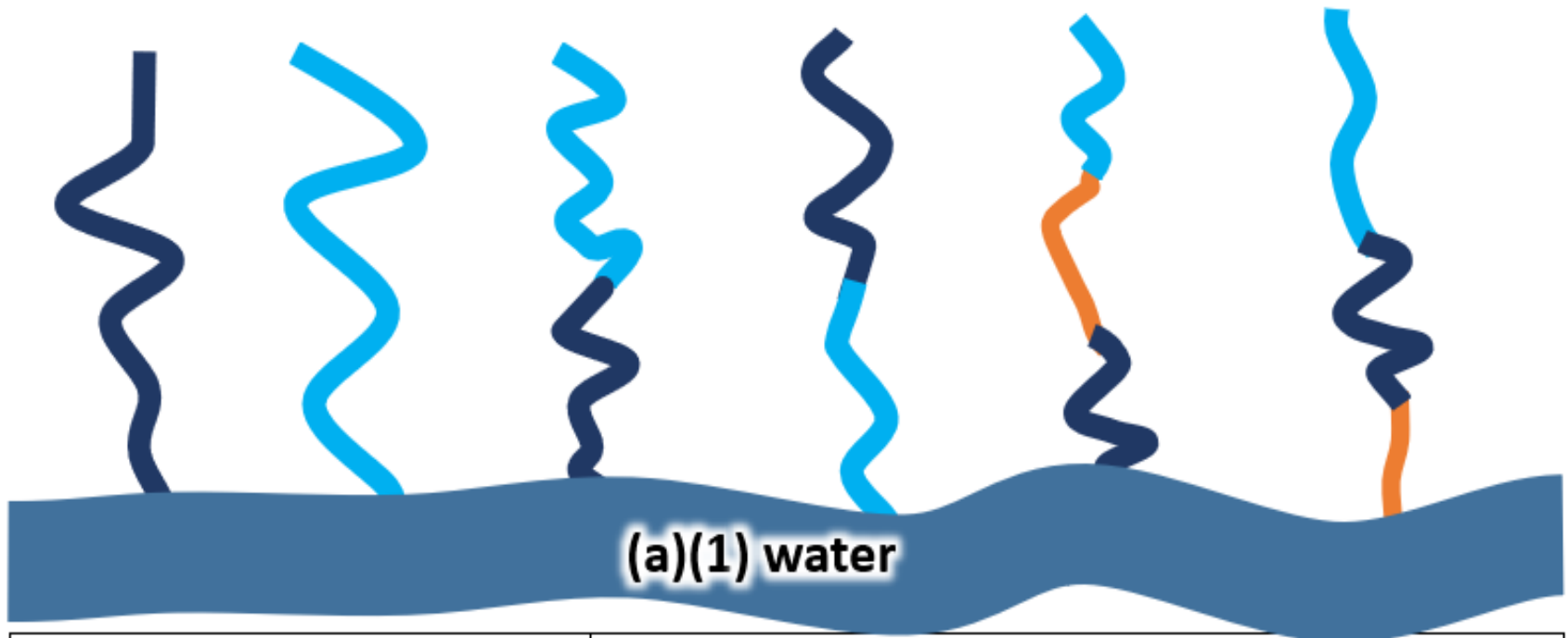


-  Perennial Tributary (Jurisdictional)
-  Intermittent Tributary (Jurisdictional)
-  Perennial or Intermittent Tributary (Not Jurisdictional)
-  (a)(3) Water (Jurisdictional)
-  (a)(4) Adjacent Wetland (Jurisdictional)
-  Diffuse Overland Sheetflow (Not Jurisdictional)

The final rule defines “tributary” to mean a river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters (paragraph (a)(1) waters) in a typical year either directly or through one or more tributaries (paragraph (a)(2) waters), lakes, ponds, and impoundments of jurisdictional waters (paragraph (a)(3) waters), or adjacent wetlands (paragraph (a)(4) waters).

Non-channelized, diffuse stormwater and overland sheet flow cannot sustain a regular or predictable surface water connection between upstream and downstream waters and therefore cannot maintain jurisdiction between such waters.

Tributaries – Flow Regime



 Perennial Tributary¹
(Jurisdictional)

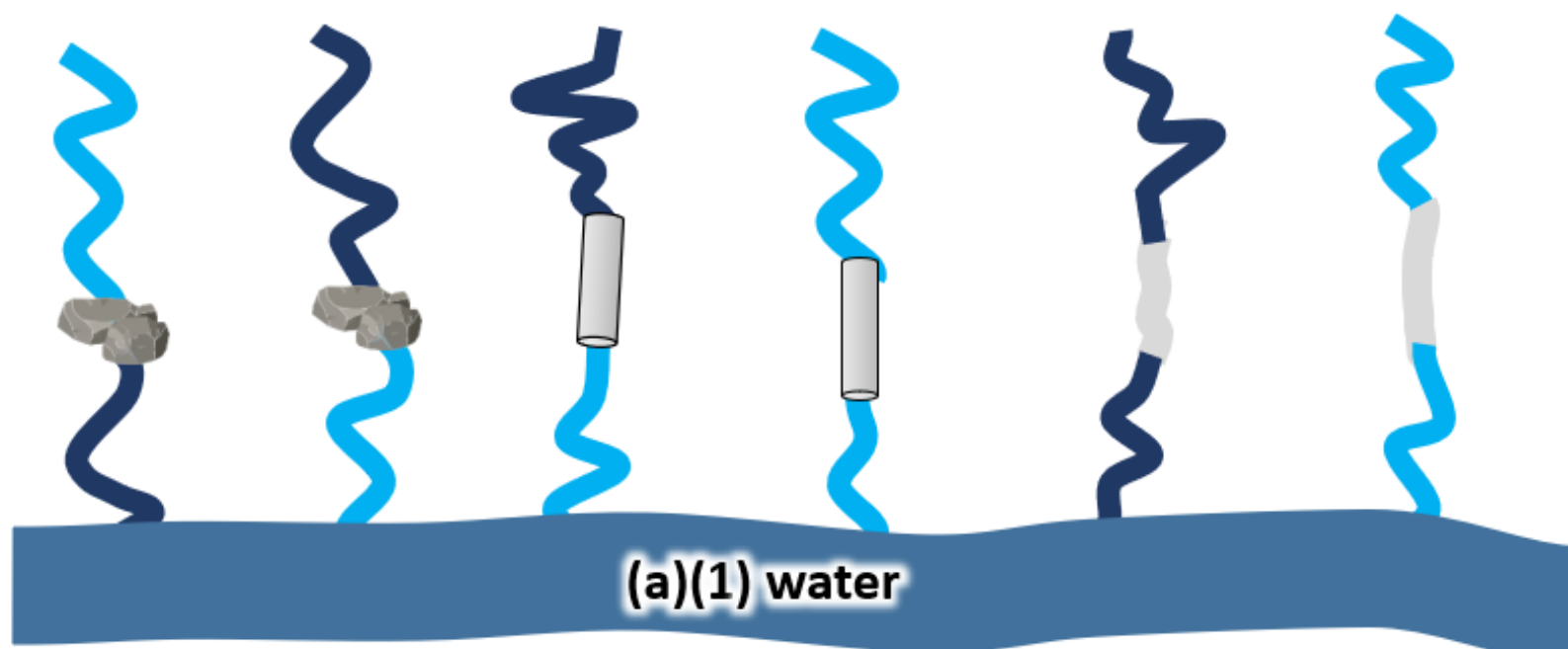
 Intermittent Tributary¹
(Jurisdictional)

 Ephemeral Channel²
(Not Jurisdictional)

¹The “tributary” definition contains no flow volume requirement, but only a requirement of perennial or intermittent flow and a contribution of surface water flow to a paragraph (a)(1) water in a typical year.

²While the channelized ephemeral feature is not itself jurisdictional, tributaries upstream of it do not lose jurisdiction so long as the channelized ephemeral feature contributes surface water flow in a typical year to a downstream jurisdictional water.

Tributaries – Contribution of Flow



-  Perennial Tributary
(Jurisdictional)
-  Intermittent Tributary
(Jurisdictional)
-  Boulder Field, Debris Pile, Or Similar Natural Feature
(Not Jurisdictional)
-  Culvert, Dam, Tunnel, Or Similar Artificial Feature
(Not Jurisdictional)
-  Subterranean River Or Stream (Not Jurisdictional)

Artificial or natural features do not sever jurisdiction for the upstream reach of the tributary if a channelized non-jurisdictional surface water feature conveys surface water flow to a downstream jurisdictional water in a typical year.

Other types of artificial or natural features, such as dams, boulder fields, debris piles, and subterranean rivers/streams maintain jurisdiction so long as they convey surface water flow from an upstream tributary to a downstream jurisdictional water in a typical year.

Additional Questions About Tributaries?

(a)(3) Lakes and Ponds, and Impoundments of Jurisdictional Waters:

- The term means **standing bodies of open water** that contribute surface water flow to an (a)(1) water in a typical year either directly or through one or more (a)(2)-(4) waters.
- Does not lose its jurisdictional status if it **contributes surface water flow** to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature (e.g., an ephemeral stream).
- A lake, pond, or impoundment is also jurisdictional if it is **inundated by flooding** from an (a)(1)-(3) water in a typical year.



Lakes, ponds, and impoundments of jurisdictional waters include open bodies of surface water that contribute surface flow to a traditional navigable water, like Christian Pond in Wyoming.

(a)(4) Adjacent Wetlands:

The term means wetlands that:

- abut, meaning to touch at least at one point or side of, a paragraph (a)(1)-(3) water;
- are inundated by flooding from a paragraph (a)(1)-(3) water in a typical year;
- are physically separated from a paragraph (a)(1)-(3) water only by a natural berm, bank, dune, or similar natural feature; or
- are physically separated from a paragraph (a)(1)-(3) water only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection in a typical year through a culvert, flood or tide gate, pump, or similar artificial feature.



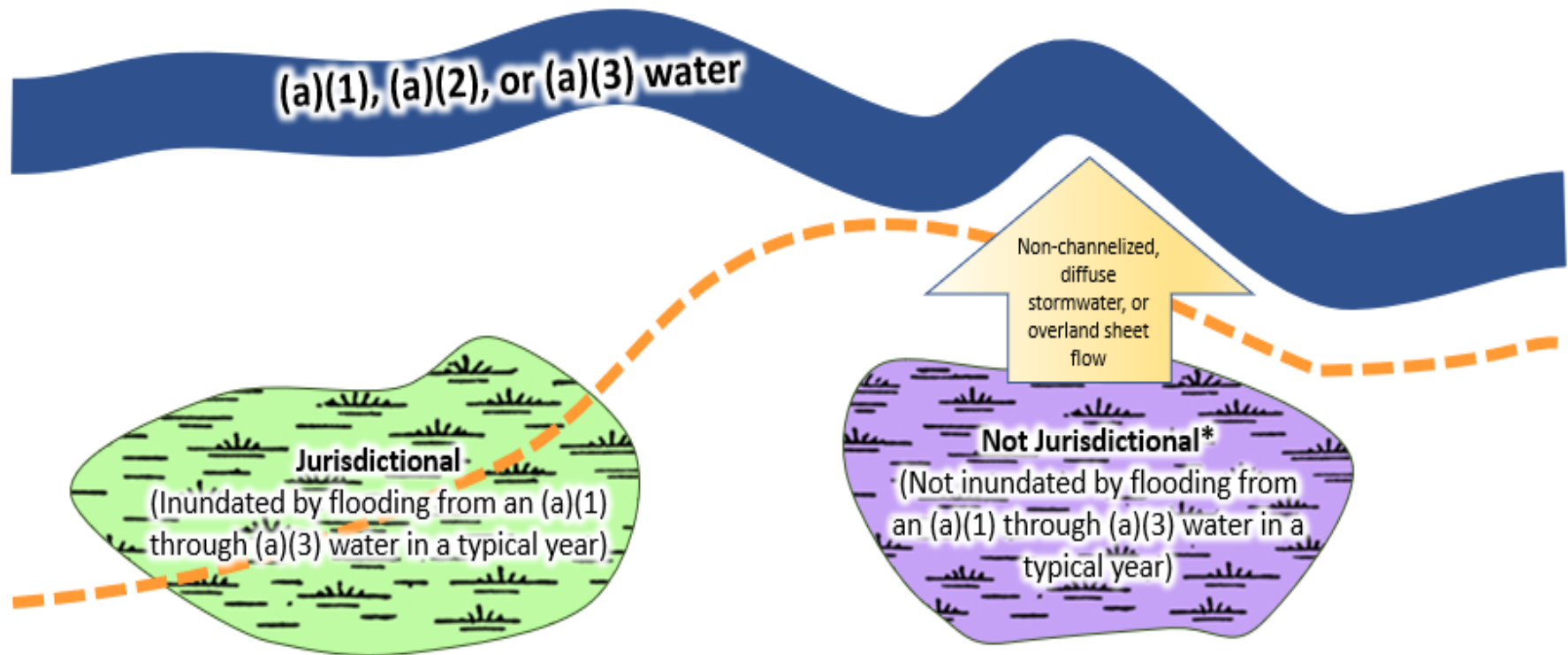
Adjacent wetlands include wetlands with manmade structures that allow for a direct hydrologic surface connection to an (a)(1)-(3) water in a typical year, like these wetlands in the Mississippi River Delta region of Louisiana.

Wetland Questions

When determining if a water is inundated by flooding from an (a)(1) through (a)(3) water, e.g., when considering whether a wetland is adjacent based on the inundation criteria, what flood frequency recurrence interval would be appropriate to inform a typical year assessment?

Adjacent Wetlands – Inundated by Flooding

33CFR328.3(c)(1)(ii): Adjacent wetlands include wetlands that are inundated by flooding from a water identified in paragraph (a)(1), (2), or (3) in a typical year.



— Extent inundation by flooding from (a)(1), (a)(2), or (a)(3) water in a typical year

*Wetlands depicted are not otherwise jurisdictional under another adjacency criteria and are not paragraph (a)(1) waters.

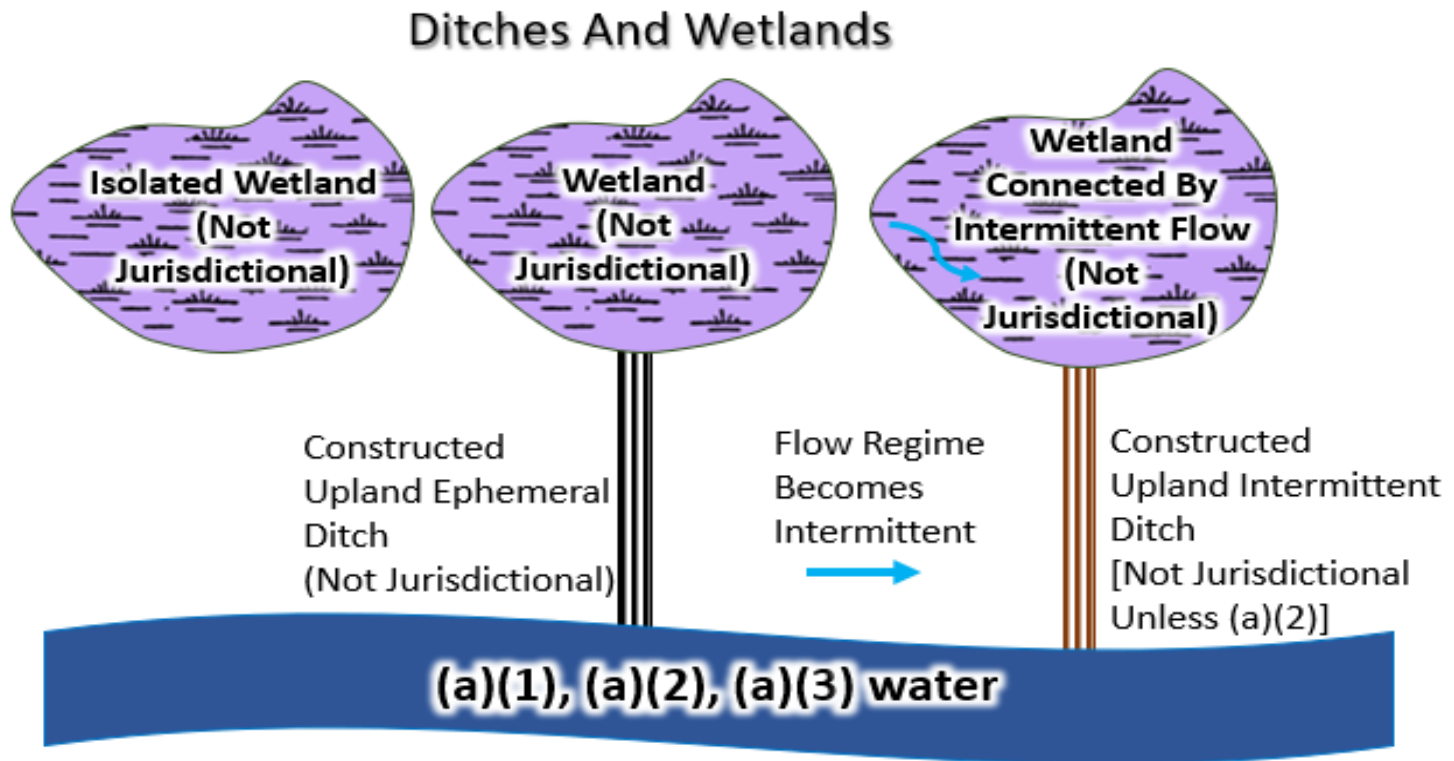
Wetland Questions (Cont'd)

Can a wetland be jurisdictional if it contributes surface water flow to a downstream jurisdictional water, in a typical year, through a channelized, non-jurisdictional surface water feature (e.g., an ephemeral swale or ditch), and when wetlands are connected to a WOTUS by a swale, does it matter if there's no standing water in the swale?

If historical resources (e.g., aerial photos) demonstrate a connection between an adjacent wetland and a downstream WOTUS, but the connection is via a ditch constructed in uplands, would the upstream wetland be non-jurisdictional?

If there's a wetland connected to a non-jurisdictional swale, that's then connected to a ditch constructed in uplands, that's then connected to a downstream WOTUS, would that upstream wetland be jurisdictional?

Features Connecting Wetlands to Jurisdictional Waters

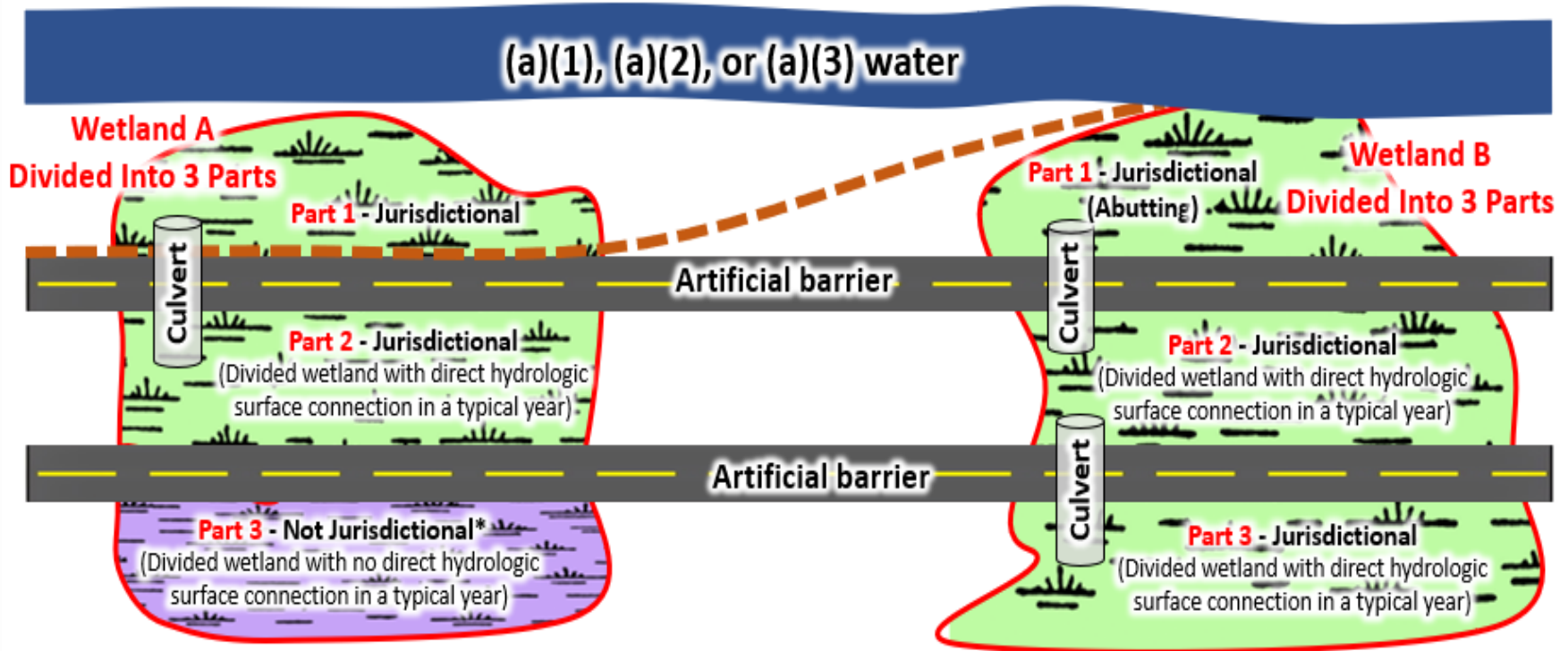


Wetlands Questions (Cont'd)

If a wetland is adjacent to a paragraph (a)(2) water, and that adjacent wetland has been segmented by a grid of roads (all with culverts that provide a surface water connection in a typical year) is the entire wetland still considered adjacent, or has adjacency been severed for the portions that are separated by more than one road?

Adjacent Wetlands – Separated by Artificial Structure

33CFR328.3(c)(1): 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.



— Extent of inundation by flooding from the water identified in paragraph (a)(1), (a)(2), or (a)(3) in a typical year

*Wetlands depicted are not otherwise jurisdictional under another adjacency criteria and are not paragraph (a)(1) waters.

Additional Questions About Wetlands?

Ditches

The term *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 (a)(1) 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 (a)(2) waters); or
- Constructed in an adjacent wetland and develop wetland characteristics (*i.e.*, are (a)(4) waters).

Ditches are excluded from WOTUS except where they meet the conditions of paragraph (a)(1) or (a)(2) waters (*i.e.*, they are a TNW, or a tributary) or where they were constructed in an adjacent wetland and develop wetland characteristics.

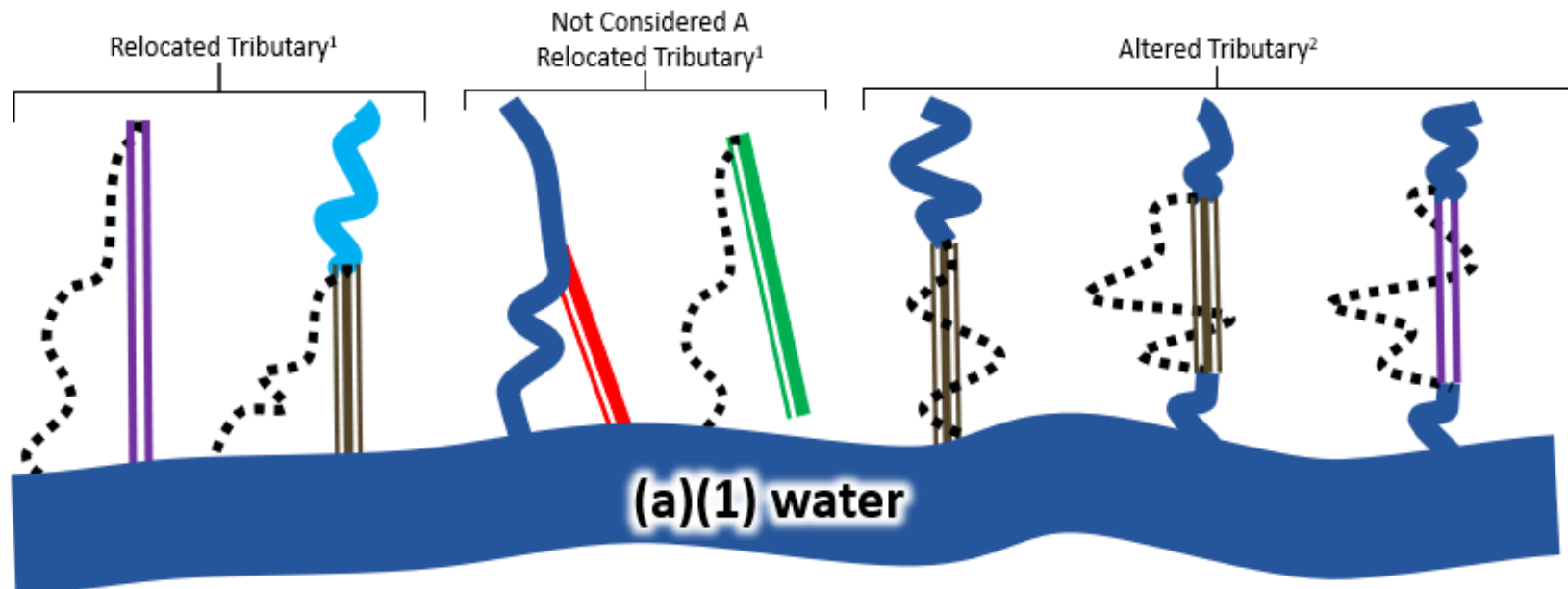
Key changes from the 2019 Rule:

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

Ditch Questions

What is the difference between an altered tributary and a relocated tributary? When is a ditch a relocated tributary?

Relocated¹ and Altered² Tributaries³



-  Perennial Tributary (Jurisdictional)
-  Intermittent Tributary (Jurisdictional)
-  Perennial or Intermittent Ditch (Jurisdictional)
-  Intermittent Ditch
(Not Jurisdictional, Did Not Wholly Relocate Channel)
-  Ephemeral Ditch³ (Not Jurisdictional)
-  Relict Tributary Channel
(Not Jurisdictional Currently, Formerly Jurisdictional)
-  Intermittent Ditch
(Not Jurisdictional, No Longer Contributes Flow To (a)(1))

¹A ditch is considered to have “relocated” a tributary when it moves the tributary channel to a different location. A ditch that relocates a tributary must continue to meet the flow conditions of the “tributary” definition and contribute surface water flow to a paragraph (a)(1) water in a typical year to remain jurisdictional.

²An altered tributary is one in which the flow or geomorphic conditions have been modified in some way.

³The alteration or relocation of a tributary does not modify its jurisdictional status as long as it continues to be perennial or intermittent and contributes surface water flow to a traditional navigable water or territorial sea in a typical year.

Ditch Questions (Cont'd)

How do you determine if a ditch was constructed in uplands and therefore not jurisdictional?

When determining if a ditch was constructed in uplands (and therefore not jurisdictional), is there a certain historical timeframe that should be evaluated to ascertain ditch construction that would automatically make the ditch excluded and non-jurisdictional (e.g., created prior to a specific year or at least 5 years prior)?

Determining Whether a Ditch Is a WOTUS

- The burden of proof lies with the agencies.
- Absent evidence, the agencies will determine the ditch is non-jurisdictional.
- Potential resources to use when determining whether a ditch was constructed in or relocated a tributary or was constructed in an adjacent wetland:
 - Historic aerials
 - Quadrangle topographic maps (topography may show crenulations and contours)
 - Certain hydrogeomorphological or soil indicators
 - Surface water management plans
 - National Hydrography Datasets (NHD)
 - National Wetland Inventory (NWI)

Ditch Questions (Cont'd)

When could a man-made ditch constructed in uplands be a WOTUS?

When could a roadside ditch be a WOTUS?

Ditches

Ditches are jurisdictional where they are:

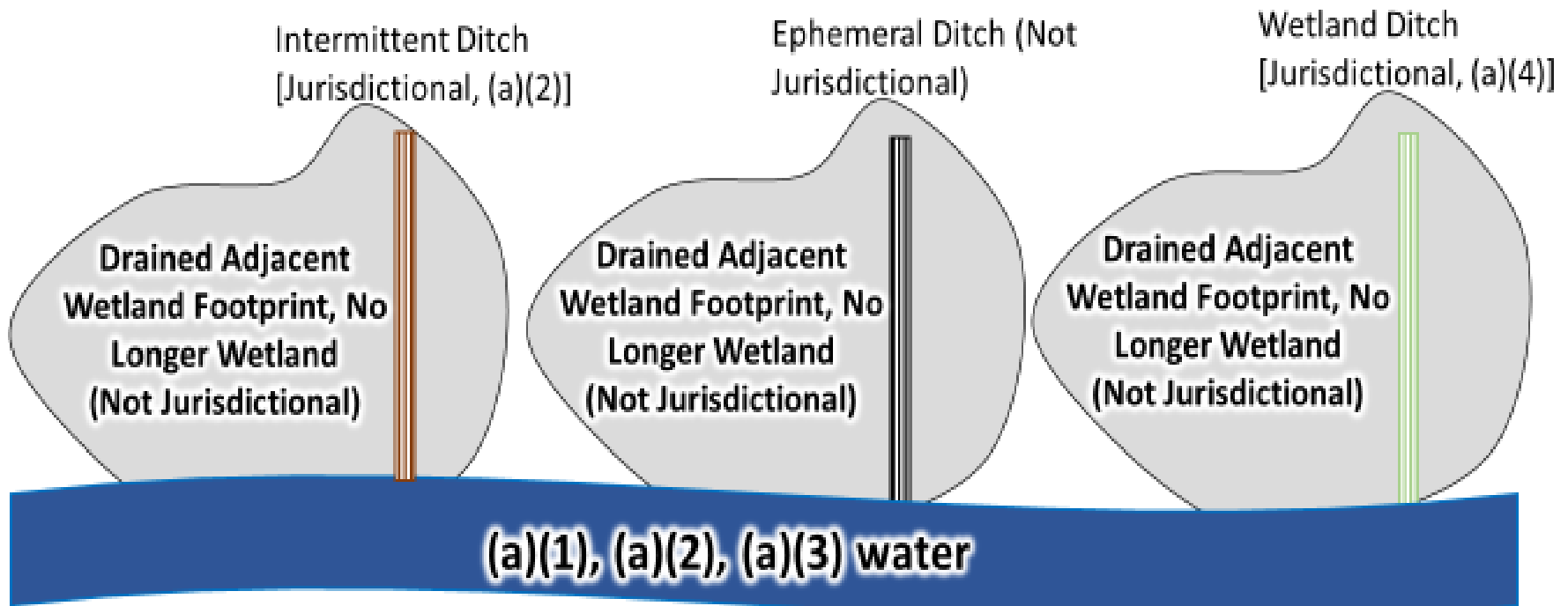
- TNWs, including those subject to the ebb and flow of the tide (*i.e.*, are (a)(1) waters);
- Either constructed in or relocate a tributary, or are constructed in an adjacent wetland, and satisfy the flow conditions of the tributary definition (*i.e.*, are (a)(2) waters); or
- Constructed in an adjacent wetland and develop wetland characteristics (*i.e.*, are (a)(4) waters).

Ditches are excluded from WOTUS except where they meet the conditions of paragraph (a)(1) or (a)(2) waters (*i.e.*, they are a TNW, or a tributary) or where they were constructed in an adjacent wetland and develop wetland characteristics.

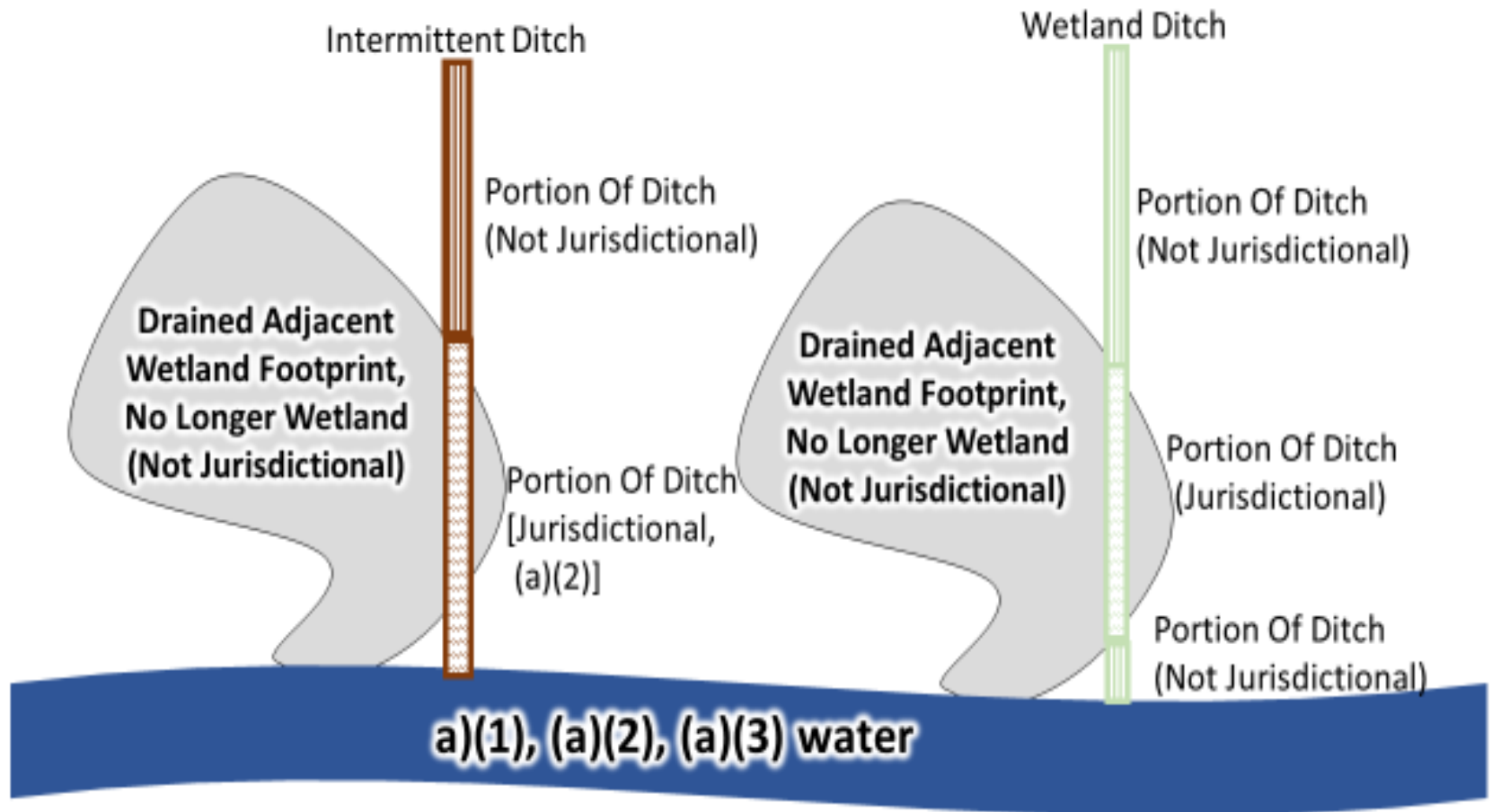
Ditch Questions (Cont'd)

When evaluating a ditch, does the entire ditch need to be constructed in uplands to be non-jurisdictional, or could a portion of the ditch dug in a historical wetland, that ultimately connects to a downstream WOTUS, also be considered non-jurisdictional given that the majority of it was constructed in uplands?

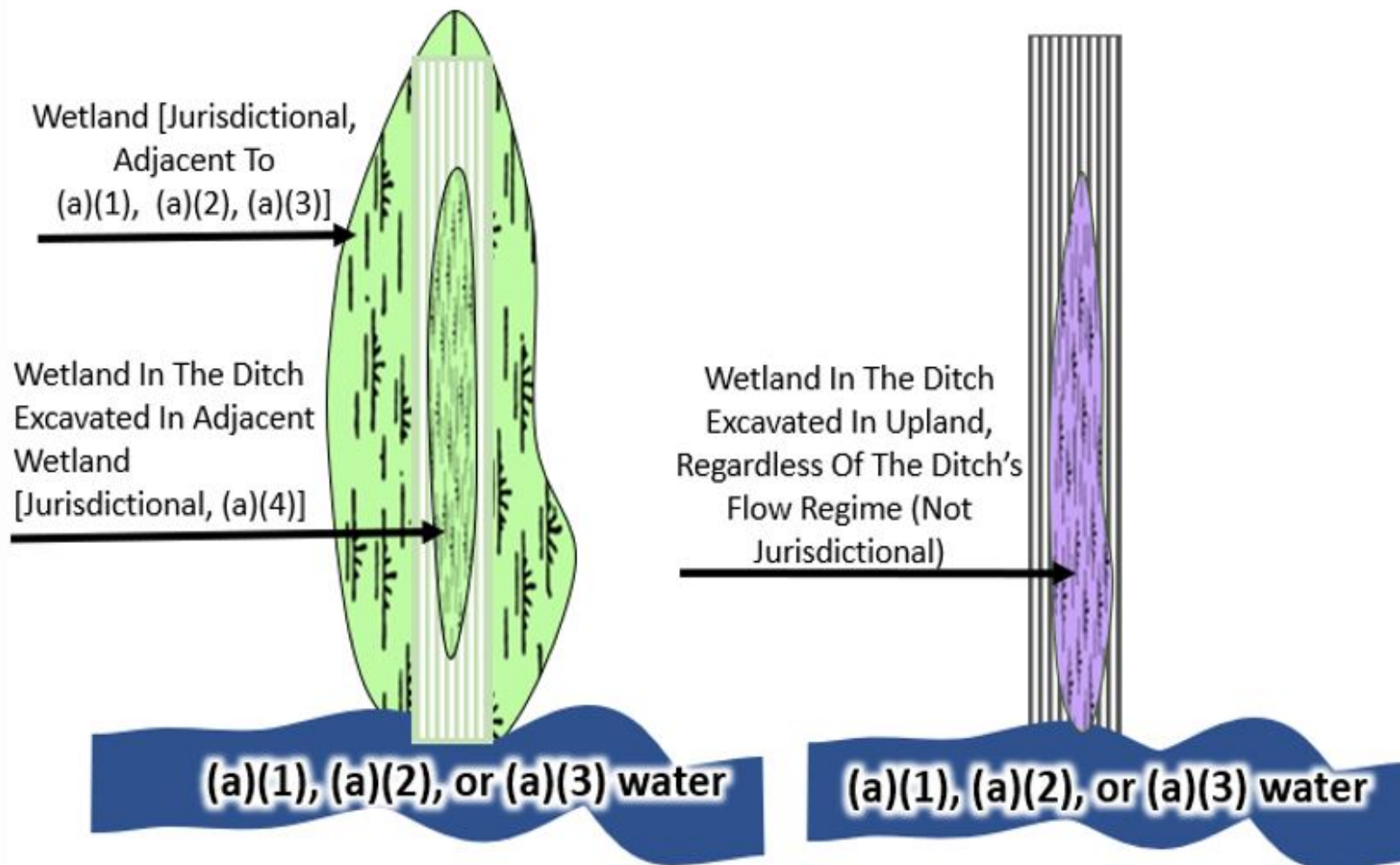
Ditches In Drained Adjacent Wetlands



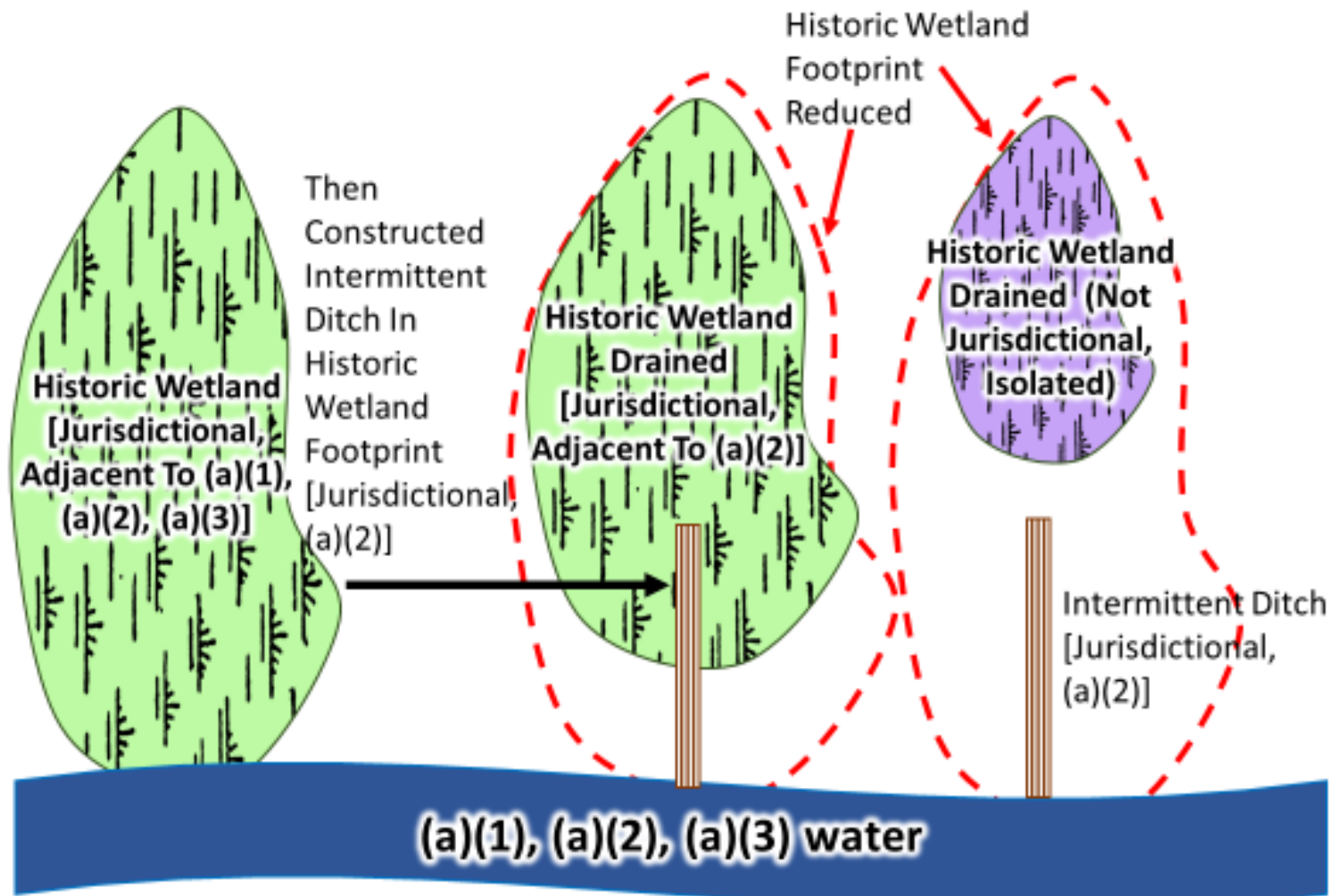
Ditches In Drained Adjacent Wetlands



Ditches and Wetlands



Ditches In Drained Wetlands



Additional Questions About Ditches?

Waters/Features Excluded From Final WOTUS Definition [33 CFR 328.3(b)]

- 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

Key Elements of Exclusions

Upland:

- The term *upland* means any land area that under normal circumstances does not satisfy all three wetland factors (*i.e.*, hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.
- Features constructed or excavated in upland or in non-jurisdictional waters must be constructed/excavated wholly in upland or non-jurisdictional waters to meet applicable exclusions.

Exclusions needing to be in upland or in non-jurisdictional waters:

- (b)(8) Artificial lakes and ponds
- (b)(9) Water-filled depressions incidental to mining or construction activity
- (b)(10) Stormwater control features
- (b)(11) Groundwater recharge, water reuse, and wastewater recycling structures

Exclusions Questions

Any quirks with the USDA and WOTUS that we need to know?

What is USDA's involvement in determining whether farm ditches are WOTUS, if any?

If an area has received a USDA determination of prior converted cropland, would the entire area included in that determination be considered non-jurisdictional?

(b)(6) Prior Converted Cropland

- Prior converted cropland (PCC) is defined for purposes of the CWA at (c)(9).
 - The term *PCC* means that any area that, prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. EPA and the Corps will recognize designations of PCC made by the Secretary of Agriculture. An area is no longer considered PCC for purposes of the Clean Water Act when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(16) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least once in the immediately preceding five years. For the purpose of the Clean Water Act, the EPA Administrator shall have the final authority to determine whether prior converted cropland has been abandoned.
- The NWPR definition of PCC excludes more wetlands than the USDA Food Security Act (FSA) definition of PCC.

Exclusions Questions

If USDA, Corps and EPA are not involved, can FDEP make a determination as to whether prior converted cropland (PCC) no longer meets the WOTUS exclusion (e.g., it has been abandoned) for the purposes of their assumed 404 permitting program or does that responsibility remain with the federal government?

Exclusions Questions (Cont'd)

What would be the jurisdictional status of a roadside ditch or ditch constructed in uplands, dug from an area that was historically permitted for stormwater treatment?

Additional Questions About Exclusions?

Thank You!

<https://www.epa.gov/wotus>