



Final “Waters of the U.S.” Rule: No, No, No!
No Clarity, No Certainty, No Limits on Agency Power
[Detailed Version]

Overview

The final WOTUS rule is even broader than the proposed rule—and creates even more risk and uncertainty for farmers, ranchers and others who depend on their ability to work the land. The definition of “tributary” has been broadened to include landscape features that may not even be visible to the human eye, or that existed historically but are no longer present—and that can be conclusively identified by remote bureaucrats using “desktop tools.” The jurisdictional status of ditches now also hinges on whether they are found, again by remote agency staff, to be “excavated in” such an invisible or non-existent “tributary”—or to be a “relocated tributary” (a ditch that historically diverted the flow of a tributary). The definitions of “neighboring” (as used within “adjacent”) and “significant nexus” remain overbroad and so vague that they are open to wildly varying agency interpretations. The rule provides a list of exclusions, which has been revised and superficially expanded from the one in the proposed rule. Many of the exclusions, however, are extremely narrow, or so vague that they lend themselves to narrow agency interpretation. Overall, the exclusions are insufficient to outweigh our grave concerns with the expansive jurisdiction and tremendous uncertainty that will result from the rule.

Tributaries

The “tributary” definition has been expanded.

- The proposed rule required “**the presence of a bed and banks and ordinary high water mark**” (OHWM)—plus some flow that sometimes reaches a navigable water—to identify a tributary.
- In the final rule, there is no need for the presence of an *actual* bed, bank and OHWM, but only the “**presence of physical indicators of a bed and banks and ordinary high water mark.**” (Final Rule at 204)

The agencies’ preamble explanation sheds light on the significance of the change. The agencies explain that they can *conclusively establish* the presence of both “water” and these “physical indicators” through “[o]ther evidence, besides direct field observation.” (Final Rule at 91) Tools that can allow the agencies to “reasonably conclude” the presence of a bed, bank and OHWM include “remote sensing or mapping information” such as “USGS topographic data, the USGS National Hydrography Dataset (NHD), Natural Resources Conservation Service (NRCS) Soil Surveys, and State or local stream maps, as well as the analysis of aerial photographs, and light detection and ranging (also known as LIDAR) data, and desktop tools that provide for the hydrologic estimation of a discharge sufficient to create an ordinary high water mark, such as a regional regression analysis or hydrologic modeling.” (Final Rule at 91-92)

This means that the agencies can *conclusively* establish the presence of a “tributary” based on “indicators” found in mapping, aerial photos, LIDAR, modeling and the like, even on lands where the human eye cannot discern either water or any physical channel or evidence of flow. This aspect of the final rule was not included in the proposed rule and was not subject to public comment. Reliance on LIDAR, in particular, is highly controversial, as the U.S. Geological



Survey cautions that LIDAR will find channels everywhere, most of which are in fact erosional features on the land, not waters.¹ Corps' guidance likewise supports the use of these technologies in conjunction with field observation, but not for the establishment of jurisdiction absent the actual in-field observation of OHWM. *See* A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States (Aug. 2014) at 39-40.

The agencies even assert they can establish a "tributary" where remote sensing and other desktop tools indicate a *prior existence* of bed, banks and OHWM, where these features in fact *no longer exist* on the landscape today. (Final Rule at 94-95²) This directly contradicts the agencies' position in the proposed rule that ephemeral features no longer possessing a bed, bank and OHWM due to pre-Clean Water Act activities, such as farming, would NOT be viewed as tributaries. (79 Fed. Reg. at 22,204) We see no indication of any analysis by the agencies of how many tributary "stream miles" may exist under the final rule based on indicators of the historic presence of bed, bank and OHWM—nor do we see any indication that the agencies considered the economic impact of this expansion in the scope of the rule. The agencies do not even identify this as a change from the proposal.

In addition to the above extremely troubling new aspects of the final rule, the following major concerns remain:

- The rule establishes automatic jurisdiction over all intermittent and ephemeral features that meet the expansive new definition of "tributary," regardless of distance to navigable waters.
- The heavy emphasis on OHWM is particularly problematic:
 - Many of the OHWM physical indicators are subjective and can be found wherever water channels and flows across the land, even with extremely small volume, frequency and duration of flow.
 - OHWM has long been a confusing and inconsistently applied concept. Just recently, in 2014, the Corps of Engineers issued lengthy guidance documents modifying the

¹ "Observations that the NHD [National Hydrography Dataset] does not represent all the channels that exist are probably true. Using elevation data, especially LiDAR data, one can generate almost any 'network.' But are they 'streams'? In most cases, the ephemeral or crenellated 'streams' that may be generated and are said to be missing from the NHD, are more likely geomorphological features than hydrologic features from a practical point of view." Frequently Asked Questions about the NHD & WBD Datasets, date revised 10/20/2014, at http://nhd.usgs.gov/Frequently+Asked+Questions+about+the+NHD+&+WBD.htm#_What_sources_were.

² According to the agencies: "In such cases where physical characteristics of bed and banks and another indicator of ordinary high water mark no longer exist, they may be determined by using other appropriate means that consider the characteristics of the surrounding areas. Such reliable methods that can indicate prior existence of bed and banks and other indicators of ordinary high water mark include, but are not limited to, lake and stream gage data, elevation data, spillway height, historic water flow records, flood predictions, statistical evidence, the use of reference conditions, or through the remote sensing and desktop tools described above." (Final Rule at 94-95)



OHWB concept in particular regions of the U.S. without notice and comment, behind the scenes of the WOTUS rulemaking effort.

Ditches

The final rule explicitly regulates many ditches as “tributaries.” Ditches are expressly defined as tributaries (Final Rule at 204), and the agencies state that:

“Ditches are one important example of constructed features that *in many instances* can meet the definition of tributary.” (Final Rule at 97).

But while many ditches will be automatically, categorically regulated as tributaries—subjecting farmers and other landowners to potentially devastating penalties for any activities that cause a “discharge” into those ditches—it is impossible for the regulated public to know, by looking or through other reasonably available information, *which* ditches are covered.

The rule excludes:

- ditches with ephemeral (after rainfall) flow that “are not a relocated tributary or excavated in a tributary” and
- ditches with intermittent (e.g. seasonal) flow that “are not a relocated tributary, excavated in a tributary, or drain wetlands.” (Final Rule at 201)

The agencies explain that a tributary has been relocated:

“... either when at least a portion of its original channel has been physically moved, or when the majority of its flow has been redirected.” (Final Rule at 98)

However, given the broad and unknowable scope of “tributary” under the final rule (described above), the regulated public *cannot know* through on-the-ground observation which land features would, according to remote sensing and other desktop tools, be found to meet the definition of a “tributary” (or to have historically met the definition of “tributary”).

If they cannot identify where “tributaries” are, or historically may have been, on their lands through observation, landowners and other stakeholders certainly cannot know through observation which ditches are “relocated tributaries” or “excavated in a tributary.” According to the agencies, however:

“Agency staff can determine historical presence of tributaries using a variety of resources, such as historical maps, historic aerial photographs, local surface water management plans, street maintenance data, wetlands and conservation programs and plans, as well as functional assessments and monitoring efforts.” (Final Rule at 99)

It is insufficient for only “agency staff”—and not the farmer, rancher, or other landowner—to be able to distinguish a regulated ditch from an excluded ditch, particularly where the landowner will face *strict liability* for any “discharge” of any amount of “pollutant” (including biological materials, weed control products, or dirt) into a regulated ditch.

Based on the agencies’ broad notion of “tributary,” we have serious concerns that many, perhaps most, agricultural ditches that flow only ephemeral will be categorically regulated as “excavated in” a tributary or as a “relocated” historical tributary. Farmers will be at great risk of



enforcement if their activities cause any materials (such as fertilizer or herbicide) to fall into ditches—even when the ditches are dry—and yet will have no fair notice of which ditches are regulated.

We have the same concerns regarding agricultural irrigation ditches, which often flow either perennially or intermittently. Intermittently flowing irrigation ditches would only be excluded under the rule if they are not “excavated in” a tributary, do not “relocate” a tributary, *and* do not “drain wetlands.” Agency officials have explained in stakeholder meetings, since issuance of the final rule, that this means the ditch may not “interact” at all with wetlands.³ That is, intermittently flowing irrigation ditches will be jurisdictional if they touch wetlands, regardless of whether they are taking any significant flow from the wetland or altering the wetland hydrology. EPA Administrator McCarthy stated publicly during the comment period that agricultural irrigation ditches are not a target of the rule, yet the final rule does nothing to reduce the likelihood that many of them will be deemed jurisdictional.

Adjacent Waters

The new “adjacent waters” standard is confusing, hard to apply and lacks clarity. *All waters* within certain distance thresholds are deemed “adjacent” and therefore *automatically* regulated. But there are many steps and layers in determining whether a feature is within these distance thresholds. The “adjacent waters” standard is expansive in scope and will now extend jurisdiction to many new features. (Final rule starting at 103)

- Waters are automatically regulated if any part of the water, or any part of a wetland adjacent to the water, is within 100 feet, or within the 100-year floodplain and not more than 1,500 feet, from certain other jurisdictional waters—including “tributaries.” Here again, given the uncertainty over what features are “tributaries,” it will be impossible for landowners to know which other waters are automatically regulated as “adjacent” to a tributary.
- Landowners will not have any reasonably available way to determine whether water features on their lands fall within the floodplain and distance parameters used to define jurisdictional adjacent waters. The preamble to the final rule (at 108-09) acknowledges that much of this country has not been mapped in FEMA Flood Zone Maps and many FEMA maps that do exist are out of date. Where there is no FEMA map, or the existing map is “deemed by the agencies to be out of date,” the agencies plan to “rely on other available tools” such as “other Federal, State, or local floodplain maps, Natural Resources Conservation Service (NRCS) Soil Surveys (Flooding Frequency Classes), tidal gage data, and site-specific modeling (e.g., Hydrologic Engineering Centers River System Analysis System or HEC-RAS),” as well as “historical evidence, such as photographs, prior delineations, topographic maps, and existing site characteristics.”
- Many waters previously viewed as isolated (e.g., on industrial sites, farmlands, etc.) will now be deemed adjacent, and therefore WOTUS, unless they fall within one of the narrow exclusions.

³ Agricultural Stakeholder Meeting with EPA Office of Water, June 3, 2015.



- Just to use a simplified example, individual landowners cannot reasonably determine:
 - (i) whether an ephemeral feature somewhere near their property is a “tributary” (contributes flow indirectly to a navigable water and would be found to have “indicators” of a bed, banks and OHWM based on remote desktop tools);
 - (ii) if so, what the 100-year floodplain is for that ephemeral tributary; and
 - (iii) whether a water feature on their land is within that ephemeral tributary’s 100-year floodplain and also within 1,500 feet of the (possibly invisible or no longer existent) OHWM of that ephemeral tributary.
- The “adjacent” definition provides that waters being used for “established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.” But this does not mean that these areas are not jurisdictional. Indeed, the preamble notes that “tributaries” are not regulated as “adjacent,” so areas within the definition of “tributary” (including invisible and historic ephemeral tributaries) that are subject to “established normal” farming, ranching and silviculture would still be regulated. (Final Rule at 106) Also, waters (including wetlands) in which normal farming, ranching and silviculture activities occur may still be found jurisdictional based on a case-by-case significant nexus analysis. (Final Rule at 105)

Case-Specific WOTUS

The final rule establishes two circumstances in which waters that are not categorically WOTUS (i.e., they are not traditional navigable waters, interstate waters, tributaries, or adjacent waters) are subject to a “case-specific” WOTUS determination. (Final Rule starting at 127)

First, five specific types of waters are deemed “similarly situated” and must be aggregated to determine whether they collectively have a significant nexus to downstream traditional navigable waters, interstate waters or the territorial seas. (Final Rule at 129-31) The five automatically aggregated waters are:

- Prairie potholes
- Carolina bays and Delmarva bays
- Pocosins
- Western vernal pools
- Texas coastal prairie wetlands

For purposes of aggregation, the “watershed” is the watershed that drains to the nearest traditional navigable water, interstate water or the territorial seas (called the “point of entry watershed”). This means that, to assess the status of one non-adjacent, non-interstate prairie pothole, agency staff must first identify all other non-adjacent, non-interstate prairie potholes within the same watershed, and then determine whether they, in the aggregate, have a significant nexus. (*See* Final Rule at 130) If the answer is yes, then each prairie pothole in the watershed is deemed to be WOTUS.

Second, for any other type of water feature, any water within certain floodplain and distance thresholds of a jurisdictional water can still be found jurisdictional on a case-specific basis. The boundaries for such case-specific determinations are:



- within the 100-year floodplain of any traditional navigable water, interstate water or the territorial seas, or
- within 4,000 feet (roughly $\frac{3}{4}$ mile) of any such water or of any jurisdictional impoundment or tributary.

Any water within these boundaries must also first be evaluated for whether there are any “similarly situated” waters within the same “point of entry watershed.” (Final Rule at 132) Waters are “similarly situated” if it is demonstrated that they function alike and are sufficiently close to function together in affecting downstream waters. If there are “similarly situated” waters, then all such waters within the watershed will be considered as a group.

Although the agencies speculate that the distance thresholds “have greatly reduced” the scope of waters that may be regulated based on a case-specific significant nexus test (Final Rule at 127), there is no apparent basis for that assertion. One would have to essentially map the as-yet-unknown locations of all ephemeral “tributaries” (including historic tributaries and those not observable in the field) to determine how many waters are more than 4,000 feet (about $\frac{3}{4}$ mile) from any such feature. The breadth of the tributary concept more likely ensures that few waters will be more than $\frac{3}{4}$ mile from *any* ephemeral tributary. In fact, the agencies’ final economic analysis plainly states: “The agencies have determined that the *vast majority of the nation’s water features* are located within 4,000 feet of a covered tributary, traditional navigable water, interstate water, or territorial sea.” (Economic Analysis at 11)

Significant Nexus

The new definition of “significant nexus” is the backbone of the final rule. The agencies claim that the science shows that all waters that meet the new definitions of “tributary” and “adjacent” meet the new “significant nexus” standard. Thus, those waters are categorically jurisdictional and there is no need for further analysis of “significant nexus.” Even if a water does not fall within one of the categories of jurisdictional waters, it can still be deemed jurisdictional through a case-specific “significant nexus” test. The problem with all of this is the final rule defines “significant nexus” far too broadly.

- 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” traditional navigable water, interstate water or the territorial seas. The functions listed in the rule include:
 - sediment trapping;
 - nutrient recycling;
 - pollutant trapping, transformation, filtering and transport;
 - retention and attenuation of flood waters;
 - runoff storage;
 - contribution of flow;
 - export of organic matter;
 - export of food resources; and
 - provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning or use as a nursery area).



The Supreme Court was clear in *SWANCC* that basing federal jurisdiction over water solely on its use by migratory birds would violate the Commerce Clause. On page 155 of the final rule, the agencies claim they are not doing that because – “non-aquatic species or species such as non-resident migratory birds do not demonstrate a life cycle dependency on the identified aquatic resources and are not evidence of biological connectivity for purposes of this rule.” (Final Rule at 155-156). But that disclaimer is rather meaningless when, further up in the same paragraph, the agencies state that they will find evidence of biological connectivity by identifying the presence of “amphibians, aquatic and semi-aquatic reptiles, aquatic birds.” (Final Rule at 155). As just one of many examples, the agencies discuss the biological connectivity of waters in floodplains, to include “integral components of river food webs, providing nursery habitat for breeding fish and amphibians, colonization opportunities for stream invertebrates and maturation for stream insects.” (Final Rule at 38). In fact, insects are mentioned eight times in the final rule. “Non-resident” migratory birds may be out, but most anything else that could live in and around water is in.

Exclusions

The rule sets forth a number of exclusions (listed below), which take precedence over the categories of jurisdiction. Thus, if a water feature falls within an exclusion, it is non-jurisdictional even if it would otherwise be jurisdictional. Many features, however, will not qualify for any exclusion because they were not created in dry land. The final rule excludes:

- Waste treatment systems, including ponds or lagoons designed to meet the requirements of the CWA;
- Prior converted cropland;
- Certain ditches: (i) ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary; (ii) ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands; (iii) ditches that do not flow, either directly or through another water, into an (a)(1) through (3) water;
- Artificially irrigated areas that would revert to dry land if application of water ceases;
- Artificial, constructed lakes and ponds created in dry land (e.g., farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds or cooling ponds);
- Artificial reflecting pools or swimming pools created in dry land;
- Small ornamental waters created in dry land;
- Water filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand or gravel that fill with water;
- Erosional features, including gullies, rills and other ephemeral features that do not meet the definition of tributary, non-wetland swales and lawfully constructed grassed waterways;
- Puddles;
- Groundwater, including groundwater drained through subsurface drainage systems;
- Stormwater control features constructed to convey, treat or store stormwater that are created in dry land; and



- Wastewater recycling structures constructed in **dry land**; detention and retention basins built for wastewater recycling; and water distributary structures built for wastewater recycling. Final rule starting at 164.

Is It “Water” or “Dry Land”?

Each and every feature that is WOTUS must *first* be “water.” In addition, many of the exclusions from the definition of WOTUS are limited to features “created in dry land.” Yet the final rule defines neither of these terms that are central to identifying jurisdictional and non-jurisdictional features, and the preamble provides only vague and somewhat circular explanations of the agencies’ intent.

Regarding the term “**water**,” the preamble states:

- The agencies use the term ‘water’ and ‘waters’ in categorical reference to rivers, streams, ditches, wetlands, ponds, lakes, oxbows, *and other types of natural or man-made aquatic systems, identifiable by the water contained in these aquatic systems or by their chemical, physical, and biological indicators.* (Final Rule at 7, fn.1)
- Thus, “waters” are “natural or man-made aquatic systems” that may be identified based on the presence of water—or instead may be identified based on “chemical, physical, and biological indicators” (i.e., water may be present only rarely). As with the definition of “tributary” discussed above, the reference to “indicators” is new in the final rule (compare to 76 Fed. Reg. at 22,191, fn.3) and may make it easier for the agencies to establish the presence of “waters” with very little evidence of the actual presence of H₂O.

Regarding “**dry land**”:

- The agencies declined to define the term in the rule because they “*determined that there was no agreed upon definition given geographic and regional variability.*” (Final Rule at 173)
- However, the agencies claim that “dry land” is “well understood based on the more than 30 years of practice and implementation” and further explain that “dry land” “refers to areas of the geographic landscape that are not water features such as streams, rivers, wetlands, lakes, ponds, *and the like.*” (Final Rule at 173)

The refusal to clearly define these key terms means that the agencies will retain broad discretion to identify “waters”—and therefore to limit the scope of the exclusions that are limited to features “created in dry land.” As with any ambiguous regulation, the agencies will receive extreme deference in their interpretation of what is arguably the most important word in the rule: WATER.

Erosional Features

Erosional features (gullies, rills, etc.) are not excluded if they meet the definition of “tributary” (i.e., “indicators” of bed, bank and OHWM, possibly identifiable only by the agency with desktop tools). The preamble notes that features “colloquially called” gullies or the like can meet the definition of tributary and therefore not qualify for exclusion as an erosional feature. (Final Rule at 176) Here again, given the broad and unknowable (to the landowner) scope of the term



“tributary” under the final rule, it is impossible for landowners to determine whether any mark on the landscape left by flowing water is in fact an excluded “erosional feature” or a categorically regulated “tributary.”

Stormwater Systems

The preamble states that “the agencies’ longstanding practice is to view stormwater control measures that are not built in ‘waters of the U.S.’ as non-jurisdictional.” Conversely, the agencies view some waters, such as channelized or piped streams, as jurisdictional even where used as part of a stormwater management system. (Final Rule at 177) The preamble seems to limit the scope of the stormwater control exclusion to engineered structures in municipal or urban environments, though the text of the rule does not contain that limitation. (Final Rule at 179)

Grandfathering

The final rule will become effective 60 days after the date of its publication in the *Federal Register*.

- The agencies do not intend to reopen existing jurisdictional determinations (JDs). JDs associated with issued permits and authorizations are valid until the expiration date of the permit or authorization. (Final Rule at 80)
- Permit applications deemed by the Corps to have been complete on the rule’s publication date, including complete pre-construction notifications, will be made consistent with the existing (1986) rule.
- The agencies will not be issuing new JDs between the final rule’s publication date and its effective date. (Final Rule at 80)