

POLICY BRIEF

The Shape of Water Regulations

The Disputed Waters of the United States

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Executive Summary

The term “waters of the United States” refers to the bodies of water subject to the Clean Water Act (CWA) of 1972, which prohibited discharge of pollutants into navigable waters. When passing the CWA, Congress refrained from defining navigable waters and instead referred to such waters only as waters of the United States (or WOTUS). Over the past five decades, the further definition of WOTUS has been shaped by the various administrations of the Environmental Protection Agency (EPA), the United States Army Corps of Engineers (Corps), and judicial decisions. There has been a great deal of contestation about whether certain streams, wetlands, and other water bodies that feed into navigable rivers and lakes are also subject to protection from pollution under the CWA. In general, a narrower definition of WOTUS has meant that more wetlands and streams would be vulnerable to pollution that could ultimately spill into navigable waters and drinking water sources. Proponents of the narrower WOTUS definition argue it will lower the costs of compliance while environmentalists argue greater levels of freshwater pollution create negative economic, health, and social consequences for people and wildlife.

In 2015, the Environment Protection Agency under the Obama Administration issued a new definition for WOTUS. The 2015 Rule clarified categories and criteria that would be used to determine if a body of water, stream, or wetland would be considered a part of WOTUS and subject to protection. If protected, discharge into these waterways would require a permit. The rule integrated current scientific understanding of water in ecosystems and was designed to provide clarity on the status of wetlands and streams. While the 2015 Rule was almost immediately challenged in courts as an overextension of the CWA’s jurisdiction, it ultimately went into effect in 26 states as of 2018.

On June 22, 2020, a new regulatory definition of the phrase “waters of the United States” took effect through the Trump Administration’s Navigable Waters Protection Rule.¹ The 2020 Rule narrowed the definition of WOTUS, and explicitly excluded wetlands not directly adjacent to other jurisdictional waters as well as ephemeral streams and 10 other types of water features (though some of these were previously excluded), removing them from federal protection and permit requirements under the act.

The two water features of particular contention between the 2015 and 2020 WOTUS definition are wetlands and ephemeral streams. Wetlands are transitional areas between water bodies and drained (or seemingly dry) land. They typically exist where the water table is at, near, or just above the land's surface. Ephemeral streams flow briefly in direct response to precipitation that is nearby. These bodies of water provide critical ecosystem functions and work to replenish and filter drinking water sources. Because of their ecological importance to navigable waters, they were more broadly included under the 2015 WOTUS definition. As such, the 2020 Rule, which excludes these water features, puts public and environmental health at greater potential risk while shifting the burden of regulatory oversight to states.

This brief considers the longer regulatory and judicial history of WOTUS and the potential impacts of the 2020 Rule if and as it is implemented. The brief first describes how the 2020 Rule's underpinnings were shaped by key Supreme Court opinions, opinions that are likely to continue to shape judicial decisions with regard to this rule in the near future. The brief then describes the potential environmental health impacts of the 2020 Rule and outlines how the rule serves to open new regulatory gaps and shifts the burden to state regulators, jeopardizing the health of water bodies and drinking water sources for tens of millions of people (if not more) in the process.

According to the EPA's own Science Advisory Board, whose members are appointed by the EPA administrator to (among other things) review scientific and technical information being used by the EPA as the basis for agency regulations, the 2020 Rule lacks consistency with current ecological understandings of water systems as interconnected in ways that are sometimes less immediately visible. That is, it distinguishes types of water to be regulated (or not) according to boundaries that water itself does not abide by. Once more, as noted above, it explicitly excludes water features that are important to the broader water systems, ecosystems, and human drinking water systems in and across states.

While the 2020 Rule redefining WOTUS went into effect in all states except Colorado in late June 2020, the ultimate implementation and impact is very likely to be unevenly distributed across the states. As such, this brief looks at the examples of New Mexico and New York to illustrate its differential affects.

This brief concludes that this variability is likely to be influenced by four central factors related to political geography. The first is, states' willingness to legally contest the 2020 Rule and the success of these challenges will affect where the rule is actually fully implemented. Second, the impact of the rule could be lessened in states that have existing complementary regulatory systems that can more easily fill in the gaps created by the 2020 Rule. Third, the specific and variable ecological and hydrological systems within a state will affect the size of the gaps created by the 2020 Rule, and will determine (in part) the severity of the ecological and human consequences. The more arid southwestern states will likely be the most impacted.

And finally, fourth, at this time states are all dealing with compounding factors that will affect their ability to pick up regulatory slack. States have seen long-term declines in environmental staffing levels since 2008. This longer-term trend is compounded by states grappling with an unprecedented public health crisis and a concurrent economic crisis that will make it difficult for states to allocate additional resources in order to fill those regulatory gaps created by the 2020 Rule.



Introduction

People rely on water to sustain their lives and, in turn, they rely on water regulations to ensure that their water is safe. Recent federal rollbacks to water regulations, however, threaten to jeopardize that safety and undo existing protections—perhaps, particularly as they relate to wetlands that are not immediately adjacent to navigable water bodies and ephemeral streams. Wetlands are commonly referred to as the kidneys of the ecosystem, they provide the crucial function of filtering water as it makes its way to drinking water systems. Likewise, ephemeral streams represent an important component of water systems as the ultimate source of larger water bodies and drinking water sources. In the Trump Administration’s recent repeal and replacement of the definition of the waters of the United States (WOTUS) under the Clean Water Act, the administration has explicitly excluded these two types of critical water features from protection under the Act.

On April 21, 2020, the Administration issued a new definition of WOTUS in its Navigable Waters Protection Rule (here referred to as the 2020 Rule). That new definition recently took effect on June 22, in all states except for Colorado.² In broad terms, the 2020 Rule reverted WOTUS to its narrower meaning prior to the Obama Administration’s expansion of that rule in 2015 (here referred to as the 2015 Rule). The 2020 Rule explicitly excluded twelve categories of water features from federal regulation under the Clean Water Act (though some of these were previously excluded) most saliently including certain wetlands and ephemeral streams, water features that had been more broadly included under the 2015 Rule.

This policy brief will explore the potential impacts of the rollback of WOTUS and important facets of the 2020 WOTUS definition just as it goes into effect, in order to provide a basis for understanding the unfolding impacts of the rule moving forward. This brief will also situate this regulatory change in the broader contexts of water policy in the US, outline the legal and historical contexts for the WOTUS definition, consider the potential implications for environmental health, and highlight ongoing actions in response to the new definition.

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Legal and Regulatory Background

Water behaves according to boundaries of ecological systems, but water governance is created and enforced at the federal and state level. As a result of this and other factors, regulations tend to assume that water behaves according to political boundaries and in discreet or isolated ways that can be compartmentalized and managed. Consequently, different types of water and different water-related issue areas have generally fallen under separate and sometimes siloed regulatory structures and requirements.

Though it was not the first nationwide law to regulate water, the 1948 Federal Water Pollution Control Act is regarded as the first significant federal legislation to address water pollution. In short, the act prohibited the discharge of pollutants into navigable waters without a permit. In 1972, Congress amended the Federal Water Pollution Control Act with the express objective “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”³ Congress then further delegated authority for administering the statute to the newly established Environmental Protection Agency (EPA). In 1977, Congress amended this authority again to designate the US Army Corps of Engineers (Corps) as administrators of the permitting processes for the discharge of dredge or fill material under Section 404 of the Act, and to rename the statute the title by which it is known today—the “Clean Water Act.”⁴

As referenced above, the Clean Water Act prohibits the discharge of pollutants into what are called “navigable waters.” This term was defined by the Act only as “waters of the United States, including the territorial seas.” It should be noted that Congress explicitly discussed the definition, or lack thereof, for navigable waters leading up to the passage of the Clean Water Act in 1972. That discussion as written in the accompanying report from Congress reflects that far from not knowing how to define the term, the choice to not define it was made with an express intent:

One term the Committee was reluctant to define was the term “navigable waters.” The reluctance was based on the fear that any interpretation would be read narrowly. However, this is not the Committee’s intent. The Committee fully intends the term “navigable waters” be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes”⁵

This statement in the report from Congress on its own actions, reflects that leaving “navigable waters” undefined was done for the specific purpose of having the term be applied as expansively or inclusively as possible. The term “navigable waters” was then used in several sections of the Act that outlined programs and regulations, saliently including:

...leaving “navigable waters” undefined was done for the specific purpose of having the term be applied as expansively or inclusively as possible.

- ◆ Section 401: State Certification of Water Quality processes and requirements
- ◆ Section 402: National Pollutant Discharge Elimination System (NPDES) permit program
- ◆ Section 404: Permit program regulating the discharge of dredged or fill material
- ◆ Section 311: Regulating the discharge of oil and other hazardous substances and establishing the oil spill prevention and response program
- ◆ Section 303: Water quality standards and implementation plans

As a consequence of its relative importance to understanding where and when the act requires federal regulation under these sections of the law, and the vested interests of the stakeholders involved, the meaning of “navigable waters” and “waters of the United States” have long remained contentious.⁶

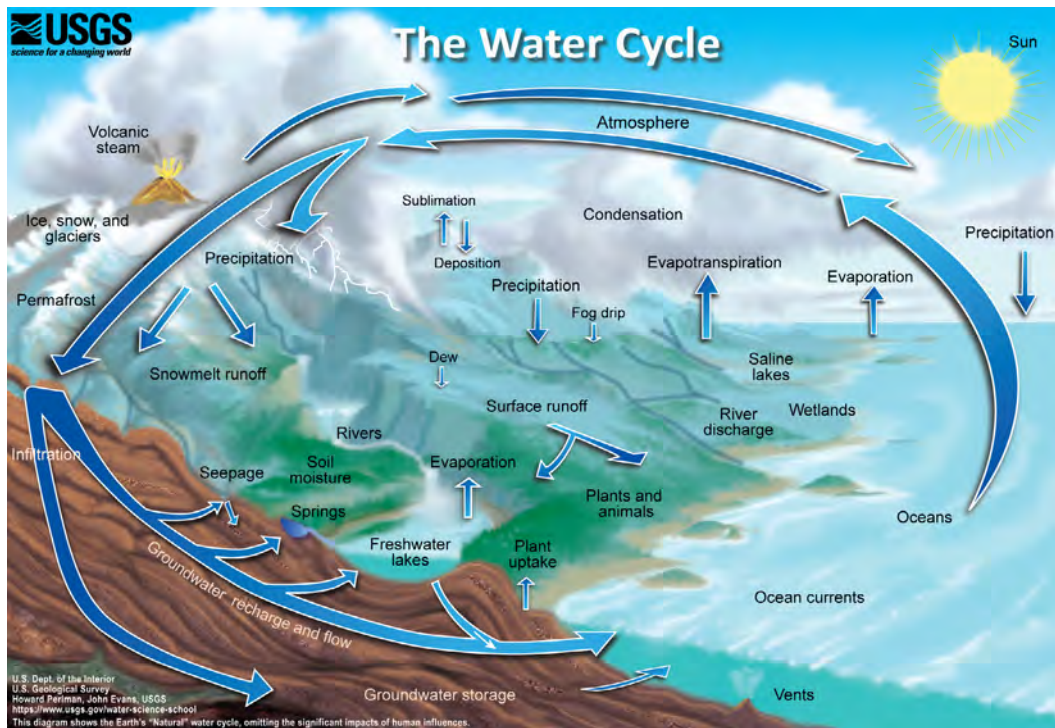
Potential Environmental Health Impacts

The 2020 Rule will effectively mean less or no oversight over activities that currently require permits for certain waters, including: dredging and filling areas with material; mining of hard rock and coal; and oil and gas extraction and disposal. The impacts of such activities with little or no regulatory oversight may lead to further pollution of water bodies and drinking water sources, the loss of important habitats for endangered and economically important wildlife alike, and the loss of areas that provide carbon sequestration or would otherwise work to mitigate flooding and drought. This mitigation is even more important in the context of climate change and the increasingly unpredictable, frequent, and severe weather events that accompany that change. Conversely, climate change makes it all the more likely that once perennial streams and wetlands with surface connections to other water bodies will fall out of regulation,⁷ burdening already vulnerable frontline communities with a dual risk.

Water Systems and Their Regulation

Water is not only necessary for the millions of types of organisms on earth to exist, it is a central component of the physical habitats that structure our ecosystems. It provides for plant growth, the delivery of nutrients and minerals, and habitats for many species. Water further cycles through our ecosystems, in what is called the hydrological cycle—the continuous movement of water through different states (as vapor, liquid, or ice), on, above, and below the earth’s surface in precipitation, groundwater, surface water, water vapor, etc. (see [Figure 1](#)). Water also cycles through related human systems like stormwater, wastewater, and drinking water systems that in turn draw on and empty into other water bodies. In this way, water is an important, and in many ways literal, link between different life on this planet. And, consequently, what affects water in one place, can affect water in another, sometimes even very distant, place.

FIGURE 1. The Water Cycle, Also Known as the Hydrological Cycle



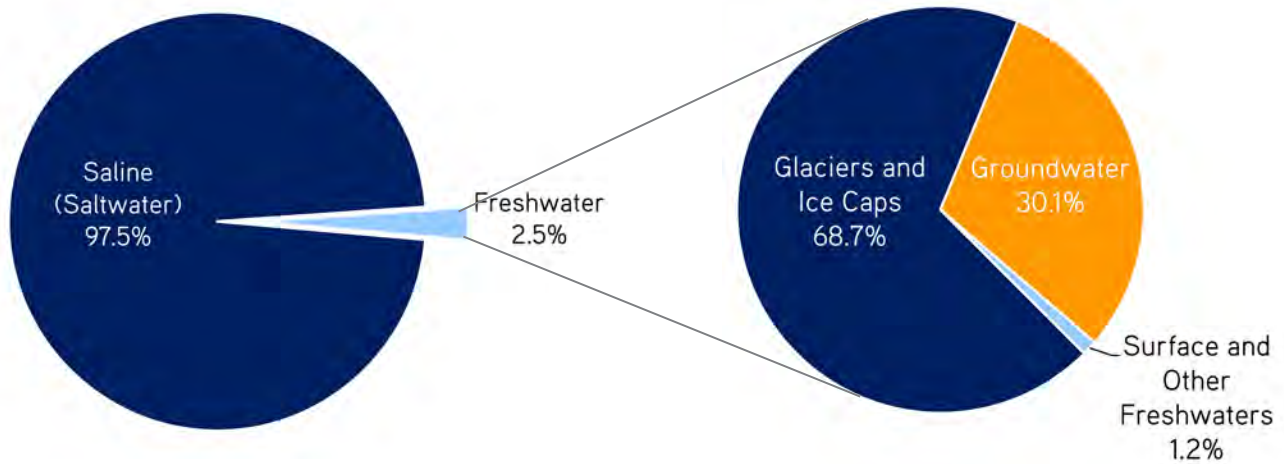
SOURCE: US Department of the Interior, US Geological Survey, <https://www.usgs.gov/media/images/water-cycle-natural-water-cycle>.

Most of the water on earth, however, is not even useable for human purposes. About 97.5 percent of the Earth's water is saline (saltwater). Of the 2.5 percent of the Earth's water that is freshwater, over 68.7 percent is inaccessible in glaciers and ice caps, while another 30.1 percent is found in groundwater, and just 1.2 percent is found in surface and other freshwaters.⁸ As a result, freshwater sources and the hydrological systems with which they interact are a precious and vital resource.

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The explicit exclusion of wetlands that lack surface connections to other jurisdictional waters as well as the exclusion of ephemeral waterways under the 2020 Rule's definition of WOTUS—features which had been more broadly included in the 2015 Rule—raises important questions about what places and people might be impacted as the rule is implemented and what those impacts might be. Wetlands and ephemeral streams provide important functions within a watershed.^{9, 10} But what are these features, what functions do they provide, and why should we be concerned about them given the 2020 Rule's changes to WOTUS?

FIGURE 2. Earth's Water Breakdown

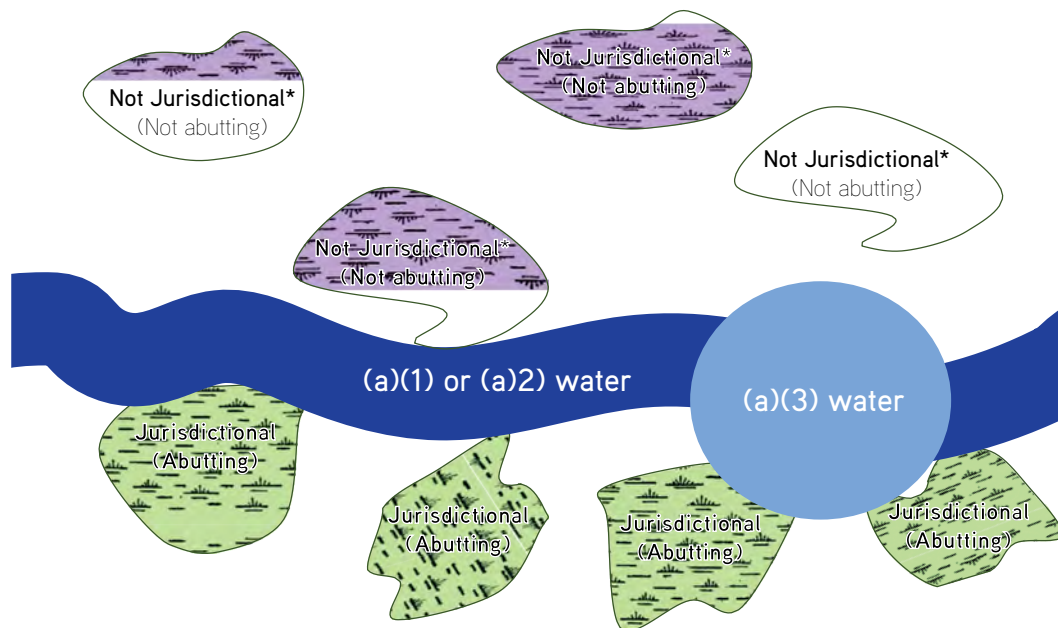


Wetlands

Wetlands are transitional areas between water bodies and drained (or seemingly dry) land that typically exist where the water table is at, near, or just above the land's surface.¹¹ Wetlands can exist in a wide variety of geographic regions including coastal areas, as with salt marshes and mangroves, or inland areas like swamps, bogs, and freshwater marshes. Wetlands, commonly referred to as the kidneys of the landscape, are also often highlighted in ecosystem studies as the most valuable part of the system, providing among other things: flood and drought mitigation; carbon sequestration; habitats for rare and endangered species; soil development; and, of course, water quality improvement.¹²

These processes and functions have not only individual, but cumulative impacts on ecological, geological, and hydrological systems, and in turn on downstream water quality. Although certain wetlands may be geographically "isolated" or not connected to water bodies through surface water connections, wetlands are rarely hydrologically isolated due to their subsurface water connections.^{13, 14} This is especially important given that under the 2020 Rule only wetlands that are "adjacent" to navigable waters through surface water connections that exist during a "typical year" are protected. That is, the 2020 Rule and recent guidance documents from the Army Corps of Engineers, do not reflect an understanding of hydrological connectivity (see [Figure 3](#)).¹⁵

FIGURE 3. US Army Corps of Engineers Diagram of Abutting Adjacent Wetlands



NOTE: 33CFR328.3(c)(1)(i): Adjacent wetlands include wetlands that abut, meaning to touch at least at one point or side of, a water identified in paragraph (a)(1), (2), or (3). Wetlands depicted are not otherwise jurisdictional under another adjacency criteria and are not paragraph (a)(1) waters.

SOURCE: “Lakes, Ponds, and Impoundments of Jurisdictional Waters; Adjacent Wetlands; Inundation by Flooding: Navigable Waters Implementation Rule Webinar,” US Army Corps of Engineers-Norfolk District, May 26, 2020, <https://media.defense.gov/2020/Jul/29/2002466512/-1/-1/1/NWPR.WEBINAR-04-LPIS%20AND%20WETLAND%20ADJACENCY-2020.05.26.PDF>.

The protection of wetlands is all the more important due to the historical, widespread, and significant loss of wetlands in the United States. The Emergency Wetlands Resources Act of 1986 first directed the US Fish and Wildlife Service to issue reports to Congress on the status of wetland resources and document long-term historic wetland losses, a report which would be updated every 10 years. The first such report, found that of the 221 million acres of wetlands originally in the present day boundaries of the 48 continental states in the 1780’s (392 million acres including all states), only roughly 104 million acres remained as wetlands in the 1980s (274 million acres including all states). This represented a staggering 53 percent loss.¹⁶ Net wetland losses have generally continued since that time, if unevenly.¹⁷

This loss can be seen as a direct consequence of, among other things, federal policies tied to colonial settlement, concepts of “Manifest Destiny” and westward expansion, and the displacement of indigenous peoples. In the mid-nineteenth century, Congress passed three Swamp Land Acts¹⁸ (in 1849, 1850, and 1860) to effectively encourage settlement in “new” areas of the expanding country and displacing indigenous communities as their land was taken through legal and violent means. These acts resulted in the collective transfer of 64,895,415 acres of “swamp and overflowed land” from the federal government to states, and the turning of such swamplands into “productive” developed and agricultural land.

It is in this longer context of the significant historic losses of wetlands that the 2020 Rule rolling back the definition of WOTUS has occurred. Internal Corps documents¹⁹ sent to the EPA in 2017 and leading up to the 2020 Rule have lent insight into the federal administration's analysis of the potential impacts of the new WOTUS definition. These documents relay that under a definition requiring "continuous surface connection" (directly touching a waters of the United States) roughly 51 percent of mapped wetland acreage that is currently left in the United States would not be considered adjacent. The documents further reflect that this impact is more likely to be felt with respect to freshwater wetlands as they are less likely to have direct surface connections.

Ephemeral and Intermittent Streams

Ephemeral streams, on the other hand, are streams that flow briefly in direct response to precipitation that is nearby. They differ somewhat from what are called intermittent streams, though the two are often discussed collectively.²⁰ Intermittent streams flow continuously, but for only part of the year, as with a stream that flows in response to snow melt each spring. Ephemeral and intermittent streams often represent the ultimate headwaters, or originating source, for streams and other water bodies, comprising nearly 60 percent of all streams in the United States (not counting Alaska).²¹

Consequently, the Corps's internal analysis from 2017 reflected that defining streams under WOTUS as those with only "relatively permanent flow" and potentially excluding intermittent and ephemeral streams "could result in a large reduction in jurisdiction and would impact every state." While the final 2020 Rule did include intermittent streams that could affect interstate or foreign commerce, it explicitly excluded ephemeral and other intermittent streams.

Like wetlands, streams provide numerous critical functions in a watershed, including: groundwater recharge and discharge; nutrient storage and cycling; sediment transport; wildlife habitat; stream dissipation, erosion reduction; and, water quality improvement. According to earlier reports by the EPA itself, such processes reflect that ephemeral and intermittent streams "provide the same ecological and hydrological functions as perennial streams—which are included under the 2020 Rule—by moving water, nutrients, and sediment throughout the watershed."²² Consequently, in February of 2020, the EPA's own Science Advisory Board²³ issued its commentary on the 2020 Rule, concluding that:

the proposed WOTUS rule does not incorporate best available science and as such we find that a scientific basis for the proposed Rule, and its consistency with the objectives of the Clean Water Act, is lacking... [The proposed Rule] decreases protection for our Nation's waters and does not provide a scientific basis in support of its consistency with the objective of restoring and maintaining "the chemical, physical and biological integrity" of these waters.²⁴

WOTUS's Judicial History

As noted above, when the Clean Water Act was enacted, Congress explicitly declined to establish a definition for the waters of the United States that would be protected. In the absence of a definition, the judicial system has played a critical role in shaping WOTUS.

Consequently, there is a substantial judicial history with respect to the terms at issue here. For the purpose of succinctly understanding the 2020 Rule, it is most immediately relevant, however, to begin to understand the changes made under the previous federal administration. Under the Obama Administration, the EPA and the Corps jointly issued a new rule in 2015 revising the administrative definition of WOTUS. Prior to the revisions in 2015, the definition of WOTUS had last been codified in 1986. The 2015 Rule expanded the definition to be more inclusive of wetlands and other ephemeral waterways. This expansion was explicitly contextualized with respect to a key Supreme Court precedent.²⁵

Rapanos v. United States

The 2015 Rule was predicated primarily upon the Supreme Court's findings in *Rapanos v. United States*²⁶ in which there was no majority opinion. The four-justice plurality's opinion written by Justice Scalia found that the Corps's interpretation of "navigable waters" and "waters of the United States" had exceeded their scope in extending regulation under the Clean Water Act to wetlands that were neither navigable nor adjacent to navigable waters.

Instead, the wetlands in this case drained into ditches and drains that were human made, and that in turn emptied into navigable waters. The plurality opinion further outlined two criteria for defining waters under WOTUS. First, that such waters are "relatively permanent, standing or continuously flowing bodies of water." And second, that "only those wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right" should fall under the definition of WOTUS.

Justice Kennedy concurred with the plurality that the Corps had exceeded their jurisdiction in this case, but significantly from a case law standpoint, did not agree with the two criteria that Scalia outlined. Instead, Justice Kennedy wrote in his concurring opinion that "a water or wetland constitutes 'navigable waters' under the Act if it possesses a 'significant nexus' to waters that are navigable in fact or that could reasonably be so made." This opinion drew on the earlier case of *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*, in which the court had held the same.

However, Kennedy stated that absent more specific regulations, the determination of a significant nexus would need to be established on a case-by-case basis and not according to the two criteria Scalia set out. Kennedy found that those determinations of a significant nexus would need to be made with respect to whether or not a wetland either directly *or in combination* with other lands, "significantly affect the chemical,

physical, and biological integrity” of navigable waters, as outlined in the 1972 language of the Clean Water Act.

The 2015 Rule

Following *Rapanos*, the EPA conducted a scientific review²⁷ of more than 1,200 peer-reviewed publications on the “Connectivity of Streams and Wetlands to Downstream Waters” to determine what constituted a significant nexus. The EPA’s review ultimately made five major conclusions that would be used as criteria by the EPA and the Corps to determine if a body of water was subject to the Clean Water Act. These conclusions were particularly salient with respect to wetlands and other ephemeral or intermittent features that may or may not have consistent surface water connections to navigable waters, but which could potentially be determined to have a significant nexus based on Justice Kennedy’s opinion.

From these findings, on May 27, 2015, the EPA and the Corps then issued a final rule clarifying and effectively expanding the definition of WOTUS.²⁸ This rule aimed to address Justice Kennedy’s opinion by issuing more specific regulations that clarified which waters—particularly wetlands and isolated streams that do not flow throughout the year—fell under the protections of the Clean Water Act, and further outlined the ways in which case-by-case determinations of a significant nexus could be made.

That 2015 Rule, however, quickly became tied up in the courts. The Oklahoma Attorney General along with 17 other states, filed a case against the EPA and the Corps challenging the new rule’s validity on the basis that it infringed on private property rights.²⁹ Shortly thereafter, the US Chamber of Commerce, National Federation of Independent Business, Portland Cement Association, State Chamber of Oklahoma, and Tulsa Regional Chamber jointly filed a lawsuit seeking the same. In total, 21 petitions for review were submitted. These petitions were then consolidated and transferred to the Sixth Circuit of the US Court of Appeals. Initially, the rule was given an effective date of August 28, 2015, but the day prior, the US District Court for the District of North Dakota enjoined the rule’s applicability preventing it from going into effect in 13 states.^{30, 31} Once more, in October of 2015, the Sixth Circuit then stayed the 2015 Rule, delaying its implementation on a nationwide basis until the court could further act.

The 2020 Rule

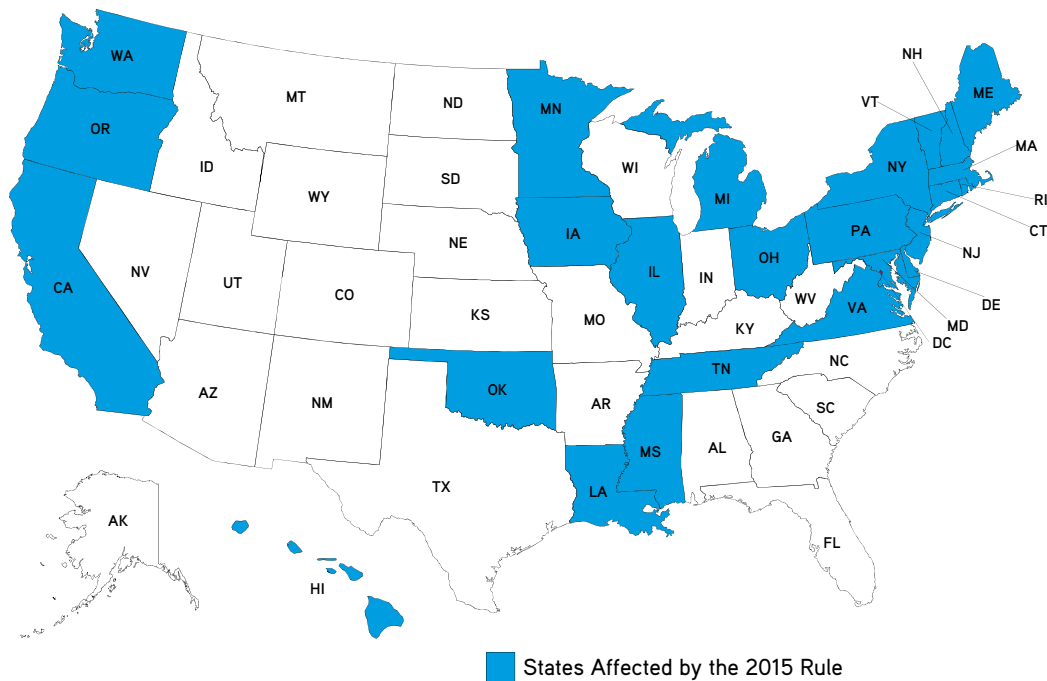
Since President Donald Trump took office in 2017, the speed of change related to WOTUS and its definition has accelerated. In February of 2017, the Administration issued an Executive Order directing the EPA and the Corps to “Step One” review and rescind the 2015 Rule, and then “Step Two” further define navigable waters at some future date to make it consistent with Justice Scalia’s opinion in *Rapanos v United States*.³²

A subsequent January 2018 Supreme Court ruling determined district courts and not court of appeals had jurisdiction over the challenges to the 2015 Rule. This meant that the existing nationwide stay would be lifted and that the 2015 Rule would go into effect—a proverbial blow to the Administration’s two step plan. Thus, shortly thereafter in February 2018, the Trump Administration issued another rule to try to delay the implementation of the 2015 Rule until 2020.³³

This rule to delay implementation was quickly challenged in the courts. Legal challenges led by New York State’s attorney general, attorneys general in other states, and environmental groups claimed the executive order delayed the 2015 Rule and did not allow for meaningful public comment. In August 2018, the US District Courts found that the Administration had violated the Administrative Procedure Act by delaying the 2015 Rule and not adequately considering public comments in its decision, issuing an injunction to reinstate the rule. This judgement resulted in the 2015 Rule going into effect in 26 states in August of 2018.³⁴ It did not, however, change the status of the rule in 24 other states with pending legal challenges.

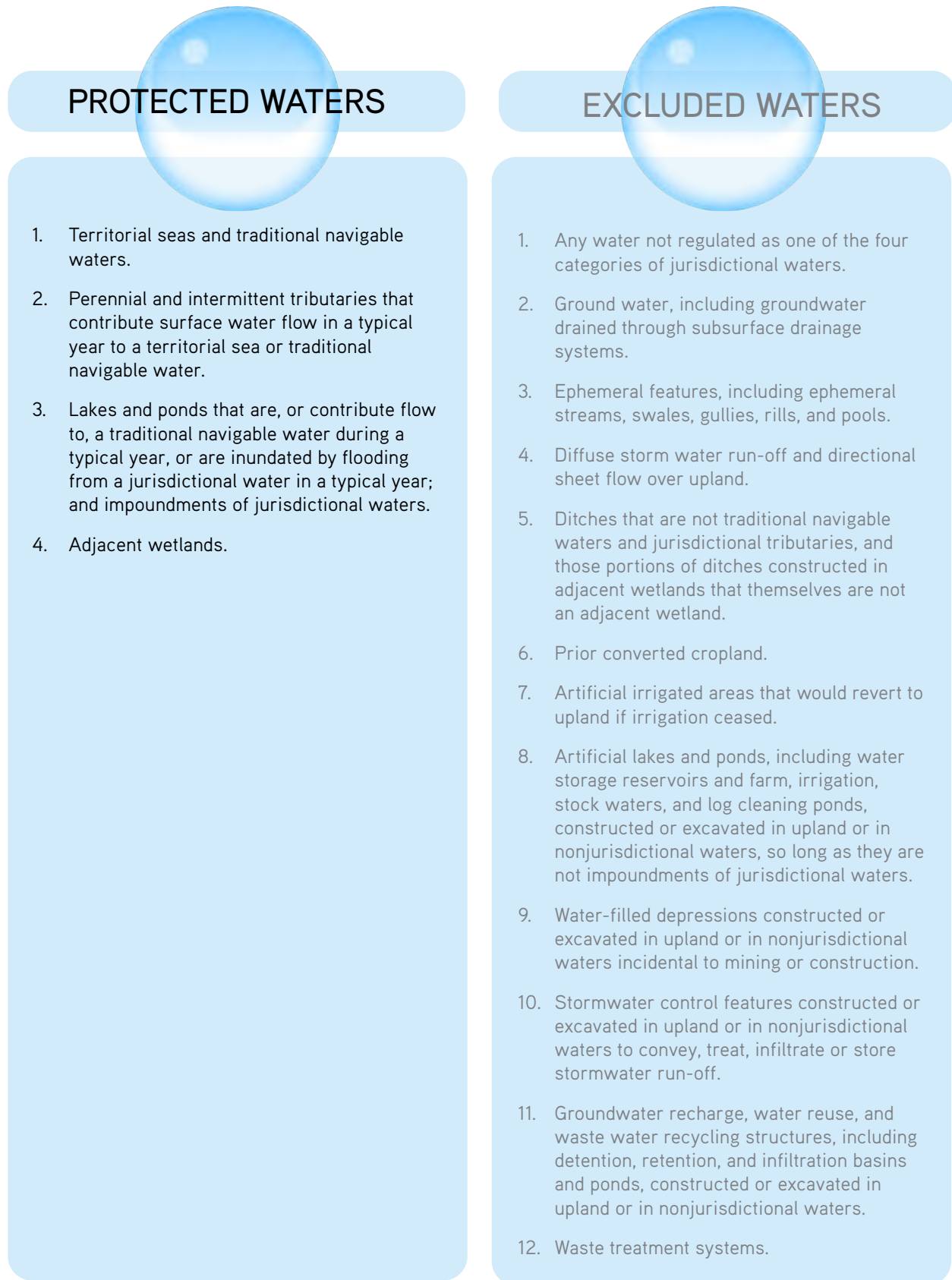
Despite this, albeit uneven, implementation of the 2015 Rule, by fall of 2019, the Trump Administration was solidifying its “Step One”³⁵ proposal to rollback the 2015 Rule to the prior 1986 definition of WOTUS. That rollback went into effect in December of 2019 and was likewise swiftly taken to court in suits brought first by environmental groups, including the National Wildlife Federation and Natural Resources Defense Council, and then by 14 states, the District of Columbia, and New York City.^{36, 37}

FIGURE 4. States Affected by 2015 Rule



SOURCE: “Final Rule: Definition of ‘Waters of the United States’ – Addition of Applicability Date to 2015 Clean Water Rule,” 2017 Annual Estimates, US Environmental Protection Agency, <https://www.epa.gov/nwpr/final-rule-definition-waters-united-states-addition-applicability-date-2015-clean-water-rule>.

FIGURE 5. Protected Waters vs. Excluded Waters Under the 2020 Rule



SOURCE: Brent Carson, Joseph B. Nelson, and Jonathan D. Simon, "Navigable Waters Protection Rule Substantially Narrows the Scope of Waterbodies Subject to Regulation under the Clean Water Act," *National Law Review* 10, 230 (2020): <https://www.natlawreview.com/article/navigable-waters-protection-rule-substantially-narrows-scope-waterbodies-subject-to>.

On April 21, 2020, the Trump Administration then published “Step Two,” the final Navigable Waters Protection Rule.³⁸ It was this rule that went into effect on June 22 in all states except Colorado (more on that below). The 2020 Rule, reflected Justice Scalia’s opinion in *Rapanos v. United States* in establishing navigable waters as those that were *relatively permanent* and *continuously flowing*, or waters that had *direct surface connections* to those waters. The rule outlined four categories of features that qualified as “jurisdictional waters” including: territorial seas and traditional navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds, and impoundments; and, wetlands adjacent to jurisdictional waters. It also outlined 12 categories of “excluded waters,” including: groundwaters; many ditches; prior converted cropland; waste treatment systems; and, perhaps most saliently, wetlands and ephemeral features, or features that only contain water in direct response to rainfall.

The administration framed the 2020 Rule with respect to providing greater regulatory certainty. The EPA administrator commented at the time that “we have to have regulatory certainty, clean, fair smart regulations of environmental law,” asserting that the rule worked with existing state programs to protect clean water. The administration further framed the rule’s ability to provide certainty as a benefit for industry, particularly: manufacturing; farming and ranching; construction; mining; and, energy. The announcement itself was made from the National Association of Manufacturers’ headquarters, where EPA officials were joined by others supporting the 2020 Rule, including the American Farm Bureau Association, the National Association of Home Builders, and Dominion Energy.

Ongoing Legal Developments

As with the 2015 Rule and earlier regulatory proposals under the Trump Administration, the 2020 Rule has been the subject of numerous legal challenges. In May 2020, just ahead of the rule going into effect, 18 attorneys general led by New York and California filed a lawsuit against the EPA and the Corps.^{39,40} Included in that lawsuit was the state of New Mexico, whose attorney general stated that “this attack on one of our most valuable and most vulnerable resources is unacceptable.” In addition to those states, several indigenous peoples have brought suits against the new WOTUS rule.⁴¹ These states and peoples have been further joined by environmental and others advocacy groups in lawsuits and in framing the 2020 Rule as the “Trump Dirty Water Rule.”⁴²

Just before the 2020 Rule took effect, on June 19, the US District Court for the Northern District of California rejected the nationwide injunction requested by the 18 states, finding that they did not sufficiently demonstrate that the rule was not adopted in compliance with the Administrative Procedures Act—but noting, that if the court was “tasked with the question of whether the new rule represents wise environmental policy or the best approach to protecting water resources that could be supported by scientific data, the result might be different.”⁴³

The state of Colorado, however, filed a separate suit requesting an injunction of the 2020 Rule. And, on the same day that the California court rejected the injunction for the other states' suit, the US District Court for the District of Colorado granted the state injunctive relief, delaying the implementation of the 2020 Rule. In that ruling, Judge William Martínez wrote⁴⁴ that while the 2020 Rule attempts to take Scalia's plurality opinion and "make it the new law of the land [...] *Rapanos* forecloses this interpretation of the C[lean] W[ater] A[ct]" reiterating Justice Kennedy's statement of the need to establish "significant nexus" on a case-by-case basis absent further regulations and finding that "although nothing in *Rapanos* forecloses reinterpretation of 'waters of the United States,' that decision *does* foreclose the reinterpretation at issue here." It is thus, that on June 22, the 2020 Rule went into effect in all states except Colorado. Further judicial decisions, however, have yet to determine whether the rule will continue to be implemented as such.

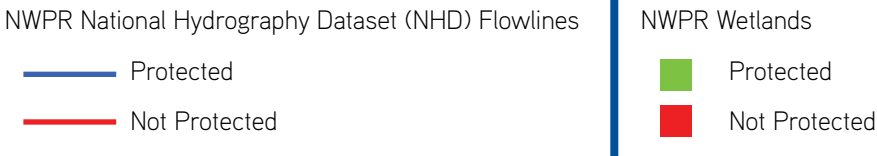
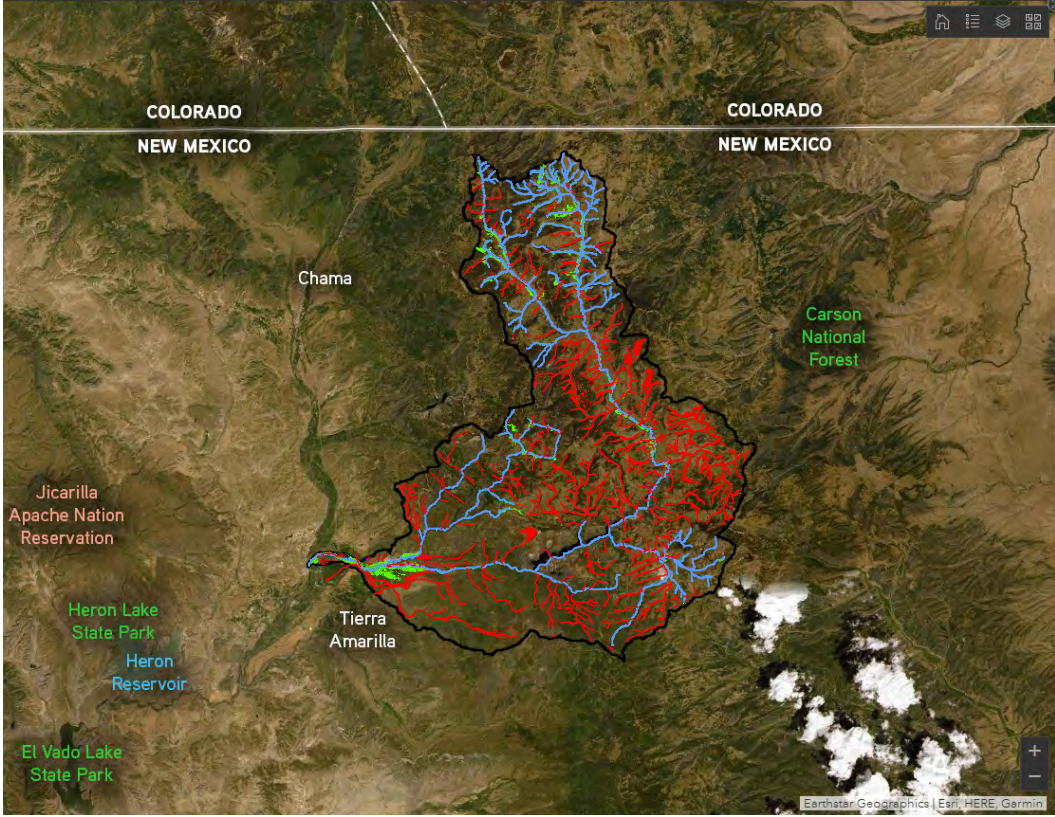
Uneven Terrain Across States—Examples From New Mexico and New York

State wetlands programs, laws, and regulations vary considerably.⁴⁵ For example, many states rely entirely on Section 401 certification of federal permits under the Clean Water Act, while others have further laws or regulations requiring permits in "waters of the state" that effectively broaden the WOTUS definition to include wetlands and ephemeral streams. Some states do not have wetlands programs at all, and those that do may pertain to freshwater wetlands, or coastal wetlands, or both. Instead or in addition to these programs, a number of states also employ nonregulatory programs—education, restoration, outreach, etc.—concerning wetlands, ephemeral streams, and other waterways. As of 2008, the date of the most recent survey, at least 13 states have specific wetland water quality regulations that may be used in permitting determinations and 23 states have the authority to issue permits for dredge and fill activities in wetlands. This diverse array of state-level policies and programs illustrates that the impact of the 2020 Rule on states, state agencies, and their ability to ensure oversight of environmental permitting will likely be uneven, though significant.

New Mexico

New Mexico does not have a state permitting program in place that could address many of the waters now excluded under the 2020 Rule.⁴⁶ As a result, the rule is estimated to eliminate roughly 40 percent of water pollution permits in the state unless a state program is established to fill the resulting regulatory gap. Internal EPA documents referencing the 2020 Rule, reflect that the impact of the rule will likely be most felt in arid west states like New Mexico,⁴⁷ where ephemeral and intermittent streams make up over 80 percent of all streams.

FIGURE 6. Chavez Creek Watershed, New Mexico Coverage and Noncoverage Under the 2020 Navigable Waters Protection Rule (NWPR)



SOURCE: “Protected Water and Wetland Modeling Results,” St. Mary’s University of Minnesota, Geospatial Services, <https://smumn.maps.arcgis.com/apps/opsdashboard/index.html#/09bb631910db482ba33b4be6c6e30fb2>.

It is estimated that the 2020 Rule may exclude 96 percent of the New Mexico’s streams and wetlands from regulation—out of the state’s over 88,000 miles of streams and over 845,000 acres of wetlands.^{48, 49} Such waters include important tributaries to the Rio Grande River and parts of the Santa Fe River, that are significant drinking water sources for residents of Santa Fe. More broadly, 78 percent of New Mexicans depend on groundwater⁵⁰—excluded from protections in the Clean Water Act under the 2020 Rule⁵¹ and the 2015 Rule—for their drinking water. Half of all water withdrawals in the state, including those for agriculture and other industry, come from groundwater.

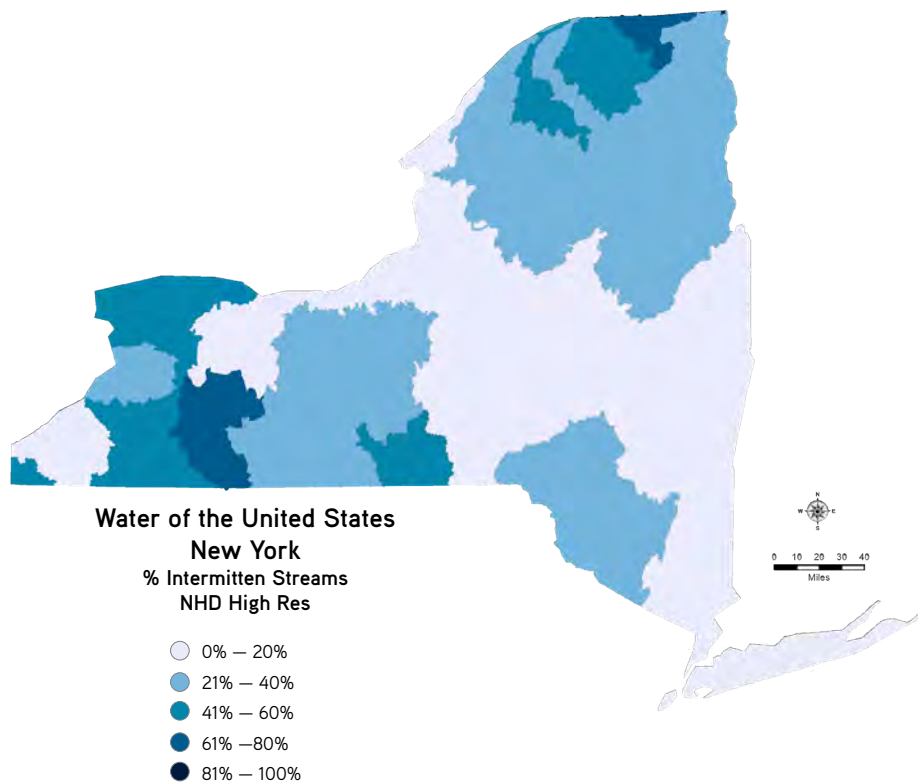
Given the significant potential impact of the 2020 Rule, the New Mexico state attorney general has generally joined the multistate lawsuits contesting the change in WOTUS definitions. Likewise, New Mexico's Environment Department secretary, submitted comments to the EPA that outlined concerns about the 2020 Rule's impact in the state. The secretary later stated of the rule that it "will devastate New Mexico's scarce and limited water resources [...] New Mexico is arguably the state with the most to lose, and my Department will do whatever it takes to prevail in protecting our most precious resource."⁵²

New York

As in New Mexico, New York's attorney general and Department of Environmental Conservation commissioner have contested the 2020 Rule. The New York State Office of the Attorney General joining the multistate lawsuits to stay its implementation. In New York, roughly 29 percent of streams are intermittent and, while ephemeral streams are not mapped in the state, it is estimated that there are over 100,000 miles of unmapped ephemeral streams in the state.⁵³ Likewise, over 4.7 million New Yorkers depend on groundwater for their drinking water.⁵⁴ Unlike in New Mexico, New York's "waters of the state" definition is more expansive than the federal government's WOTUS definition. The Department of Environmental Conservation (DEC) in New York has an approved permitting program by the EPA.⁵⁵ The Department of Environmental Conservation further administers a Freshwater Wetlands Program⁵⁶ under the state's Freshwater Wetlands Act. This act requires permitting for activities in wetlands or their adjacent areas, including (but not limited to): construction of buildings or roadways; placement of fill or excavation; application of pesticides; and, drainage with the exception of agricultural drainage. Which areas fall under this regulation currently depends on DEC mapping and pertains to wetlands that are 12.4 acres⁵⁷ or larger, or those that are of unusual local importance.

As the Trump Administration announced its changes to WOTUS in early 2020, Governor Andrew Cuomo proposed revising those state regulations to further include all wetlands identified by the physical characteristics in the original state statute.⁵⁸ That proposal did not, however, make it into the final state budget amidst the large-scale response to the COVID-19 pandemic. Even more recently in New York, when the state legislature reconvened in July, the Senate passed a bill extending state protections and permit requirements to what are called "class C" waters.⁵⁹ This bill, which had passed the Assembly in February, was directly framed by its sponsors and environmental advocates to counteract the changes implemented in the 2020 Rule.⁶⁰

FIGURE 7. Waters of New York



NOTE: 109,898 miles of streams are mapped in New York river basins in US Geological Survey’s High Resolution National Hydrography Dataset. 29 percent are mapped as Intermittent. Ephemeral streams are not mapped in the state.

SOURCE: “Waters of the United States,” Trout Unlimited, https://www.tu.org/wp-content/uploads/2019/05/TU_StateMaps_Waters-of-the-US.pdf.

Compounding Factors for States

The long-term impact of COVID-19 on states and localities, agency funding, staffing, and general capacity, is still not clear. COVID-19 related budget shortfalls will likely compound existing state-level shortfalls in environmental protection.⁶¹ During and in the immediate years following the 2008 recession, 30 states reduced funding for pollution control programs at their environmental agencies. Of those, 25 states cut at least 10 percent, and 16 states cut 20 percent or more (adjusted for inflation). In total, 40 states over the last decade have reduced environmental agency staff.

In short, the rollback of WOTUS will mean that even for states who want to fill the regulatory gaps the 2020 Rule will leave behind, they will be hard-pressed to find the resources to do so and do so quickly. And, that impact will not only be felt based on the interest and ability of states to fill those regulatory gaps, but on the interest and ability of neighboring states with which they share watersheds to also fill those gaps. These effects will be further compounded by the uneven impacts of climate change and by the way in which those impacts move more water bodies out of categories of protection as their continuous surface connections become less consistent or move below ground.

Conclusions

The 2020 Rule’s redefining the “waters of the United States” under the Clean Water Act removes key types of water including wetlands and ephemeral streams from federal protections, jeopardizing the health of not only ecosystems but drinking water sources, and shifting the burden onto states to address the resulting regulatory gap. While the 2020 Rule went into effect in all states except Colorado in late June, its ultimate implementation and impact are likely to be uneven. As reflected above, this unevenness is influenced by at least four central factors.

First, given the judicial history and present status of legal challenges to WOTUS, in which states the 2020 Rule continues to be implemented, will likely play out in the courts for some time and, consequently, will result in uneven implementation depending on who ultimately brings successful challenges. Second, this unevenness will be further affected by the degree to which a given state has existing regulatory systems and programs—which vary considerably across states—to potentially address those regulatory gaps left behind by the 2020 Rule. Third, states and their residents will be unevenly impacted depending on their particular ecological and hydrological features. As noted, those more arid states in the southwest are likely to be among the most impacted, as are other states whose ecologies, drinking water systems, and economies more heavily depend on groundwater, wetlands, and ephemeral streams explicitly excluded from federal protections under the 2020 Rule.

And fourth, the impact on each state and its residents is likely to be compounded by both the existing longer term declines in state environmental staffing levels, and the current economic and public health crisis related to COVID-19 as the resources for related agencies to address the regulatory gaps left by the 2020 Rule stand to be further strained. As a result, states stand to lose regulatory oversight for the protection of tens of thousands of miles of streams, hundreds of thousands of acres of wetlands, and the source water for drinking supplies for millions of residents. Given that this is a presidential election year, it is important to note that the ultimate implementation of the 2020 Rule is also dependent on the outcome of that election and whether or not the elected administration next year is likely to continue this policy or work to rollback this rollback. As that work unfolds, as legal challenges continue to play out in the judicial system, and as state regulatory systems shift, further work by the Rockefeller Institute will update this research.

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ENDNOTES

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