Navigating Rough Waters After *Sackett v. EPA:* Federal, Tribal, and State Strategies

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The Clean Water Act is the primary federal law regulating impacts to water resources and water quality in the United States. Congress asserted the focus of the Act in the first section: to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Federal jurisdiction to implement this focus for many of the Act's water protection programs turns on whether a waterbody is classified as a "Water of the United States" (WOTUS). The definition of WOTUS has been contested since the ink dried on the Act, with proponents of greater water protections arguing for more expansive boundaries of federal jurisdiction. Most recently, the Supreme Court re-interpreted WOTUS in Sackett v. Environmental Protection Agency *(2023), in which the Court held that wetlands 300 feet from Priest Lake would no longer be considered adjacent wetlands protected as WOTUS. Upending forty-five years of agency and judicial interpretation, the Court narrowed the definition of WOTUS to only those wetlands that have a continuous surface connection to a traditionally navigable body of water, such as a river or lake. This places many wetlands and ephemeral and intermittent streams outside of federal jurisdiction, and thus, the protections of the CWA. Yet, wetlands and nonperennial streams are vital to the chemical, physical, and biological integrity of the Nation's waters. Wetlands filter pollutants from water, retain and absorb flood waters, and provide habitats for wildlife. Ephemeral and intermittent streams are ubiquitous and important pathways that drain water and pollutants into traditional navigable waters. Removing federal protections means these areas are vulnerable to ruin by human alterations, and it increases flood risks to downstream communities.*

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Decreasing federal jurisdiction over the majority of wetlands and nonperennial streams across the U.S. places a greater emphasis on the role of states and tribes in water protection. Lacking a consistent federal approach results in a patchwork of protections for waters that are now considered nonfederal, even when those waters impact large regional shared waters, such as the Great Lakes, the Mississippi River, the Colorado River, and Rio Grande, to name a few. This Article starts with a grounding in the scientific literature to explore the importance and vital functions of the waters that have lost federal jurisdiction. Using that as a springboard, we explain the most important legal decisions defining WOTUS to place Sackett v. EPA *in context. We then discuss the divergent responses to the loss of federal jurisdiction by surveying responses at federal, tribal, and state levels of government. We show that many tribes opposed reducing federal protections leading up to Sackett, and after the decision, at the federal and state level, the battle continues over removing versus restoring regulatory protections. We observe that even in states where reducing regulatory control is favored, agreements have been forged around non-regulatory programs that fund wetland protections. We conclude that tribes and states have the power to shape protections for these vital waters regardless of federal jurisdiction, but with no federal regulatory backstop, the integrity of the Nation's waters is threatened by this piecemeal approach.*

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I. INTRODUCTION

The 1970s, the environmental decade, saw many environmental movements and regulations, especially on the federal level. One such regulation was the Clean Water Act (CWA), enacted in 1972, in which Congress asserted the focus of the Act in the first section "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[1] Federal jurisdiction of many of the CWA's programs applies only to "waters of the United States" (WOTUS), the definition of which has been contested since its inception. Most recently, the Supreme Court interpreted WOTUS in *Sackett v. Environmental Protection Agency* (May 2023).[2] The Court narrowed federal jurisdiction, holding that WOTUS only covers those wetlands that have a continuous surface connection to a traditionally navigable body of water, upending forty-five years of agency and court interpretation.[3] Thus, the majority of wetlands and ephemeral and intermittent streams are no longer covered by federal jurisdiction and protected by the CWA.

However, wetlands and ephemeral and intermittent streams are vital to the chemical, physical, and biological integrity of the Nation's waters. Given the decrease in federal jurisdiction, regulatory protection of many wetlands and ephemeral and intermittent streams now rests entirely with state and tribal wetlands programs.

This Article will focus on the impacts of the 2023 Supreme Court decision in *Sackett v. Environmental Protection Agency* (*Sackett*) to wetlands and ephemeral and intermittent streams. In this Article, we

1. 33 U.S.C. § 1251(a).
2. Sackett v. Env't Prot. Agency, 598 U.S. 651 (2023).
3. *Id.* at 678–79.

aim to lay out the most recent interpretation of WOTUS, and we highlight the impacts on tribes and states caused by this redrawing of federal jurisdiction. Federally recognized tribes are uniquely positioned within the governmental structure of the U.S., and *Sackett* has left a gap in protections of wetlands and ephemeral and intermittent streams on tribal lands. Additionally, in response to *Sackett,* some states have increased protections for waters in their state that lost protections, while others have taken the opportunity to decrease protections. We argue this lowered federal floor has further complicated the patchwork of protections across the U.S. for these vulnerable waterbodies. As waters are not static and do not abide by political boundaries, these deregulation decisions by some states can also impact the water resources of tribes and other states within the region.

Part II discusses the ecological importance of wetlands and ephemeral and intermittent streams. We review the scientific literature to explore the many aspects of life that are impacted by wetlands and nonperennial streams. We discuss these waters' importance and functions in both arid and wet parts of the Nation, highlighting case studies from the states of Wisconsin and New Mexico. Then we explain the interests of federally recognized tribes in these important waters, also drawing examples from tribes in arid and wet parts of the country.

From this grounding in science, in Part III we then turn to how the law integrates or ignores science in the legal frameworks established to regulate human activities in wetlands and nonperennial streams. We contextualize *Sackett* by explaining the scope of federal jurisdiction under the CWA and the prior case law. Here, we introduce the CWA Section 404 permit program, which regulates dredge and fill projects. We discuss the scope of federal jurisdiction applying only to WOTUS, as interpreted by regulations and three Supreme Court decisions: *United States v. Riverside Bayview Homes, SWANCC v. U.S. Army Corps of Engineers,* and *Rapanos v. United States.*[4] After positioning *Sackett* within this legal history, we explain the Court's holding and the early estimates of its impact on reducing federal jurisdiction over wetlands and ephemeral streams.

In Part IV, we evaluate federal, tribal, and state responses to *Sackett.* We discuss how these varied responses create a patchwork of protections across the U.S. as limited federal jurisdiction shifts the focus to

4. United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985); Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs (*SWANCC*), 531 U.S. 159 (2001); Rapanos v. United States, 547 U.S. 715 (2006).

tribes and states to fill in the gaps. We conclude that tribes and states have the power to shape protections for these vital waters regardless of federal jurisdiction, but with no federal regulatory backstop, the integrity of the Nation's waters is threatened by this piecemeal approach.

II. IMPORTANCE AND VITAL FUNCTIONS OF WETLANDS AND EPHEMERAL AND INTERMITTENT STREAMS

A. Wetlands

In the first few months after the *Sackett* decision, the U.S. Environmental Protection Agency (EPA) estimated the elimination of federal jurisdiction may result in the loss of protection of 63% of the Nation's wetland acres.[5] To better understand this loss of jurisdiction, we review the scientific literature on the importance and vital functions of wetlands.

Before "Drain the swamp!" became a political charge, it was a maxim of taming the wilds of the United States.[6] The perception of wetlands has changed drastically over time, and these "swamps" are now acknowledged in science as critical ecological systems. The National Research Council defines wetland as "an ecosystem that depends on constant or recurrent, shallow inundation or saturation at or near the surface of the substrate."[7] Additionally, a wetland's

5. U.S. Env't Prot. Agency, *Policy Webinar: Updates on the Definition of "Waters of the United States*," 24:09-24:18, YOUTUBE (Sept. 12, 2023, 03:00 PM EST), https://www.youtube.com/watch?v=lcCVelsAy2c [https://perma.cc/67GC-TTY2].

6. Historically, wetlands were commonly drained. *See generally* THOMAS E. DAHL & GREGORY J. ALLORD, TECHNICAL ASPECTS OF WETLANDS: HISTORY OF WETLANDS IN THE CONTERMINOUS UNITED STATES, U.S. GEOLOGICAL SURV., NAT'L WATER SUMMARY ON WATER RES. 19 (1994), https://wwv.inhs.illinois.edu/files/8113/4020/2403/history_of_wetlands.pdf [https://perma.cc/5MPR-9MLE].

7. NAT'L RSCH. COUNCIL, WETLANDS: CHARACTERISTICS AND BOUNDARIES 3 (Nat'l Acad. Press 1995). Due to challenges over federal regulation of wetlands, the U.S. Congress requested the EPA ask the National Research Council to create a committee, formed in 1993, to study the scientific basis of characterizing wetlands. This effort resulted in the 1995 report, *Wetlands: Characteristics and Boundaries*, which presented a reference definition for wetlands, an overview of wetland functions, and provided recommendations and conclusions for wetland criteria and indicators. The formation of a reference definition outside of the regulatory context, based in science, is helpful as it stands outside of any specific agency, policy, or regulation. The reference definition in its entirety is:

> A wetland is an ecosystem that depends on constant or recurrent, shallow inundation or saturation at or near the surface of the substrate. The minimum essential characteristics of a wetland are recurrent, sustained inundation or saturation at or near the surface and

"minimum essential characteristics" are "recurrent, sustained inundation or saturation at or near the surface and the presence of physical, chemical, and biological features reflective of recurrent, sustained inundation or saturation."[8] There are three main factors that characterize a wetland: water, substrate (soils), and biota (hydrophytic vegetation).[9] The federal agencies' definition also includes these three main factors.[10] Types of wetlands in the U.S. include freshwater marshes, tidal salt and brackish marshes, prairie potholes, fens, bogs, swamps, marshes, bottomlands, and mangroves.[11]

These wet areas have often been viewed as obstacles to people's desire to build or farm, so they have been drained and filled to make way for human designs for the land and waterscape. According to Dahl and Allord, there were approximately 221 million acres of wetlands in the now conterminous U.S. at the time of European colonization in the early 1600s.[12] The fledgling U.S. encouraged European immigrants to spread their wings and expand "civilization" westward. To increase the productive value of available land for farming, wetlands were routinely drained.[13] According to Dahl and Allord, during this time, wetlands were regarded as "swampy lands that bred diseases, impeded the production of food and fiber, and generally were not useful for frontier survival."[14] Large amounts of wetland drainage and land conversion continued well into the 1900s, encouraged by federal

> the presence of physical, chemical, and biological features reflective of recurrent, sustained inundation or saturation. Common diagnostic features of wetlands are hydric soils and hydrophytic vegetation. These features will be present except where specific physicochemical, biotic, or anthropogenic factors have removed them or prevented their development.

Id.

8. *Id*.

9. *Id.* The report notes these are factors and not parameters. It also notes that some wetlands develop where hydric soils are not present or where hydrophytic vascular plants do not grow. The report states these wetlands should not be excluded from regulation just because they lack those common indicators.

10. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. 37122, 37128 (1977). *See also* Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37054, 37081 (2015); U.S. ENV'T PROT. AGENCY, *How Wetlands are Defined and Identified Under CWA Section 404*, https://www.epa.gov/cwa-404/how-wetlands-are-defined-and-identified-under-cwa-section-404 [https://perma.cc/KX4H-56HY] (last updated Apr. 6, 2023).

11. NAT'L RSCH. COUNCIL, *supra* note 7, at 21 t.2.1.

12. DAHL & ALLORD, *supra* note 6, at 19–20. The U.S. enacted the Land Ordinance Act in 1785, which established the U.S. Public Lands Survey. This required surveying and partitioning of land before settlement. These surveys do supply some information on wetlands. *Id.*

13. *Id*. at 19–20.

14. *Id.* at 20.

government policies.[15] Dahl and Allord estimate that by the mid-1980s, about 103 million acres of wetlands remained.[16]

While the wetland protections ushered in by the CWA in the 1970s slowed the rate of destruction and mitigated losses with required wetland creation, the trend of loss has continued. In its most recent congressionally-mandated report, "Status and Trends of Wetlands in the Conterminous United States 2009 to 2019" (Status and Trends Report), the U.S. Fish and Wildlife Service discusses the change in the amount of wetlands in the study decade.[17] They report that in 2019, "there were an estimated 116.4M ac (47.1M ha) of wetlands in the conterminous U.S."[18] In the study decade, the amount of wetland losses surpassed wetland gains resulting in a net wetland loss of 221,000 acres between 2009 and 2019.[19] This, when compared to the previous report period (2004–2009), showed an accelerated rate of net wetland loss by over 50%.[20] Looking closer at the categories of wetlands, the Status and Trends Report highlighted that the data "indicates a fundamental alteration of wetland type at a national scale"[21] moving from vegetated wetlands to non-vegetated wetlands, obscuring the magnitude of vegetated wetland loss.[22] From 2009–2019, vegetated wetlands had a net decrease of 670,000 acres, an area exceeding the land area of Rhode Island.[23] However, non-vegetated wetlands increased in net area by 488,000 acres.[24] Non-vegetated wetlands include beaches, mud flats, shoals, and sand bars.[25] These reports show a trend in wetlands loss measured in acres and in quality (vegetated to non-vegetated) over time.

The way society understands the value of wetlands has changed, especially since the 1970s.[26] Since then, there has been a growing awareness of wetlands as valuable areas that provide vital

15. *See generally Id.*

16. By the mid-1980s, six states lost over 85% of their wetlands, including Ohio, Indiana, and Illinois. Twenty states lost 50% or more, including Michigan, Pennsylvania, and New York. *Id.*

17. MEGAN LANG ET AL., STATUS AND TRENDS OF WETLANDS IN THE CONTERMINOUS UNITED STATES 2009 TO 2019, U.S. DEP'T OF INTERIOR; FISH & WILDLIFE SERV. (2024). This is the sixth report in a series of Congressionally mandated Wetlands Status and Trends reports over about the past seventy years. *Id*. at 8.

18. *Id.* at 16.

19. *Id.*

20. *Id.* at 17.

21. *Id.*

22. *Id.* at 18.

23. LANG ET AL, *supra* note 17 at 18.

24. *Id.*

25. *Id.* at 16.

26. DAHL & ALLORD, *supra* note 6, at 24.

environmental functions, and these values are somewhat reflected by wetland protection laws.[27] Wetlands play a critical role in many aspects of life as extensively documented in the "Brief of Scientific Societies as *Amici Curiae* in Support of Respondents" (Amicus Brief of Scientific Societies) in *Sackett*.[28] Generally, wetlands provide support for biodiversity, improvement for water quality, flood abatement functions, and carbon management.[29] They serve as habitat and breeding places for about 40% of the world's plants and animals, although they cover only 6% of our planet's land area.[30] Over one-third of the threatened or endangered species in the U.S. live only in wetlands, and about half use wetlands during their lifetimes including for food, water, shelter, and spawning habitat.[31] Wetlands are also important for birds and migratory waterfowl.[32] For part of the year, migratory waterfowl use coastal and inland wetlands for resting, breeding, and nesting.[33]

Additionally, wetlands can improve water quality through the retention of pollutants, including excess nutrients and chemical contaminants, that could degrade waters downstream.[34] Wetlands reduce or delay floods through "storing and desynchronizing floodwaters" and thus allow the stormwater to move, over time, to navigable waters as base flow.[35] Thus, wetlands act as natural sponges that hold and

27. *Id.* There were prior acts that sought to protect wetlands. Congress passed the Migratory Bird Hunting Stamp Act in 1934 which was one of the first pieces of legislation to begin the process of acquiring and restoring wetlands. *Id*.

28. Twelve national and international scientific organizations were *amici curiae* in this brief. Brief of Scientific Societies as *Amici Curiae* in Support of Respondents, Sackett v. Env't Prot. Agency, 598 U.S. 651 (2023) (No. 21-454).

29. Joy Zedler & Suzanne Kercher, *Wetland Resources: Status, Trends, Ecosystem Services, and Restorability,* 30(1) ANN. REV. ENV'T & RES. 39, 50 (2005); *See* Amicus Brief of Scientific Societies, *supra* note 28, at 10–11 (citing U.S. ENV'T PROT. AGENCY, EPA/600/R-14/475F, CONNECTIVITY OF STREAMS AND WETLANDS TO DOWNSTREAM WATERS: A REVIEW AND SYNTHESIS OF THE SCIENTIFIC EVIDENCE ES-9 (2015)).

30. *Life Interlaced: Wetlands and People,* UNITED NATIONS, https://www.un.org/en/observances/world-wetlands-day [https://perma.cc/L2CX-ZU95] (last visited Dec. 28, 2023).

31. Animals and plants that live only in inland wetlands include wood ducks, muskrat, cattails, and swamp rose. Others use wetlands for food, water, and shelter including the striped bass, peregrine falcon, otter, black bear, raccoon, and deer. *Why Wetlands are Important,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wetlands/why-are-wetlands-important [https://perma.cc/AXV9-8K2A] (last updated Mar. 11, 2024).

32. *Id.*

33. *Id.*

34. U.S. ENV'T. PROT. AGENCY, EPA/600/R-14/475F, CONNECTIVITY OF STREAMS AND WETLANDS TO DOWNSTREAM WATERS: A REVIEW AND SYNTHESIS OF THE SCIENTIFIC EVIDENCE ES-3 (2015) [hereinafter CONNECTIVITY REPORT].

35. *See* Amicus Brief of Scientific Societies, *supra* note 28, at 11 (citing *id.* at ES-9).

slowly release surface water, rain, snowmelt, groundwater, and floodwater over time.[36]

Confirming wetlands' sponge-like capabilities, EPA estimates that one acre of wetland can store about one million gallons of water, allowing water to slowly seep into navigable waters and lower peak flows during floods.[37] The continued loss of wetlands, and thereby, storage capacity, will only exacerbate the already significant property-damaging and deadly impacts of floods. According to the National Centers for Environmental Information (NCEI) housed within the National Oceanic and Atmospheric Administration (NOAA), from 1980–2023, there were forty-four flood events that resulted in 738 deaths, individually resulting in losses of more than one billion dollars and cumulatively amounting to $196.6 billion in costs in the U.S. alone.[38] Of these forty-four floods whose losses exceeded one billion dollars each, ten occurred in the last five years reported, from 2019–2023.[39] Cumulatively, these ten floods resulted in ninety-eight deaths and an estimated total of $37.7 billion in damages.[40]

These flood events are increasing and are expected to increase further. Heavier rainfall, paired with land use changes and other variables such as soil moisture and snow, is already leading to increasing flood damage.[41] Additionally, according to the 2023 "Fifth National Climate Assessment," heavy rainfall events are expected to increase across the U.S. in the coming years.[42]

Wetlands interact with surface water and groundwater in dynamic systems. To inform the federal rulemaking on defining the scope of wetland protections, EPA published a 2015 report based on a review of more than 1,200 peer-reviewed publications: *Connectivity of Streams & Wetlands to Downstream Waters: A Review & Synthesis of the Scientific Evidence* (*Connectivity Report*).[43]

36. *Why Wetlands are Important,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wetlands/why-are-wetlands-important [https://perma.cc/AXV9-8K2A] (last updated Mar. 11, 2024).

37. OFF. OF WATER, U.S. ENV'T PROT. AGENCY, EPA 843-F-06-001, WETLANDS: PROTECTING LIFE AND PROPERTY FROM FLOODING (2006).

38. *Billion-Dollar Weather and Climate Disasters, United States Summary,* NAT'L CTRS. FOR ENV'T INFO., NAT'L OCEANIC & ATMOSPHERIC ADMIN (2024), https://www.ncei.noaa.gov/access/billions/summary-stats [https://perma.cc/M52S-ZTE2].

39. *Id.*

40. *Id.*

41. Elizabeth A. Payton et al., *Water in* FIFTH NATIONAL CLIMATE ASSESSMENT, U.S. GLOB. CHANGE RSCH. PROGRAM (Allison Crimmins et al. eds. 2023).

42. *Id.*

43. CONNECTIVITY REPORT, *supra* note 34, at 2-14 (2015).

This report represents the state-of-the-science on the connectivity and isolation of waters in the United States. It makes five major conclusions, summarized below, drawn from a broad range of peer-reviewed scientific literature.

- The scientific literature unequivocally demonstrates that streams, regardless of their size or frequency of flow, are connected to downstream waters and strongly influence their function.
- The scientific literature clearly shows that wetlands and open waters in riparian areas (transitional areas between terrestrial and aquatic ecosystems) and floodplains are physically, chemically, and biologically integrated with rivers via functions that improve downstream water quality. These systems act as effective buffers to protect downstream waters from pollution and are essential components of river food webs.
- There is ample evidence that many wetlands and open waters located outside of riparian areas and floodplains, even when lacking surface water connections, provide physical, chemical, and biological functions that could affect the integrity of downstream waters. Some potential benefits of these wetlands are due to their isolation rather than their connectivity. Evaluations of the connectivity and effects of individual wetlands or groups of wetlands are possible through case-by-case analysis.
- Variations in the degree of connectivity are determined by the physical, chemical, and biological environment, and by human activities. These variations support a range of stream and wetland functions that affect the integrity and sustainability of downstream waters.
- The literature strongly supports the conclusion that the incremental contributions of individual streams and wetlands are cumulative across entire watersheds, and their effects on downstream waters should be evaluated within the context of other streams and wetlands in that watershed.[44]

44. CONNECTIVITY REPORT, *supra* note 34, at ES-3.

Thus, wetlands have a variety of hydrological connections with other water networks via surface or groundwater, and these can be continuous, seasonal, or ephemeral depending on the conditions of the watershed.[45] Further, the *Connectivity Report* states that wetlands and streams, with varying levels of connection and isolation, are central to "maintain[ing] the structure and function of downstream waters."[46]

The *Connectivity Report* organizes wetlands into two categories—riparian/floodplain wetlands and non-floodplain wetlands. Based on its scientific review, the *Connectivity Report* states riparian/floodplain wetlands are "highly connected to streams and rivers through surface water, shallow groundwater, and biological connectivity."[47]

By contrast, non-floodplain wetlands are composed of "depressional, slope, and flat wetlands that lack surface water inlets."[48] Non-floodplain wetlands are shown to interact with groundwater, which can travel long distances and impact downstream waters.[49] These groundwater connections can also serve as groundwater discharge (flow of groundwater to a wetland) or groundwater recharge (flow of water from the wetland to groundwater).[50] Multiple studies have shown that during dry periods, water tends to move from wetlands into the groundwater and vice versa in wetter periods.[51] Additionally, non-floodplain wetlands, although they lack relative surface water connections, serve as sources for dissolved organic matter and elements such as nitrogen, phosphorous, and carbon which are important parts of food webs in waters downstream.[52] They also serve as sinks by sequestering or transforming materials such as nitrogen, nitrate, ammonium, and phosphorous compounds.[53] These chemicals were shown to be removed or assimilated in non-floodplain wetlands through various studies, according to the *Connectivity Report*.[54]

Some wetlands are categorized as isolated wetlands; these wetlands are not connected by surface water to a river, lake, ocean, or

45. *Id.* at 2-14.
46. *Id.* at ES-6.
47. *Id.* at 4-39.
48. *Id.* at 4-39.
49. *Id.* at 4-2.
50. CONNECTIVITY REPORT, *supra* note 34, at 4-22.
51. *Id.* at 4-23.
52. *Id.* at 4-26-7.
53. *Id.* at 4-27.
54. *Id.* at 4-29.

other body of water.[55] Both floodplain and non-floodplain wetlands can include isolated wetlands[56] that are completely surrounded by uplands.[57] Known in scientific literature as geographically isolated wetlands,[58] these are formed by natural forces that make depressions in the landscape where precipitation, nearby surface water, or groundwater create saturated soil conditions for hydric soils and hydrophytic vegetation to develop.[59] These wetlands have no apparent surface water outlets.[60] These can be fed through groundwater hydrology or through intermittent or ephemeral hydrological connections.[61] Geographically isolated wetlands include prairie potholes, vernal pools, and playa lakes.[62]

Despite their apparent lack of surface connection, isolated wetlands are important because they contribute to generating water flow, retaining nutrients and sediments, and supporting a rich array of biodiversity.[63] These geographically isolated wetlands can also maintain and improve the quality of traditional navigable waters through their capacity to retain nutrients and sediments, thus keeping those potential pollutants out of traditionally navigable waters.[64] Isolated wetlands serve as important habitats for waterfowl, especially small, shallow potholes, as they develop invertebrate populations earlier in the year than larger potholes, thus providing critical, early-foraging for migrating waterfowl according to studies done on prairie potholes in the Northern Plains states.[65]

55. Dennis Whigham & Thomas Jordan, *Isolated Wetlands and Water Quality,* 23(3) WETLANDS 541, 541 (2003).

56. CONNECTIVITY REPORT, *supra* note 34, at 2-8.

57. Charles R. Lane & Ellen D'Amico, *Identification of Putative Geographically Isolated Wetlands in the Conterminous United States*, 52(3) J. AM. WATER RES. ASS'N 705 (2016).

58. Scientific literature notes to use caution with the term geographically isolated wetlands when interpreting connectivity because there is substantial variation between wetlands over time and wetlands themselves, as the degree of connectivity through surface and groundwater hydrologic flow paths change. John M. Marton et al., *Geographically Isolated Wetlands are Important Biogeochemical Reactors on the Landscape,* 65(4) BIOSCIENCE 408, 409 (2015). *See also* CONNECTIVITY REPORT, *supra* note 34, at 4-38; Matthew J. Cohen et al., *Do Geographically Isolated Wetlands Influence Landscape Functions,* 113(8) PROC. NAT'L ACAD. SCIS. 1978, 1986 (2016).

59. Marton et al., *supra* note 58, at 408.

60. CONNECTIVITY REPORT, *supra* note 34, at 2-8.

61. Marton et al., *supra* note 58, at 414.

62. CONNECTIVITY REPORT, *supra* note 34, at ES-3; *See* Marton et al., *supra* note 58, at 408.

63. Cohen et al., *supra* note 58, at 1978.

64. Marton et al., *supra* note 58, at 410.

65. NAT'L RSCH. COUNCIL, *supra* note 7, at 156.

B. Ephemeral and Intermittent Streams

Due to the Supreme Court's focus on the need for continuous surface water connection to a traditionally navigable water to establish federal jurisdiction, any non-continuously flowing waters may fall into the abyss of lacking federal jurisdiction. In the first few months after the *Sackett* decision, EPA estimated the elimination of federal jurisdiction would impact 1.2 to 4.9 million miles of the Nation's ephemeral streams.[66]

To start, we will offer some working definitions EPA uses for these non-continuous surface waters and then discuss their importance to the ecosystems they impact. Intermittent streams flow seasonally and may be fed by a mix of groundwater, smaller upstream waters, and precipitation.[67] At certain times of the year, intermittent streams may be dry. By contrast, ephemeral streams are entirely dependent on precipitation.[68] Ephemeral streams are ubiquitous, but fleeting. Intermittent and ephemeral streams are more of a dominant feature in arid landscapes and in the Midwest.

EPA estimates that 59% of streams in the U.S. and over 81% in the arid and semi-arid Southwest are ephemeral or intermittent.[69] According to a comprehensive review published in 2008 by EPA, *The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-Arid American Southwest* (*2008 EPA Ephemeral Streams Report*), ephemeral flows serve "a critical role in the protection and maintenance of water resources, human health, and the environment."[70]

The *Connectivity Report* also discusses these features and concludes all streams—perennial, ephemeral, and intermittent—are "physically, chemically, and biologically connected to downstream rivers via channels and associated alluvial deposits. . . ."[71] Additionally, "[i]nfrequent, high magnitude [rain] events are especially important" for

66. U.S. Env't Prot. Agency, *Public Webinar: Updates on the Definition of "Waters of the United States*," YOUTUBE (Sept. 12, 2023), https://www.youtube.com/watch?v=lcCVelsAy2c [https://perma.cc/67GC-TTY2].

67. *Learn About Streams*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/learn-about-streams [https://perma.cc/762W-GXEX] (last updated Jan. 26, 2024).

68. *Id.*

69. This number as it relates to the U.S. excludes Alaska. The Southwest region includes Arizona, New Mexico, Nevada, Utah, Colorado and California. LAINIE R. LEVICK ET AL., U.S. ENV'T PROT. AGENCY, OFF. OF RSCH. AND DEV., EPA/600/R-08/134, THE ECOLOGICAL AND HYDROLOGICAL SIGNIFICANCE OF EPHEMERAL AND INTERMITTENT STREAMS IN THE ARID AND SEMI-ARID AMERICAN SOUTHWEST iii (2008).

70. *Id.*

71. CONNECTIVITY REPORT, *supra* note 34, at ES-2.

transporting materials from headwater streams in most river networks, and the *Connectivity Report* notes ephemeral and intermittent streams as an example of such an event.[72] The *Connectivity Report* highlights that stream channel networks and the watersheds they drain are "fundamentally cumulative in how they are formed and maintained."[73] Further, these cumulative effects are "exemplified by ephemeral flows in arid regions," as they are key sources of flow for downstream waters and by the high rates of denitrification in headwaters.[74]

The *2008 EPA Ephemeral Streams Report* highlights the importance of ephemeral and intermittent streams in groundwater recharge, especially in the arid and semi-arid southwest region of the U.S.[75] As an estimated 81% of streams in this region are ephemeral or intermittent, they constitute a large portion of watersheds and greatly contribute to the hydrological, biogeochemical, and ecological health of the watershed.[76] Most importantly, as identified by the *2008 EPA Ephemeral Streams Report*, these water features "provide hydrological connectivity within a basin" connecting ephemeral, intermittent, and perennial stream segments, and thus "facilitating the movement of water, sediment, nutrients, debris, fish, wildlife, and plant[s] . . . ."[77] They provide habitat for wildlife,[78] and support a wide diversity of plant species.[79] Additionally, ephemeral and intermittent streams in this region provide for basin groundwater recharge.[80]

While acknowledging impacts will vary by watershed, the Amicus Brief of Scientific Societies reflected on the research from the *Connectivity Report*. The Brief further argued that if intermittent and ephemeral streams and their adjacent wetlands lost CWA Protections under *Sackett,* it would contribute to "serious negative water quality impacts."[81]

72. *Id.* at ES-8.

73. Water that does not evaporate, is not taken up by organisms, or is not stored in the soil moves downstream through flow or channels. This forms into concentrated water flow that carries sediment, chemicals, and organisms. As flows from multiple channels combine into larger ones, these effects are magnified. *Id*. at 1-10.

74. *Id*.

75. LEVICK ET AL., *supra* note 69, at 22.

76. *Id*. at iii.

77. *Id*. at 64.

78. *Id*.

79. *Id*. at 65.

80. *Id*. at 64.

81. Amicus Brief of Scientific Societies, *supra* note 28, at 20.

In 2024, Brinkerhoff and team published research from a first-of-its-kind model of ephemeral streams that is consistent with the concerns raised by the Amicus Brief of Scientific Societies. Brinkerhoff and team developed a model "to quantify ephemeral stream contributions to river systems, defined as the percentage of river water that enters the river system through an upstream ephemeral catchment under mean annual conditions."[82] Their model evaluated water in the contiguous United States network of more than 20 million rivers, lakes, and reservoirs, and found that "ephemeral streams contribute, on average, 55% of the discharge exported from regional river systems, as defined by the United States Geological Survey."[83] In other words, more than half of the flow in a navigable river could be coming from ephemeral streams that are transporting precipitation to the river. These streams also carry nutrients, sediments, and pollutants. The researchers concluded that: "Nonperennial rivers (in particular, ephemeral streams) disproportionately influence river water composition along the entire drainage network, from small headwaters that are almost entirely nonperennial all the way to the major navigable mainstems of the HUC4 river systems in this study."[84] Thus, losing federal jurisdiction over ephemeral streams impacts downstream water quality.[85]

In the next section, we will discuss the importance of wetlands and ephemeral and intermittent streams in different parts of the United States.

C. Importance and Vital Functions in Wet and Arid Regions

While *Sackett* will have a nationwide impact, it will vary depending on the water resources of specific locations. To explore this concept, we contrast the water resources available in the predominantly wet region of the Great Lakes with the predominantly arid region of the Southwest. We selected Wisconsin to serve as an example from the Great Lakes region. We contrast that with New Mexico to serve as an example of the desert Southwest region which is dominated by ephemeral streams and water scarcity.

82. Craig B. Brinkerhoff et al., *Ephemeral Stream Water Contributions to United States Drainage Networks,* 384 SCI. 1476, 1476 (2024).

83. *Id*.

84. *Id*. at 1482.

85. *Id*.

1. Great Lakes Region State Example: Wisconsin

European settlers in Wisconsin encountered an abundance of wetlands. Mirroring trends of pioneers across the greater U.S., they responded by draining wetlands to convert to agriculture and other uses. The Wisconsin Department of Natural Resources (WDNR) estimates that by 1990, Wisconsin lost 46% of its 10 million acres of wetlands.[86] The WDNR further estimates that Wisconsin currently has approximately 5 million acres of wetlands remaining, covering about 15% of the state.[87]

There are various types of wetlands in Wisconsin including marshes, aquatic beds, sedge or wet meadows, scrub/shrub wetlands, and forested wetlands.[88] These remaining wetlands provide vital functions including flood water control, improvements to water quality, and habitat for fish and wildlife as well as recreation.[89] For example, deer use wetlands frequently for food, water, and as a refuge to hide.[90]

Wetlands serve important flood retention and storage functions. In Wisconsin, according to NOAA, there were four flood events from 1980–2023 which resulted in a total estimated $5 billion to $10 billion worth of damages.[91] Two of these floods were in the last five years (2019–2023) and resulted in an estimated total of $2 billion to $5 billion in damages.[92] These floods and flood-related damages are predicted to increase with climate change. According to a 2021 Assessment Report by the Wisconsin Initiative on Climate Change Impacts, "average precipitation has increased 17% (about five inches) since 1950," the southern part of Wisconsin has seen the highest increase

86. *Wisconsin Wetland Dashboard,* WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/dashboard [https://perma.cc/BFS4-SLFW] (last visited Feb. 29, 2024); *Wisconsin Wetlands: Acreage Facts,* WIS. DEP'T NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/acreagefacts.html [https://perma.cc/GB7A-7PNN] (last visited Feb. 29, 2024).

87. *Wetland Ecology and Science,* WIS. DEP'T OF NAT. RES. https://dnr.wisconsin.gov/topic/wetlands/ecology [https://perma.cc/5NVE-D6YJ] (last visited Feb. 29, 2024).

88. *Wetland Types,* WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/types.html [https://perma.cc/VM94-KL47] (last visited Dec. 28, 2023).

89. *Wetland Ecology and Science*, WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/wetlands/ecology [https://perma.cc/5NVE-D6YJ] (last visited Feb. 29, 2024).

90. Tom Biebighauser, *Wetlands for Whitetails,* QUALITY WHITETAILS 36, 37 (2012).

91. *Billion-Dollar Weather and Climate Disasters, Summary Stats,* NAT'L CTRS. FOR ENV'T INFO., NAT'L OCEANIC AND ATMOSPHERIC ADMIN., https://www.ncei.noaa.gov/access/billions/summary-stats [https://perma.cc/M52S-ZTE2].

92. *Id*.

in precipitation, and "very extreme precipitation events will increase in the future."[93]

Various actors play a role in Wisconsin's wetland management. The U.S. Army Corps of Engineers (USACE) administers the Section 404 wetlands permitting program in Wisconsin. Wisconsin has enacted further wetland permitting at the state level, which works in conjunction with and goes further than the Section 404 permitting program to cover more waters.[94] To identify Wisconsin's wetlands, the Wisconsin legislature established the Wisconsin Wetlands Inventory in 1978.[95] The WDNR completed the first inventory in 1984[96] which showed, based on aerial photographs from 1978–1979, approximately 5.3 million acres of wetlands in the state.[97] It is important to note that wetlands less than two or five acres, depending on the county, were not included; since the photographs were taken in the summer, some wetlands, especially in the northern counties, were missed because of difficulty in interpretation due to leaf cover.[98] The maps show graphic representations of the type, size, and location of wetlands in the state.[99]

In 1991, Wisconsin adopted the Nation's first water quality standards for wetlands which apply to "all department regulatory, planning, resource management, liaison and financial aid determinations that affect wetlands."[100] These were enacted to protect water quality related functions and values including sediment and pollution attenuation, storm and flood water retention, hydrological cycle maintenance, shoreline protection against erosion, biological diversity and production, and human uses such as recreation.[101] Under Wisconsin's wetland permitting program, no person may discharge dredged or fill material into a wetland unless it is authorized by a wetland permit or fits into an exemption.[102] Wisconsin defines wetlands in statute as "an

93. WISCONSIN INITIATIVE ON CLIMATE CHANGE IMPACTS, WISCONSIN'S CHANGING CLIMATE: IMPACTS AND SOLUTIONS FOR A WARMER CLIMATE 6 (2022).

94. Michael J. Cain, *Reversing the Loss of Our Nation's Wetlands,* 32 NAT'L WETLANDS NEWSL. no. 2 (Env't L. Inst., Wash., D.C.), 2010, at 17.

95. Act effective May 19, 1978, ch. 374, 1977 Wis. 1439; Cain, *supra* note 94, at 17.

96. *Wetland Mapping,* WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/inventory.html [https://perma.cc/GAD7-CFQ9] (last visited Jan. 29, 2024).

97. *Wisconsin Wetlands: Acreage Facts,* WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/acreagefacts.html [https://perma.cc/N7SN-FSNW] (last visited Jan. 29, 2024).

98. *Id.*

99. *Id.* This wetland mapping is codified in WIS. STAT. § 23.32 (2021–2022).

100. WIS. ADMIN. CODE NR § 103.06 (2015); Cain, *supra* note 94, at 17–18.

101. WIS. ADMIN. CODE NR § 103.01(3) (2015).

102. WIS. STAT. § 281.36(3b)(b) (2021–2022).

area where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions."[103] In 2000, Wisconsin also adopted a wetland mitigation program.[104]

In 2001, after the Supreme Court in *Solid Waste Agency of North Cook County. v. U.S. Army Corps of Engineers* (*SWANCC*) left isolated wetlands unprotected under the CWA,[105] Wisconsin took action to fill the gap. The Wisconsin legislature recognized the importance of isolated wetlands and unanimously passed Act 6 in 2001.[106] This Act established state regulation over all wetlands and restored state authority over nonfederal wetlands which included isolated wetlands.[107]

From 2001 until 2018, Wisconsin had regulatory control over all wetlands within the state. This was the status quo in Wisconsin until the Wisconsin legislature passed Act 183, effective in 2018, which added a permit exemption for nonfederal wetlands that met certain requirements that differ for urban versus rural areas.[108] While Wisconsin still has a broad definition of wetlands, some human activity in nonfederal wetlands in Wisconsin may qualify for an exemption and be filled without any search for alternatives to avoid harming wetlands or mitigation to offset the harm.

To obtain a nonfederal wetland exemption, the applicant must obtain a Jurisdictional Determination (JD) from the USACE so the WDNR has evidence that the wetland is not subject to federal jurisdiction.[109]

103. WIS. STAT. § 281.01(21) (2021–2022); WIS. STAT. § 23.32(1) (2021–2022).

104. Act of May 10, 2000, ch. 147, 1999 Wis. 1; *see also* WIS. STAT. § 281.37 (2021–2022). Another aspect of Wisconsin's wetland program work is the Wisconsin Wetland Conservation Trust (WWCT), which began in November 2014, and sells wetland credits to permittees who need to offset authorized wetland impacts. *See Wisconsin Wetland Conservation Trust,* WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/wwct [https://perma.cc/XC6M-9VYR] (last visited Jan. 19, 2024).

105. Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs, 531 U.S. 159, 174 (2001).

106. Act of May 7, 2001, ch. 6, 2001 Wis. 1 Spec. Sess.; WIS.'S GREEN FIRE, WETLANDS AND WATERWAYS IN WISCONSIN: NAVIGATING CHANGES TO THE FEDERAL WATERS OF THE UNITED STATES (WOTUS) RULE (2021), at 6, https://wigreenfire.org/2019/wp-content/uploads/2021/05/WGF-Opp-Now-Waters-of-the-United-States-Final-May-10-2021.pdf [https://perma.cc/LP2K-EJN9].

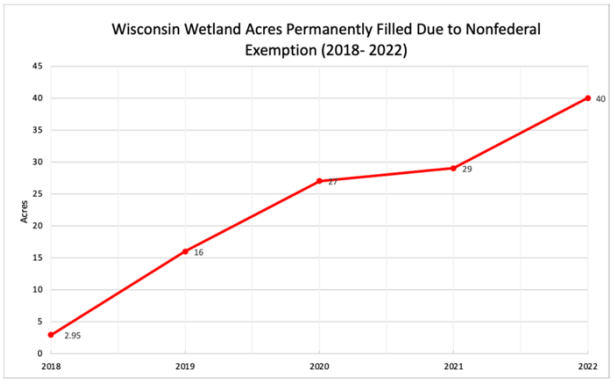
107. *Id.*

108. Act of Mar. 28, 2018, ch. 183, 2017 Wis. 1; WIS. LEGIS. COUNCIL, IM-2023-07, FEDERAL JURISDICTION OVER WETLANDS: RECENT DEVELOPMENTS AND THEIR IMPACTS IN WISCONSIN 2, 5 (2023), https://docs.legis.wisconsin.gov/misc/lc/information_memos/2023/im_2023_07 [https://perma.cc/Y2QW-ZJRN].

109. Wetland Permit Exemptions, WIS. DEP'T OF NAT. RES., https://dnr.wisconsin.gov/topic/Wetlands/permits/exemptions.html [https://perma.cc/636M-SQWX] (last visited Jan. 19, 2024).

In urban areas, an exemption to the wetland permit may be granted if the proposed project does not affect more than one acre of wetland per parcel, does not affect a rare and high-quality wetland, and the project is in compliance with applicable stormwater zoning and permits.[110] An exemption may be granted in rural areas if the proposed project does not affect more than three acres of wetland per parcel, does not affect a rare and high-quality wetland, and the project is for a structure—such as a building, driveway, or road—with an agricultural purpose.[111]

Since the exemptions for nonfederal wetlands went into effect in Wisconsin, there has been an increase in the number of acres of wetlands permanently filled (Figure 1).



Center for Water Policy. This graph represents the acres of wetlands in Wisconsin permanently filled under a Wisconsin law that provides an exemption for nonfederal wetlands, from the first year of the exemption onward, 2018-2022. Source: 2018 data, Declaration of David Siebert in Support of Plaintiff's Partial Opposition to Defendants' Motion for remand Without Vacatur ¶4 case no. 3:20-cv-03005-RS (dated Sept. 9, 2021); 2019 data, email between WDNR and Melissa Scanlan, Apr. 15, 2024; 2020-2022 data, WDNR's Wisconsin Wetlands Dashboard (last visited Apr. 15, 2024).

As shown above, the number of acres of nonfederal wetlands filled (without any mitigation to offset the losses) has risen significantly each year since enactment. In 2018, there were less than three acres filled, and by 2020, twenty-seven acres of wetlands were filled. In 2022, forty acres were filled. Given the significant reduction in federal jurisdiction over wetlands post-*Sackett,* there will be more nonfederal wetlands in Wisconsin that may be filled through these exemptions.

110. WIS. STAT. § 281.36(4n)(b) (2021–2022); *see also Wetland Permit Exemptions*, *supra* note 109.

111. WIS. STAT. § 281.36(4n)(c) (2021–2022); *see also Wetland Permit Exemptions, supra* note 109.

2. Southwest Region State Example: New Mexico

Although there are far fewer acres of wetlands in the arid Southwest than in the Great Lakes region of the U.S., wetlands serve vital functions in this water-stressed region. Wetlands supply groundwater systems and serve as ecosystems and habitats for wildlife. T.A. Minckley et al. observed that wetlands in arid and semi-arid regions are "globally recognized as priority environments for conservation" because of the high numbers of unique local species inhabiting them, their role as a key stopover for migrating species, and their importance for daily water use by upland animals.[112]

New Mexico is one of the driest states in the U.S., with an average of less than twenty inches of annual precipitation.[113] New Mexican law defines "wetlands" as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico."[114] Wetland types in New Mexico include "headwater wetlands, forested wetlands, bottomland shrublands, marshes, fens, wet and salt meadows, mineral flats, shallow ponds, riparian wetlands, and playa wetlands."[115] Wetlands, and specific types of wetlands such as prairie potholes, playa lakes, and wet meadows, are included in New Mexico's statutory definition of "surface water(s) of the State."[116]

As of 2019, there were around 845,000 acres of freshwater wetlands in New Mexico according to a comment submitted by the New Mexico Environment Department on the 2019 proposed rule defining the scope of waters federally regulated under the CWA.[117]

112. T.A. Minckley et al., *The Relevance of Wetland Conservation in Arid Regions: A Re-examination of Communities in the American Southwest*, 88 J. ARID ENV'TS 213, 213 (2013).

113. N.M. Env't Dep't, Comment Letter on Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act 2 (Apr. 15, 2019), https://www.env.nm.gov/wp-content/uploads/2019/04/2019-04-15-Final-NMED-WOTUS-Comments-v2.pdf [https://perma.cc/DH3C-CBLJ].

114. N.M. ADMIN. CODE § 20.6.4.7(W)(4) (2022).

115. *Wading into the Wetlands of New Mexico*, N.M. ENV'T DEPT. & ST. MARY'S UNIV. OF MINN. GEOSPATIAL SERVS. (Oct. 4, 2024), https://storymaps.arcgis.com/stories/81df9f1c7b47467895377e9772964d07 [On File with the Columbia Journal of Environmental Law].

116. N.M. ADMIN. CODE § 20.6.4.7(S)(5) (2022).

117. N.M. Env't Dep't, supra note 113, at 2. This 2019 rule went into effect on October 22, 2019 and repealed the 2015 Clean Water Rule, recodifying the pre-2015 regulations. Definition of "Waters of the United States,": Recodification of Pre-Existing Rules, 84 Fed. Reg. 56626 (Oct. 22, 2019) (to be codified at 33 C.F.R pt. 328 and 40 C.F.R pts. 110, 112, 116–17, 122, 230, 232, 300, 302, and 401).

Surface water features in the arid southwest region are dominated by ephemeral streams. In New Mexico, about 93% of the state's streams and rivers are intermittent or ephemeral.[118] Due to the ruling in *Sackett,* the CWA no longer covers ephemeral streams.[119] This leaves 93% of New Mexico's streams and rivers without CWA protections.[120] In 2019, the New Mexico Environment Department opposed a similar rule, arguing that removing ephemeral and intermittent streams from CWA protections due to their lack of surface connectivity is not based in science.[121] The agency stated these streams are "fundamental to maintaining water quality and overall watershed function," especially in these arid and semi-arid regions that rely on such streams for the "hydrological, biogeochemical and ecological functioning of a watershed."[122] New Mexico cannot rely on a WOTUS definition that limits federal jurisdiction based on continuous surface connectivity as this leaves many of the state's waters vulnerable.[123]

New Mexico's waters are also predicted to be increasingly threatened due to climate change. New Mexico's annual mean temperature is estimated to increase three to seven degrees Fahrenheit compared to the twentieth century.[124] With warming temperatures, increasing amounts of New Mexico's waters are drying up, which will strain the state's already water-stressed systems even further.[125] Under a NOAA-funded analysis, predictions for the years 2041–2060 estimate that the Southwest will see the largest percent change in water-stressed areas in the U.S. when compared to the 1900–1970 time period.[126]

Despite the variety of factors indicating the importance of wetlands and ephemeral streams, New Mexico does not have a wetlands permitting program and instead entirely relies on the USACE and EPA for wetlands regulation under CWA Section 404.[127]

118. N.M. Env't Dep't, supra note 113, at 2.
119. *Id.* at 6.
120. *Id.* at 2.
121. *Id.* at 5.
122. *Id.*
123. *Id.* at 2.
124. *Climate Change and New Mexico's Water Resources: A 50-Year Outlook,* 22 N.M. EARTH MATTERS 1 (N.M. Bureau of Geology & Mineral Res., Socorro, N.M. 2022), at 1.
125. N.M. Env't Dep't, *supra* note 113, at 5.
126. Rebecca Lindsey, *Climate Change to Increase Water Stress in Many Parts of the U.S.*, NAT'L OCEANIC & ATMOSPHERIC ADMIN. (2013), https://www.climate.gov/news-features/featured-images/climate-change-increase-water-stress-many-parts-us [https://perma.cc/L92S-D8NJ].
127. *Dredge and Fill Activities,* N.M. ENV'T DEP'T, https://www.env.nm.gov/surface-water-quality/dredgeandfillactivities/ [https://perma.cc/4USW-UUNL] (last visited June 6, 2024).

New Mexico's Surface Water Quality Bureau started a non-regulatory wetlands program in 2003, aiming to develop a comprehensive wetland planning, monitoring and assessment, restoration, and protection program.[128] According to the 2021 Wetlands Program Plan for New Mexico, the current progress of their wetlands program includes: (1) continuing to expand the wetlands inventory and wetlands classification; (2) documenting wetland gains and losses; (3) identifying vulnerable wetland types, developing strategies to anticipate potential sources of stress, and creating/maintaining resilience of these wetland/riparian systems confronted by the effects of a drying climate; and (4) documenting the results of wetland restoration projects and techniques for restoration.[129] There is no current state permit required for dredging or filling wetlands.[130]

Therefore, the limited reach of federal jurisdiction after *Sackett* leaves many New Mexican wetlands and ephemeral waters without federal regulatory protection. In recognition of this vulnerability after *Sackett,* American Rivers, a nonprofit environmental advocacy group, highlighted the issue in its 2024 annual list of *America's Most Endangered Rivers*.[131] They listed New Mexico's rivers as first on the list of *America's Most Endangered Rivers of 2024*.[132]

The Amicus Brief of Scientific Societies discussed how the impacts of the *Sackett* decision would be the most felt in the Southwest arid regions of the U.S., using New Mexico's Rio Salado Watershed, a tributary of the Rio Grande, as an example.[133] In this watershed, the Brief estimated wetland jurisdiction would likely decrease by more than 50%, and stream jurisdiction by more than 90%.[134] This reduction in

128. *Wetlands Projects,* N.M. ENV'T DEP'T, https://www.env.nm.gov/surface-water-quality/wetlands-projects/ [https://perma.cc/T74P-P66P] (last visited June 19, 2024).

129. SURFACE WATER QUALITY BUREAU, N.M. ENV'T DEP'T, 2021 WETLANDS PROGRAM PLAN FOR NEW MEXICO 3 (2021), https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2022/01/2021-New-Mexico-Wetlands-Program-Plan.pdf [https://perma.cc/MT3G-68RE]. The 2021 Wetlands Program Plan is the most recent of a periodically updated report outlining their achievements made since the original plan was approved in 2010 by the EPA, and lays out a framework for the next five years.

130. *Id.*

131. AM. RIVERS, AMERICA'S MOST ENDANGERED RIVERS OF 2024 (2024), https://www.americanrivers.org/wp-content/uploads/2024/04/AmericasMostEndangeredRivers%C2%AEof2024 Report.pdf [https://perma.cc/G29F-CB38].

132. *Id.*; AM. RIVERS, MOST ENDANGERED RIVERS REPORT 2024 NAMES RIVERS OF NEW MEXICO AS #1 (April 16, 2024), https://www.americanrivers.org/media-item/most-endangered-rivers-report-2024-names-rivers-of-new-mexico-1/ [https://perma.cc/NZX2-CPQH].

133. Amicus Brief of Scientific Societies, *supra* note 28, at 24 ("[This watershed has] a high proportion of ephemeral streams.").

134. *Id.* at 25.

jurisdiction for important watersheds, such as the Rio Salado, will further reduce vital flows to traditionally navigable waters, such as the Rio Grande, which provides irrigation and water for millions of people.[135] This leaves these already water-stressed areas with fewer vital federal protections.

The next section will discuss the importance of these water resources to tribes in the U.S.

D. Importance to Tribes

Indigenous peoples have a strong personal, cultural, and spiritual connection to water, according to the National Tribal Water Council.[136] In 2021, the National Tribal Water Council submitted written comments during the federal-tribal consultation on defining federal jurisdiction over "Waters of the United States."[137] They asserted that no matter the size of the waterbody, be it an ocean or seep, the water is "treated with respect and dignity as a living entity and held sacred."[138] Additionally, Indigenous peoples' view of connectivity between waterbodies goes much further than the physical and hydrological connections and "stems from long-standing Indigenous knowledge of local ecosystems and organisms coupled with historical patterns of seasonal and subsistence-based movements," according to Sulliván et al.[139] The patchwork of vulnerable waters, including isolated, non-floodplain wetlands, are essential for animals and tribal hunting, gathering, and trapping.[140]

135. *Id.*

136. Nat'l Tribal Water Council, Notice of Consultation and Coordination on Revising the Definition of "Waters of the United States" 3 (Oct. 1, 2021), https://www7.nau.edu/itep/main/ntwc/docs/Policy_Responses/NTWC-Early-Comment-on-Revised-Definition-of-WOTUS.pdf [On File with the Columbia Journal of Environmental Law]. The National Tribal Water Council was created in 2005 to advocate for the best interests of federally recognized Indian and Alaskan Native Tribes in matters regarding water. It is a technical and scientific body assisting the EPA, federally recognized Indian Tribes, Alaska Native Tribes, and associated tribal communities and tribal organizations, "with research and information for decision-making regarding water issues and water-related concerns that impact Indian and Alaska Native tribal members in Indian Country." NAT'L TRIBAL WATER COUNCIL, *NTWC Fact Sheet* (May 2024), https://www7.nau.edu/itep/main/ntwc/docs/Home/NTWC-Handout-5.30.24.pdf [On File with the Columbia Journal of Environmental Law].

137. Nat'l Tribal Water Council, Notice of Consultation and Coordination on Revising the Definition of "Waters of the United States," *supra* note 136.

138. *Id.* at 3.

139. S.M.P. Sulliván et al., *Enhancing Water Protection on Tribal Lands*, 22 FRONTIERS ECOLOGY & ENV'T, no.6, 2024, at 3.

140. *Id.*

Additionally, various plants in wetlands are important food and medicinal sources, and supply materials for traditional practices such as building materials, household goods, and spiritual ceremonies.[141] According to the Brief of Menominee Indian Tribe of Wisconsin and 17 Federally Recognized Tribes as *Amici Curiae* in Support of Respondents (Amicus Brief of Tribes) submitted in *Sackett*, various tribes in the Midwest count thousands of lakes, streams, wetlands, and the Great Lakes as an "integral part of their homes, critical to their culture and subsistence resources."[142] For each of the amici tribes, clean water and wetlands are vital to their physical and cultural survival.[143]

Wild rice, translated from Ojibwemowin[144] as "manoomin,"[145] grows in wetlands. Manoomin is a species native to the Great Lakes region and parts of Canada.[146] It is unique to the Northern Great Lakes Region and grows nowhere else in the world.[147] The grain is essential to the Anishinaabe, a group of Indigenous peoples in Canada and the U.S. that include the Odawa, Ojibwe, Potawatomi, and Algonquin peoples.[148] Hosterman and team documented that manoomin is a sacred symbol that represents the Anishinaabe's journey westward from the Atlantic Northeast as well as a symbol of "their relationship to the land and their identity as a culture."[149] It is a healthy, traditional food source and is used in various ceremonies.[150] The grain is "highly sensitive to damage by flooding or washout" if wetlands upstream that aid in absorbing and decreasing flood flows are damaged or destroyed.[151] Manoomin is also negatively impacted by pollution, particularly sulfates that can be released through mining operations.[152]

141. *Id.* at 4.

142. Brief of Menominee Indian Tribe of Wisconsin and 17 Federally Recognized Tribes as *Amici Curiae* in Support of Respondents at 1, Sackett v. Env't Prot. Agency, 598 U.S. 651 (2023) (No. 21-454).

143. *Id.* at 2.

144. *Manoomin (Wild Rice),* GREAT LAKES INDIAN FISH & WILDLIFE COMM'N, https://glifwc.org/WildRice/ [https://perma.cc/Y6P6-SNKP] (last visited Jan. 22, 2024).

145. *Wetland Resources,* BAD RIVER TRIBE, https://www.badriver-nsn.gov/wetland-resources/ [https://perma.cc/WVJ9-WQZ8] (last visited Dec. 29, 2023).

146. *Manoomin (Wild Rice),* MICH. SEA GRANT, https://www.michiganseagrant.org/topics/ecosystems-and-habitats/native-species-and-biodiversity/manoomin-wild-rice/ [https://perma.cc/4TXF-XMU8] (last visited Dec. 29, 2023).

147. Amicus Brief of Tribes, *supra* note 142, at 5.

148. Heather Hosterman et al., *Lake Superior Manoomin Cultural and Ecosystem Characterization Study,* 28 ECOLOGY & SOC'Y, Sep. 2023, at 1.

149. *Id.* at 1.

150. *Id.*

151. Amicus Brief of Tribes, *supra* note 142, at 5.

152. *Id.*

Manoomin is decreasing in Wisconsin and is one of the species most vulnerable to climate change.[153]

According to the Bad River Band of Lake Superior Chippewa Indians in northern Wisconsin, their lands include large beds of manoomin on the Kakagon-Bad River sloughs on Lake Superior.[154] The Kakagon-Bad River sloughs comprise 13% of coastal wetlands in the Lake Superior Basin.[155] These sloughs are internationally recognized for their ecological and cultural importance.[156] In a 2021 comment letter to the federal government regarding the scope of federal protection of wetlands, the Bad River Band stated that the water resources within their reservation and "the food and medicine supported by them are the foundation for why the Bad River Reservation was established where it is, and the health of our peoples and others are dependent on the quality and quantity of connected waters."[157]

Ephemeral and intermittent streams are also vital to tribes. According to the Amicus Brief of Tribes, in the Southwest region of the U.S., the Tohono O'odham Nation, the Pascua Yaqui Tribe, the Navajo Nation, and the Pueblo of Laguna rely on these ephemeral and intermittent streams to sustain their culture, crops, and homes.[158] The Pueblo of Laguna, located in the K'awaika homeland in west-central New Mexico, rely on a large network of ephemeral and intermittent streams connected to the Rio Puerco, one of the largest tributaries in the middle of the Rio Grande.[159] Of the 1,416 miles of streams in the Pueblo's territory, 79% are ephemeral, 18% are intermittent, and 3% are perennial.[160] The Amicus Brief of Tribes discusses how many of these waters are "threatened by upstream mining and other activities that could pollute or destroy the Pueblo's scarce waters in the absence of the Clean Water Act."[161] The Pueblo rely on and use tools under the

153. GREAT LAKES INDIAN FISH AND WILDLIFE COMM'N, CLIMATE CHANGE VULNERABILITY ASSESSMENT: INTEGRATING SCI. AND TRADITIONAL ECOLOGICAL KNOWLEDGE 28 (Apr. 2018); WIS. INITIATIVE ON CLIMATE CHANGE IMPACTS, WISCONSIN'S CHANGING CLIMATE: IMPACTS AND SOLUTIONS FOR A WARMER CLIMATE (2022), at 34.

154. *Wetland Resources,* BAD RIVER TRIBE, https://www.badriver-nsn.gov/wetland-resources/ [https://perma.cc/DE9X-HJ2Y] (last visited Dec. 29, 2023).

155. Bad River Band of Lake Superior Tribe of Chippewa Indians, Tribal Comments as Consultation on Waters of the United States (WOTUS) Rulemaking 1 (Oct. 4, 2021), https://www.epa.gov/system/files/documents/2021-11/letter1.pdf [https://perma.cc/YX8C-QQZH].

156. *Wetland Resources, supra* note 154.

157. Bad River Band of Lake Superior Tribe of Chippewa Indians, Tribal Comments, *supra* note 155, at 1.

158. Amicus Brief of Tribes, *supra* note 142, at 1.

159. *Id.* at 9–10.

160. *Id.*

161. *Id.*

CWA to protect their waters from discharges from upstream mines.[162] They argue in the brief that reduced federal protections will limit the Pueblo's ability to use such regulation to ensure upstream polluters comply with the Pueblo's water quality standards.[163]

Thus, wetlands and ephemeral and intermittent streams are vital to the continued health and quantity of water resources available to tribes.

In the next section, we discuss the protections afforded to wetlands and streams under the CWA and ambiguities arising from the fluctuating definition of WOTUS through four U.S. Supreme Court cases.

III. WETLAND AND STREAM PROTECTIONS UNDER THE CLEAN WATER ACT: DEFINING "NAVIGABILITY"

Congress passed the CWA in 1972, amending the Federal Water Pollution Control Act,[164] in response to growing awareness over environmental pollution and nationally-shocking events such as Ohio's Cuyahoga River catching on fire in 1969.[165] The CWA's primary purpose is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[166] Among other things, the CWA requires states to establish water quality standards for waterbodies and establishes federal jurisdiction over "navigable waters."[167] The CWA defines "navigable waters" as "waters of the United States" (WOTUS).[168] The Act does not offer any further definition of what Congress meant

162. *Id.* The Pueblo of Laguna is one of eighty-four Tribes authorized as TAS under CWA Section 401 and is one of fifty Tribes that has EPA-approved water quality standards. *EPA Actions on Tribal Water Quality Standards and Contacts,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wqs-tech/epa-actions-tribal-water-quality-standards-and-contacts [https://perma.cc/U7UV-9HWT] (last updated May 3, 2024).

163. Amicus Brief of Tribes, supra note 142, at 10–11.

164. 33 U.S.C. §§ 1251–1389.

165. *History of the Clean Water Act*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/laws-regulations/history-clean-water-act [https://perma.cc/EX8L-6QZV] (last updated June 22, 2023); Lorraine Boissoneault, *The Cuyahoga River Caught Fire At Least a Dozen Times, But No One Cared Until 1969*, SMITHSONIAN MAG. (June 19, 2019), https://www.smithsonianmag.com/history/cuyahoga-river-caught-fire-least-dozen-times-no-one-cared-until-1969-180972444/ [https://perma.cc/C5BC-7BFL]. Although the Cuyahoga River burned multiple times before the 1969 incident, this event drew national attention like none before, thus spurring movements.

166. 33 U.S.C. § 1251(a).

167. *History of the Clean Water Act,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/laws-regulations/history-clean-water-act [https://perma.cc/EX8L-6QZV] (last updated June 12, 2024).

168. 33 U.S.C. § 1362(7).

to include as WOTUS.[169] Yet, a wide variety of CWA programs turn on whether the water is classified as WOTUS. While we focus on Section 404 wetland permits that regulate the discharge of dredge and fill material and state or tribal CWA Section 401 water quality certifications for federal licensing and permitting activities that could result in discharges, federal jurisdiction also impacts other programs, including programs focused on the designations of water quality standards, assessments to classify impaired waters on the CWA's Section 303(d) list and plans to clean up those waters, and the regulation of pollutant discharges from point sources through Section 402 National Pollutant Discharge Elimination System permits.[170]

Thus, the meaning of WOTUS has dramatic ripple effects for clean water, as it is the basis of federal jurisdiction for CWA programs and any state or tribal programs that implement federal requirements. Any non-WOTUS waters are only protected from discharges of pollutants or disposal of dredge and fill material in wetlands if there is an applicable state or tribal law. In simplistic terms, changes in the meaning of WOTUS that shrink federal jurisdiction simultaneously increase the burden on states and tribes to regulate in the absence of the federal government.[171]

The importance of the scope of WOTUS combined with Congress' lack of clear direction has resulted in an ongoing push and pull between the regulated community, EPA, and the USACE to create regulations that clarify the scope of WOTUS and, thus, the reach of the CWA. A locus of this regulatory tension has been on the mosquito-laden swamps some seek to drain to convert to new uses while others seek to maintain for their diverse values, as discussed above in Section I.

A. CWA Section 404 Permits for Dredging and Filling WOTUS

The CWA is the primary federal law that regulates wetlands and ephemeral and intermittent streams. Ephemeral and intermittent streams are offered federal regulatory protection if they are

169. *About Waters of the United States,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wotus/about-waters-united-states [https://perma.cc/33QY-LZS2] (last updated Oct. 10, 2023).

170. James McElfish, *State Protection of Nonfederal Waters: Turbidity Continues,* 52 ENV'T L. REP. 10679, 10679 (Sept. 2022).

171. *Id.* at 10679; REBECCA KIHSLINGER ET AL., FILLING THE GAPS: STRATEGIES FOR STATES/TRIBES FOR PROTECTION OF NON-WOTUS WATERS, ENV'T L. INST. 3 (May 2023), https://www.eli.org/sites/default/files/files-pdf/Strategies%20for%20States-Tribes%20for%20Protection%20of%20non-WOTUS%20waters%201.2.pdf [https://perma.cc/SYH5-5VDR].

considered WOTUS. In the past, when federal agencies used a broader definition of WOTUS, such as the significant nexus test elaborated in *Rapanos v. United States* (2006), ephemeral and intermittent streams often were included as WOTUS.[172]

One of the most significant WOTUS management programs in the CWA lies in Section 404. Section 404 of the CWA establishes a permitting program to control the discharge of dredge or fill material into WOTUS, including wetlands.[173] Regulated activities under a 404 permit encompass fill for buildings, water resource projects such as dams or levees, infrastructure such as highways and airports, mining projects, and more.[174] Congress exempted categories of activities, including certain farming and forestry practices such as plowing, seeding, minor drainage, and harvesting for the production of food, fiber, and forest products;[175] and some construction or maintenance of roads.[176]

The two main federal agencies involved in the Section 404 program are EPA and the USACE.[177] Several agreements in the 1980s between these two agencies served to define their respective responsibilities under Section 404.[178] These include a 1989 Memorandum of Agreement (MOA) on enforcement of CWA Section 404.[179] The USACE

172. Rapanos v. United States, 547 U.S. 715, 717 (2006) (syllabus).

173. *Permit Program Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404 [https://perma.cc/P3C9-FWZ8] (last updated Apr. 11, 2024).

174. *Id.*

175. 33 U.S.C. § 1344(f)(1)(A).

176. 33 U.S.C. § 1344(f)(1)(E).

177. *Permit Program Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404 [https://perma.cc/P3C9-FWZ8] (last updated Apr. 11, 2024).

178. *The Clean Water Act and the Army Corps of Engineers,* U.S. ARMY CORPS ENG'RS (Oct. 2022), https://www.usace.army.mil/About/History/Historical-Vignettes/Civil-Engineering/155-Clean-Water-Act-Overview/ [On File with the Columbia Journal of Environmental Law].

179. *Enforcement Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/enforcement-under-cwa-section-404 [https://perma.cc/42AR-3FUA] (last updated Mar. 26, 2024). According to the MOA, the EPA will conduct initial on-site investigations when it is efficient to do so in respect to the "available time, resources and/or expenditures." However, "in the majority of enforcement cases the USACE, because it has more field resources, will conduct initial investigations and use its authorities" as provided in the MOA. Under the MOA, the USACE will act as the lead agency for all USACE-issued permits and for unpermitted discharge violations that do not meet the criteria for sending it to the EPA. The USACE may also take action on a specific case if the EPA notifies the agency that, because of limited resources or other reasons, it will not take action on a certain case. The EPA will act as the lead agency for all unpermitted discharge violations when the activity includes: "a) repeat violator(s), b) flagrant violation(s), c) where the EPA requests a class of cases or a particular case; or d) the USACE recommends that an EPA administrative penalty action may be warranted." The MOA also states

issues JDs on whether a specific proposed project involves a WOTUS regulated under Section 404.[180] After the USACE determines it has federal jurisdiction, a project proponent will need to get a permit before proceeding to dredge or fill a wetland.[181] Further, the USACE is in charge of administering the day-to-day program including individual and general permit decisions; developing policy and guidance; and enforcing Section 404 permitting provisions.[182] EPA's responsibilities include reviewing and commenting on individual permit applications; approving, overseeing, and delegating program responsibilities to state and tribal agencies; developing and interpreting policy, guidance, and environmental criteria used in evaluating permit applications; determining the scope of geographic jurisdiction and applicability of exemptions; and enforcing Section 404 provisions.[183]

The U.S. Fish and Wildlife Service and the National Marine Fisheries Service also play a role in the Section 404 program. They evaluate the impacts of all new federal projects and federally-permitted projects on fish and wildlife.[184]

States have the option to assume certain CWA programs if they meet specific federal requirements and EPA delegates authority to the

the EPA can request the USACE take action on a certain case. However, the USACE has a "right of first refusal." If the USACE notifies the EPA that it will not take action due to limited staff resources or other reasons, the EPA may take action. Memorandum between the Dep't of the Army and the Env't Prot. Agency, U.S. ENV'T PROT. AGENCY (Jan. 1989), https://www.epa.gov/cwa-404/federal-enforcement-section-404-program-clean-water-act [https://perma.cc/N8NF-KBSA].

180. *How Wetlands are Defined and Identified Under CWA Section 404,* U.S ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/how-wetlands-are-defined-and-identified-under-cwa-section-404 [https://perma.cc/B5SS-NRYL] (last updated Apr. 6, 2023).

181. There are a variety of permits available including general and individual permits. The Secretary of the USACE issues general permits on a state, federal, or regional basis if the Secretary determines the activities will cause "only minimal adverse environmental effects when performed separately and will have only minimal cumulative adverse effect on the environment." There are three types of general permits: Nationwide permits, Regional General permits, and Programmatic General permits. An individual, or standard, permit is issued for projects that have more than minimal individual or cumulative impacts, use additional environmental criteria, and include a more comprehensive public interest review. Therefore, a general permit allows specific activities to go forward with little to no delay as the process eliminates individual review. *Regional and Programmatic General Permits,* U.S. ARMY CORPS ENG'RS, https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/#RegProgPermits [On File with the Columbia Journal of Environmental Law] (last visited Jan. 11, 2024).

182. *Permit Program Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404 [https://perma.cc/P3C9-FWZ8] (last updated Apr. 11, 2024).

183. *Id.*

184. *Id.*

state agency.[185] Tribes also have the option to assume programs if they meet specific requirements and EPA delegates authority: Section 518(e) of the CWA authorizes EPA to treat tribes in a similar manner as states (TAS).[186] When EPA approves a delegation of authority to a state or tribe to run the Section 404 program, the USACE stops processing the permits.[187] An assumed program can be no less stringent than the federal requirements, therefore the CWA becomes a floor for the state or tribe's 404 program.[188] The purpose of state assumption of CWA programs is to give a more efficient permitting process to address both federal and state requirements while keeping at least the same level of protections as the federal program.[189]

Some states and tribes are well-situated to address local and regional management issues and to work with private landowners effectively, provided they have built the institutional capacity to do so.[190] However, for the 404 program, it is unusual for a state or tribe to assume the program. To date, no tribe has this authority and EPA has delegated authority for the 404 permit program to only two states: Michigan and New Jersey.[191] For the vast majority of the country and all of Indian Country (within tribal reservation boundaries),

185. *Clean Water Act Section 404 State Assumption,* ASS'N WETLAND MANAGERS, INC. (Nov. 2010), https://www.nawm.org/pdf_lib/cwa_section_404_state_assumption_factsheets.pdf [https://perma.cc/999P-NLNE].

186. 33 U.S.C. § 1377(e).

187. CLEAN WATER ACT SECTION 404 STATE ASSUMPTION, ASS'N WETLAND MANAGERS, INC. (Nov. 2010), https://www.nawm.org/pdf_lib/cwa_section_404_state_assumption_factsheets.pdf [https://perma.cc/999P-NLNE].

188. *Basic Information About Assumption Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa404g/basic-information-about-assumption-under-cwa-section-404 [https://perma.cc/ST2N-QZGP] (last updated Oct. 4, 2023).

189. Susan Martin & Rachael Santana, *State Assumption of the Clean Water Act Section 404 Permitting Program: Part 1, An Overview,* 95 ENV'T & LAND USE L. FLA. BAR J., no.1, 2021, at 38.

190. CLEAN WATER ACT SECTION 404 STATE ASSUMPTION, ASS'N WETLAND MANAGERS, INC. (Nov. 2010), https://www.nawm.org/pdf_lib/cwa_section_404_state_assumption_factsheets.pdf [https://perma.cc/999P-NLNE].

191. *U.S. Interactive Map of State and Tribal Assumption Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa404g/us-interactive-map-state-and-tribal-assumption-under-cwa-section-404 [https://perma.cc/39PD-FG9D] (last updated Nov. 17, 2023). The EPA did previously approve a state 404 program for Florida in 2020. However, a federal court order in February 2024 divested the Florida Department of Environmental Protection of the authority to issue 404 permits. The state has appealed the decision. *State 404 Program,* FLA. DEP'T OF ENV'T PROT., https://floridadep.gov/water/submerged-lands-environmental-resources-coordination/content/state-404-program [https://perma.cc/A2M8-R9RV] (last updated May 5, 2024).

the USACE is responsible for processing requests for 404 permits to dredge or fill wetlands that are WOTUS.[192]

However, even without delegated authority for the 404 program, there are two ways states and tribes may exercise jurisdiction: they can pass state or tribal law defining a broader scope of water protections beyond WOTUS and they can also issue or deny a certification that a project complies with state or tribal law.

A Section 404 permit is not valid unless a state or tribe issues a water quality certification under CWA Section 401 or certification is waived.[193] Given this, the primary way states and tribes weigh in on a USACE decision to permit wetland alterations under Section 404 is to review a proposed federal permit decision through the lens of their Section 401 certification authority. Under Section 401(a)(1) of the CWA, an "applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or . . . from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates . . ." that the discharge will comply with applicable water quality standards, among other things.[194]

In other words, the applicant needs to obtain a certification from the state, authorized tribe, or other entity with jurisdiction over the navigable waters where the discharge will begin.[195] A certifying authority (a state, an authorized tribe, EPA, or another entity) can grant, grant with conditions, deny, or waive certification under Section 401 of the CWA.[196] All states are certifying authorities under Section 401.

192. *Permit Program Under CWA Section 404,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404 [https://perma.cc/P3C9-FWZ8] (last updated Apr. 11, 2024).

193. WIS. LEGIS. COUNCIL, INFORMATION MEMORANDUM: FEDERAL JURISDICTION OVER WETLANDS: RECENT DEVELOPMENTS AND THEIR IMPACTS IN WISCONSIN (Sept. 6, 2023), https://docs.legis.wisconsin.gov/misc/lc/information_memos/2023/im_2023_07 [https://perma.cc/QAV5-QHDR].

194. 33 U.S.C. § 1341(a)(1).

195. *Id.*; *Overview of CWA Section 401 Certification,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/cwa-401/overview-cwa-section-401-certification [https://perma.cc/6SQU-DJ7P] (last updated Nov. 27, 2023).

196. 33 U.S.C. § 1341(a)(1); LAURA GATZ, CONG. RSCH. SERV., R46615, CLEAN WATER ACT SECTION 401: OVERVIEW & RECENT DEVS. 2 (2022). An important aspect of 401 certification to highlight is the length of time allowed for the certification. If a certifying authority refuses or fails to act within a "reasonable period of time (which shall not exceed one year)" after the receipt of the request, the 401 certification requirements are waived. 33 U.S.C. § 1341(a)(1).

When Congress passed the CWA in 1972, they placed the water quality certification requirement in CWA Section 401.[197] However, tribes are treated differently, and not all tribes are authorized to grant certifications under Section 401. It was not until 1987, when Congress amended the CWA with Section 501(e) that it authorized EPA to delegate authority to tribes to issue 401 water quality certifications.[198] As of January 31, 2024, EPA has authorized eighty-four tribes to administer water quality standards.[199] These tribal water quality standards serve as the basis for many CWA programs, including Section 401, just like state water quality standards.[200] Tribes with approved water quality standards thereby have authorization to issue Section 401 certifications like a state.[201] However, EPA has only approved fifty of these tribes' initial water quality standards and hence only these fifty tribes can effectively use a Section 401 certification to influence a proposed USACE decision to issue a 404 permit.[202] Obtaining authority for Section 401 certifications and establishing water quality standards can be a powerful tool to protect waters from negative impacts resulting from the construction or operation of a federally licensed or permitted project.[203]

In May 2024, EPA finalized a rule revising the CWA's water quality standards.[204] This rule has three impacts: it (1) defines tribal reserved rights for purposes of the regulation; (2) establishes and clarifies state responsibilities in regard to tribal reserved rights in the water quality standards context; and (3) establishes and clarifies EPA's responsibilities and oversight role in water quality standards.[205] The new rule defines tribal reserved rights for purposes of the water quality

197. Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. 66558, 66559 (Sept. 27, 2023) (to be codified at 40 C.F.R. pts. 121, 122, 124).

198. 33 U.S.C. § 1377(e).

199. *EPA Actions on Tribal Water Quality Standards and Contacts,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wqs-tech/epa-actions-tribal-water-quality-standards-and-contacts [https://perma.cc/34JH-GV3H] (last updated Jan. 31, 2024).

200. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. 29496, 29497 (May 5, 2023) (to be codified at 40 C.F.R. pts. 131, 230, 233).

201. *EPA Actions on Tribal Water Quality Standards and Contacts,* U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wqs-tech/epa-actions-tribal-water-quality-standards-and-contacts [https://perma.cc/34JH-GV3H] (last updated Jan. 31, 2024).

202. Fifty tribes have EPA-approved WQS. One tribe has WQS promulgated by the EPA. *Id.*

203. Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. 66558, 66558 (Sept. 27, 2023) (to be codified at 40 C.F.R. pts. 121, 122, 124).

204. This rule went into effect on June 3, 2024. Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights, 89 Fed. Reg. 35717, 35748 (May 2, 2024) (to be codified at 40 C.F.R. pt. 131).

205. *Id.* at 35718.

standards under the CWA as "any rights to CWA-protected aquatic and/or aquatic-dependent resources reserved by right holders, either expressly or implicitly, through Federal treaties, statutes, or executive orders."[206] Specifically, the rule requires that if a tribe asserts a tribal reserved right in writing to a state and EPA for consideration in establishment of water quality standards:

> the state must, to the extent supported by available data and information: (1) take into consideration the use and value of its waters for protecting the Tribal reserved right in adopting or revising designated uses; (2) take into consideration the anticipated future exercise of the Tribal reserved right unsuppressed by water quality in establishing relevant WQS; and (3) establish water quality criteria to protect the Tribal reserved right where the state has adopted designated uses that either expressly incorporate protection of the Tribal reserved right or encompass the right.[207]

In other words, this new rule acts to offer more protection for tribes and gives them more footing in the regulatory scheme.

This rule is not without its challenges. On May 28, 2024, eight states[208] filed a complaint with the U.S. District Court for the District of North Dakota arguing the new rule "unlawfully recasts the CWA as a "Tribal Rights Act" and commandeers states to effectuate the new policy imposed unilaterally by the EPA."[209] The states seek to invalidate the rule and enjoin EPA from enforcing it.[210] In response, twelve tribal nations, represented by the Native American Rights Fund and Earthjustice, filed a motion to intervene in defense of the new rule.[211] This case is ongoing at the time of this Article.

Section 401(d) directs states and authorized tribes to include conditions when granting a Section 401 certification, including "effluent limitations and other limitations, and monitoring requirements necessary to assure that the applicant for a Federal license or permit will comply with" other specific sections of the CWA, and with "any other

206. *Id.*

207. *Id*.

208. Plaintiff states are Idaho, North Dakota, Alaska, Iowa, Nebraska, South Carolina, South Dakota, and Wyoming. Complaint and Petition for Review, Idaho v. EPA, No. 1:24-cv-00100-DLH-CRH (D.N.D. May 28, 2024), ECF No.1.

209. *Id.* ¶ 4.

210. *Id.* ¶ 14.

211. Tribes' Memorandum in Support of Motion to Intervene, Idaho v. EPA, No. 1:24-cv-00100-DLH-CRH, ECF No. 15. Initially, seven tribes intervened in June 2024. Five more tribes joined in July 2024. Tribes' Amended Unopposed Motion to Intervene, Idaho v. EPA, No. 1:24-cv-00100-DLH-CRH, ECF No. 19; *Tribes Move to Defend EPA's Tribal Water Rights Rule (State of Idaho v. EPA),* NATIVE AM. RTS. FUND, https://narf.org/cases/epa-water-rights-rule/ [https://perma.cc/Q3PP-K8GX] (last visited Oct. 16, 2024).

appropriate requirement of State law."[212] According to a 2015 report by the Congressional Research Service, state implementation of Section 401 varied because it was optional—states could waive the certification.[213] However, the report highlighted that many states have come to view Section 401 as an "important tool in their overall programs to protect the physical and biological, in addition to chemical, integrity of their waters."[214] The report further attributed states using this authority to "tensions between state and federal agencies and regulated entities over the scope of the states' Section 401 authority."[215]

Additionally, Congress recognized that a 404 permit proposed outside of and upstream from a state or tribe's jurisdiction could impair the state or tribe's water quality. Thus, Congress created opportunities for the affected state or authorized tribe to object to the project and request a public hearing on a federal license or permit.[216] If there is a hearing, the agency seeking to issue the federal license or permit—based on recommendations of the objecting state or tribe, EPA, and any other additional evidence—"shall condition such license or permit in such a manner as may be necessary to insure compliance with applicable water quality requirements."[217] However, "if the imposition of conditions cannot insure such compliance" the "agency will not issue such license or permit."[218]

In summary, in all but two states and in Indian Country, when a project proponent seeks to fill or discharge into a wetland that is WOTUS, they interact with USACE to receive a determination of federal jurisdiction, and if that is positive, they apply to the USACE for a 404 permit. Every state and fifty tribes have the authority to grant, grant with conditions, deny, or waive a 401 certification for the project. If the project is on tribal lands where EPA has not authorized the tribe to issue a 401 certification or the project is in an area where the federal government has exclusive jurisdiction, EPA certifies compliance with

212. 33 U.S.C. § 1341(d); Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. 66558, 66558 (Sept. 27, 2023) (to be codified at 40 C.F.R. pts. 121, 122, 124).

213. CLAUDIA COPELAND, CONG. RSCH. SERV., 97-488, CLEAN WATER ACT SECTION 401: BACKGROUND & ISSUES 1 (2015).

214. *Id.* at 1.

215. *Id.*

216. 33 U.S.C. § 1341(a)(2); Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. at 66561.

217. 33 U.S.C. § 1341(a)(2).

218. *Id.*

Section 401.[219] If a 401 certification is denied, the wetland project may not proceed.

B. Defining WOTUS and the Road to *Sackett*

Agency rules have played a very large role in attempting to clarify the scope of federal jurisdiction under the CWA. The USACE and EPA have used regulations to offer greater detail about how wetlands and non-continuous streams fit into WOTUS, and thus the Section 404 permit program. According to Professor Dave Owen, for years after the CWA was enacted in 1972, the regulation of small streams, including ephemeral and intermittent streams, was "largely nonexistent."[220]

In 1974, the USACE published regulations to implement the Section 404 program, limiting it to the same waters that were being regulated under the Rivers and Harbors Act of 1899: "waters that are subject to the ebb and flow of the tide shoreward to their mean high water mark (mean higher water mark on the West Coast) and/or waters that are presently used, were used in the past, or are susceptible to use to transport interstate or foreign commerce."[221] This limited the program only to those waters traditionally navigable, thus not including isolated wetlands or ephemeral and intermittent streams. In 1975, in *Natural Resources Defense Council, Inc. v. Callaway,* the District Court for the District of Columbia held that this definition was too narrow and that the term "navigable waters" in the CWA was not limited to the traditional tests of navigability.[222] During this case, challengers to the rule expressed concerns over the need to "regulate the entire aquatic system," including all wetlands that are a part of it and the tributary streams that feed into traditionally navigable waters.[223]

Pursuant to this ruling, the USACE published an interim final regulation in 1975 defining the term "navigable waters" to "include all coastal waters subject to the ebb and flow of the tide shoreward to their mean high water mark . . . and also to all wetlands, mudflats, swamps, and similar areas which are contiguous or adjacent to coastal

219. Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. at 66561; GATZ, *supra* note 196, at 2 n.12.

220. Dave Owen, *Little Streams and Legal Transformations,* 2017 UTAH L. REV. 1, 5 (2017). This article uses the term "little streams," otherwise known as headwaters. *Id.* at n.15. A subset of these headwaters are ephemeral and intermittent streams. *Id*. at 7.

221. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. 37122, 37123 (July 19, 1977).

222. *Id.* at 37124; Nat. Res. Def. Council, Inc. v. Callaway, 392 F.Supp. 685, 686 (D.D.C. 1975).

223. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. at 37123–4; *See also* Nat. Res. Def. Council, Inc. v. Callaway, 392 F.Supp. 685 (D.D.C. 1975).

waters."[224] With respect to the inland areas, the term, in part, would "extend to all rivers, lakes, and streams that are navigable waters of the United States, [and] to all tributaries of navigable waters of the United States." The rule also extended "navigable waters" to "all contiguous or adjacent wetlands to these waters which are periodically inundated by freshwater, brackish water, or salt water and are characterized by the prevalence of aquatic vegetation that are capable of growth and reproduction."[225] This broadened the rule to cover adjacent wetlands as defined.

The 1975 regulation defined WOTUS in a way that included streams "up to their headwaters and landward to the ordinary high water mark."[226] It also stated, "permits would not be required for discharges beyond the 'headwaters' of a river or stream unless the interests of water quality required assertion of jurisdiction above the headwaters."[227] The rule defined headwaters as the "point on a stream beyond which the flow . . . is normally less than five cubic feet per second."[228] For those other waters not defined in the regulation, such as "intermittent rivers, streams, tributaries and perched wetlands that are not continuous or adjacent to navigable waters identified," the district engineer had the discretion to determine the necessary regulation for protecting water quality.[229]

In 1977, the USACE, along with EPA, the U.S. Department of the Interior, and the U.S. Department of Agriculture, revised the 1975 definition of WOTUS to expand federal jurisdiction by defining wetlands as: "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."[230] Additionally, the 1977 regulation recognized that there are streams with "highly irregular flows," like those that occur in the western U.S. whose

224. Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. 31320, 31320 (July 25, 1975).

225. *Id.* at 31320–21.

226. *Id.* at 31324.

227. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. at 37124.

228. Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. at 31321.

229. *Id.* at 31325.

230. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. at 37128; United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 124 (1985); The USACE uses the same definition as the EPA, but the EPA is the entity that has ultimate authority within the Executive Branch to define WOTUS. *See* Amicus Brief of Scientific Societies, *supra* note 28, at 5 n.3. *See also* NAT'L RSCH. COUNCIL, *supra* note 7, at 51.

headwaters are dry most of the year but still average an annual flow of five cubic feet per second because of "high volume flash flood type flows."[231] The 1977 regulation added an option, after notifying the Regional Administrator of EPA, for the district engineer to "establish the headwater based on median rather than the average flow."[232]

In the 1977 regulation, the USACE issued nationwide permits for the discharge of dredge or fill material into non-tidal rivers, streams, and their impoundments including adjacent wetlands that are located above the headwaters.[233] These permits provide legal cover for these activities, but they established only limited, largely suggested, requirements, and did not include reporting obligations.[234]

From 1977 onward, the definition of wetlands remained largely unchanged until the Supreme Court reviewed it in 1985 in *United States v. Riverside Bayview Homes, Inc*.[235] The issue in *Riverside Bayview Homes, Inc.* was whether the CWA, along with specific regulations promulgated under its authority by the USACE, authorized the USACE to require a Michigan developer to get a Section 404 permit before discharging fill materials into wetlands adjacent to navigable bodies of water and their tributaries.[236]

Respondents, Riverside Bayview Homes, Inc., owned eighty acres of low-lying, marshy land in Michigan approximately one mile west from Lake St. Clair and "roughly paralleling the Clinton River."[237] The property was made up of a sixty-acre parcel, platted as a subdivision since 1916, and a partially adjoining twenty-acre parcel.[238] In 1976, respondents began placing fill materials on their property to begin

231. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. at 37129.

232. *Id*. ("A median flow of five cubic feet per second means that fifty percent of the time the flow is greater than five cubic feet per second and fifty percent of the time the flow is less than this value."). As a refresher, the average or the arithmetic mean is the sum of a set of numbers divided by the number of values. The median is the exact middle number when arranged from smallest to largest. Anne Helmenstine, *Median vs. Average – Know the Difference Between them,* SCI. NOTES (August 9, 2022), https://sciencenotes.org/median-vs-average-know-the-difference-between-them/ [https://perma.cc/CR4S-5Q9R].

233. Regulatory Program of the Army Corps of Eng'rs, 42 Fed. Reg. at 37130.

234. Owen, *supra* note 220, at 21. In the 1980s, some of these permits created Nationwide Permit 26. *Id.* at 25. This permit authorized discharges in headwaters or isolated waters. COPELAND, *supra* note 213, at 4. Nationwide permit 26's approach was replaced in 2000 by several activity-based permits to authorize specific categories of activities instead of the acreage and geographic approach. *Id.*

235. United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 124 (1985).

236. *Id.* at 123.

237. United States v. Riverside Bayview Homes, Inc., 729 F.2d 391, 392 (6th Cir. 1984) (decision on review in Riverside Bayview Homes Inc., 474 U.S. 121 (1985)).

238. *Riverside Bayview Homes, Inc.*, 729 F.2d at 392.

constructing a housing development.[239] The USACE, believing the land was an adjacent wetland under the regulation defining WOTUS, filed suit in District Court, seeking to enjoin the respondent from filling the property without permission from the USACE.[240]

The Supreme Court reversed a Sixth Circuit Court decision that excluded "from the category of adjacent wetlands . . . wetlands that are not subject to flooding by adjacent navigable waters at a frequency sufficient to support the growth of aquatic vegetation."[241] The Supreme Court deferred to the agency and held that the USACE acted reasonably in interpreting the CWA to require permits for the discharge of materials into these adjacent wetlands.[242] In reaching this holding, the Court determined the USACE acted reasonably when it concluded that adjacent wetlands are "inseparably bound up with the 'waters' of the United States . . . ."[243] The administrative record showed that the USACE had determined that adjacent wetlands may affect the water quality of waterbodies and may serve significant biological and ecological functions such as habitat of spawning and other activities, food chain production, and flooding and erosion controls.[244] The USACE further determined that adjacent wetlands that do not contain water sourced from the adjacent bodies of water may also serve vital functions to the aquatic environment. Again, the Court stated it could not find these judgements unreasonable, and so concluded that a WOTUS definition that encompasses all wetlands adjacent to other water bodies is a permissible interpretation of the CWA.[245] *Riverside Bayview Homes* clarified that wetlands adjacent to waters navigable in fact are included in WOTUS and, therefore, covered by the CWA.[246]

239. *Riverside Bayview Homes, Inc.*, 474 U.S. at 125.

240. The District Court held that the part of the property lying below 575.5 feet above sea level was a covered wetland, and enjoined respondent from filling it without a permit. Respondent appealed, and the Court of Appeals remanded for consideration of the effect of the 1977 amendments to WOTUS. On remand, the District Court again held the property to be a wetland subject to the Corps' permit authority. Respondent appealed again, and the Sixth Circuit reversed. The Court construed the Corps' regulation to exclude wetlands that were not subject to flooding by adjacent navigable waters at a frequency sufficient to support the growth of aquatic vegetation from the category of adjacent wetlands and thus from "waters of the United States." *Id.* at 124.

241. *Id.* at 125.

242. *Id.* at 122.

243. *Id.* at 134.

244. *Id.* at 134–35.

245. United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 135 (1985).

246. *Id*. at 122.

The following year, in 1986, the USACE issued a final rule in which it extended CWA Section 404 to intrastate waters that are or would be used as habitat for birds that are covered by the Migratory Bird Treaties (known as the "Migratory Bird Rule").[247] This rule took center stage in the next U.S. Supreme Court review of the reach of federal jurisdiction over wetlands in *SWANCC* in 2001.[248] In that case, the USACE applied the Migratory Bird Rule to extend federal permitting authority over an abandoned sand and gravel pit, which had evolved into a forest with scattered permanent and seasonal ponds on petitioner's property in Illinois.[249] The Court, in a five to four decision, held that the USACE's application of the Migratory Bird Rule to the Solid Waste Agency of Northern Cook County's property exceeded its authority under the CWA.[250] The *SWANCC* decision clarified the CWA did not extend to "nonnavigable, isolated, intrastate waters" simply because of their use by migratory birds.[251]

Following *SWANCC,* the USACE did not promulgate a final rule change although there was proposed rulemaking in 2003.[252] Because *SWANCC* did not directly address tributaries, the USACE "notified its field staff that they 'should continue to assert jurisdiction over traditional navigable waters . . . and generally speaking, their tributary systems (and adjacent wetlands).'"[253] Also, since *SWANCC* did not overrule *Riverside Bayview Holmes, Inc.,* the USACE continued "to assert jurisdiction over waters 'neighboring' traditional navigable waters and their tributaries."[254] Thus, the USACE continued to define "adjacent wetlands" broadly.[255]

The U.S. Supreme Court next interpreted WOTUS in *Rapanos v. United States* in 2006, resulting in a plurality decision with five opinions.[256] This case involved a consolidation of cases to determine if

247. Final Rule for Regulatory Programs of the Corps of Eng'rs, 51 Fed. Reg. 41206, 41217 (Nov. 13, 1986); *See also* Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs (*SWANCC*), 531 U.S. 159, 164 (2001).

248. *SWANCC*, 531 U.S. at 159.

249. *Id.* at 162–63.

250. *Id.* at 174.

251. *Id.* at 172.

252. Rapanos v. United States, 547 U.S. 715 (2006); Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," 68 Fed. Reg. 1991 (Jan. 15, 2003).

253. *Rapanos*, 547 U.S. at 726 (plurality opinion) (quoting Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," 68 Fed. Reg. at 1991).

254. *Id.* (citations omitted).

255. *Id.*

256. *Id.* at 715.

four Michigan wetlands, which were near ditches or human-made drains that emptied into traditional navigable waters, were WOTUS under the CWA.[257]

The first consolidated case before the court was *Rapanos v. United States,* regarding three parcels of land in Michigan.[258] The Sixth Circuit affirmed the District Court, holding there was "federal jurisdiction over the wetlands on all three sites because 'there were hydrological connections between all three sites and corresponding adjacent tributaries of navigable waters.'"[259] The U.S. Supreme Court granted certiorari to determine whether the wetlands in these cases were WOTUS and, if so, whether the CWA was constitutional.[260]

The second consolidated case, *Carabell v. U.S. Army Corps of Engineers,* involved 15.9 acres of forested wetlands.[261] The lot contained a human-made berm separating the property from a ditch.[262] The berm almost always, under normal conditions, prevented surface water flow from the wetlands into the ditch.[263] In 1993, the Carabells sought a permit from the Michigan Department of Environmental Quality to fill wetlands and build condominiums.[264] The Department denied the permit, but a State Administrative Law judge directed the agency to approve an alternative plan proposed by the Carabells.[265] EPA objected to the alternate permit and the USACE denied it because the lot provided "water storage functions that, if destroyed, could result in an increased risk of erosion and degradation of water quality

257. *Id.* at 729.

258. *Rapanos*, 547 U.S. at 762 (Kennedy, J., concurring) (quoting 376 F.3d 629, 643 (2004)). The Rapanos petitioners and their affiliated businesses placed fill material into wetlands on three sites that ultimately connected to traditionally navigable waters. *Id.* The first parcel, the Salzburg site, contained twenty-eight acres of wetlands. *Id.* The District Court in the consolidated case found that water from the site drained into the Hoppler Drain, which then flowed into the Hoppler Creek, then into the Kawkawlin River, which is navigable. *Id.* The second parcel, the Hines Road site, contained sixty-four acres of wetlands, which the District Court found had a surface water connection to the Rose Drain that flowed into the Tittawabassee River. *Id.* The third site, the Pine River site, contained forty-nine acres of wetlands, which the District Court found had a surface water connection to the Pine River that proceeded to Lake Huron. *Id.* at 763.

259. *Rapanos*, 547 U.S. at 729–30 (plurality opinion).

260. *Id.* at 730.

261. *Id.* at 764 (Kennedy, J., concurring).

262. *Id.*

263. An administrative hearing testimony by a consultant for Carabells "indicated 'you would start seeing some overflow' in a 'ten-year storm.'" *Id*. (citation omitted). The ditch connected with the Sutherland-Oemig Drain, which flows continuously throughout the year into Auvase Creek. Auvase Creek connects to Lake St. Clair, about one mile from the lot itself. The ditch also connected to other ditches that also empty into Auvase Creek and thus to Lake St. Clair. *Id*.

264. *Rapanos*, 547 U.S. at 765 (Kennedy, J., concurring).

265. *Id.*

in the Sutherland-Oemig Drain, Auvase Creek, and Lake St. Clair."[266] The Carabells sought judicial review to challenge the USACE's jurisdiction and the merits of the permit denial.[267] The USACE prevailed at the District Court and the Court of Appeals for the Sixth Circuit.[268] The Supreme Court granted certiorari to consider the Carabells' jurisdictional question.[269]

Justice Antonin Scalia delivered the plurality opinion with only four votes.[270] Justice Anthony Kennedy concurred only in the judgement but gave a competing rationale.[271] Because the four dissenting justices shared Justice Kennedy's essential reasoning, Justice Kennedy's opinion shaped the interpretation of WOTUS for years to come.[272]

Justice Scalia's test in *Rapanos* included only those waters that are "relatively permanent, standing or continuously flowing bodies of water" and "does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall."[273] Additionally, Justice Scalia stated that a "wetland may not be considered 'adjacent to' remote 'waters of the United States' based on a mere hydrological connection."[274] Therefore, Justice Scalia's view of WOTUS requires a direct connection to waters navigable in fact. Justice Scalia's plurality opinion remanded the cases to the lower courts to determine "whether the ditches or drains near each wetland are 'waters' in the ordinary sense of containing a relatively permanent flow; and (if they are) whether the wetlands in question are 'adjacent' to these 'waters' in the sense of possessing a continuous surface connection . . . ."[275] In contrast, Justice Kennedy's test relied on a "significant nexus" between a wetland and waters that are navigable in fact or that "could reasonably be so made . . . ."[276] Under the broader significant nexus test, a wetland has the necessary nexus to be a WOTUS if it "alone, or in combination with similarly situated lands . . . significantly affect[s] the chemical, physical, and biological

266. *Id.*
267. *Id.*
268. *Id.*
269. *Id.*
270. *Rapanos*, 547 U.S. at 718 (plurality opinion).
271. *Id.* at 719 (Kennedy, J., concurring).
272. *Id.* at 717 (syllabus). The dissent wanted to defer to EPA's existing regulations, which already used significant nexus. The regulations created a rebuttable presumption that a significant nexus exists. *Id*. at 811 (Breyer, J., dissenting).
273. *Id.* at 739 (plurality opinion).
274. *Id.* at 716 (syllabus) (citation omitted).
275. *Rapanos*, 547 U.S. at 757 (plurality opinion).
276. *Id.* at 717 (syllabus).

integrity of other covered waters understood as navigable in the traditional sense."[277]

After *Rapanos,* Justice Kennedy's significant nexus test carried the day as EPA and USACE incorporated it into their updated rule defining WOTUS and wetlands under the CWA.[278] The 2015 Clean Water Rule claims to incorporate the statute; science; Supreme Court decisions in *U.S.* v. *Riverside Bayview Homes, Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers,* and *Rapanos* v. *United States;* and the agencies' experience and technical expertise.[279]

More than fifteen years after *Rapanos*, the U.S. Supreme Court revisited the significant nexus test in *Sackett v. EPA*.[280]

C. *Sackett v. EPA*

In the 2023 Supreme Court decision of *Sackett v. EPA*, the Sacketts challenged federal jurisdiction over wetlands on their property near Priest Lake in Idaho.[281] The Sacketts purchased the property in 2004 and, without obtaining a Section 404 permit, began backfilling the land in preparation to build a home.[282]

EPA issued a compliance order stating this violated the CWA because the property included protected wetlands with a significant nexus to Priest Lake, a traditional navigable water.[283] EPA directed the Sacketts to immediately start activities to restore the site under a Restoration Work Plan provided by the agency.[284] If they did not, the order stated the Sacketts would be charged $40,000 per day for noncompliance.[285] EPA interpreted WOTUS to include all waters "that 'could affect interstate or foreign commerce,'" and "'[w]etlands adjacent' to those waters."[286] At the time, the term "adjacent" was defined as "neighboring" in addition to "bordering" or "contiguous."[287] Following *Rapanos*, EPA and the USACE created a guidance document which stated agency jurisdiction also applied to adjacent wetlands

277. *Rapanos*, 547 U.S. at 717 (syllabus).

278. Clean Water Rule: Definition of "Waters of the United States," 80 Fed. Reg. 37054, 37056 (June 29, 2015).

279. *Id.* at 37054.

280. Sackett v. Env't Prot. Agency, 598 U.S. 651 (2023).

281. *Id.* at 661–62.

282. *Id.* at 662.

283. *Id.* Although the EPA and the USACE jointly enforce the CWA, the EPA is tasked with policing violations after the fact. *See id.* at 661.

284. *Id.* at 662.

285. *Sackett*, 598 U.S. at 662.

286. *Id.* (citation omitted).

287. *Id.*

that did not have a continuous surface connection to traditionally navigable waters.[288] Therefore, finding a continuous surface connection to traditional navigable waters was not needed to determine if a wetland was adjacent.[289] EPA stated the Sacketts' lot contained wetlands that are adjacent to, in a neighboring sense, an unnamed tributary on the opposite side of a thirty-foot road.[290] The tributary then feeds into a non-navigable creek, which feeds into Priest Lake.[291] EPA stated the Sacketts' property was "similarly situated" to the Kalispell Bay Fen, a large wetland complex nearby.[292] The properties "taken together, 'significantly affect' the ecology" of the lake, and thus, the agency concluded that the Sacketts had illegally deposited fill into a WOTUS.[293]

The Sacketts argued EPA lacked jurisdiction, asserting that none of the wetlands on their property were considered WOTUS because these were not adjacent wetlands that met the significant nexus test.[294] The Ninth Circuit affirmed the District Court's holding, based on the *Rapanos* significant nexus test, that the CWA covered these adjacent wetlands.[295] The U.S. Supreme Court granted certiorari and reevaluated the proper test for deciding if wetlands are WOTUS under the CWA.[296]

Although the Court unanimously concluded that the wetlands on the Sackett's property do not fall under the definition of WOTUS, it split five to four in its reasoning.[297] Justice Alito delivered the majority opinion of the Court.[298] In order to determine if wetlands are WOTUS, Justice Alito first looked to the text of the CWA, and citing to *Rapanos,* concluded that the Act's "use of 'waters' encompasses 'only those relatively permanent, standing or continuously flowing bodies of water'" that form geological features "described in ordinary parlance as

288. *Id.* (citing to U.S. Env't Prot. Agency & U.S. Army Corps Eng'rs, Clean Water Act Jurisdiction Following the U. S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States at 5 (2008), https://www.epa.gov/sites/default/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf) [https://perma.cc/29MQ-9B9H].

289. *Id.* at 5.

290. *Sackett*, 598 U.S. at 662.

291. *Id.* at 663.

292. *Id.*

293. *Id.*

294. *Id.*

295. *Id.*

296. *Sackett*, 598 U.S. at 663.

297. *Id.* at 651.

298. Justice Clarence Thomas filed a concurring opinion, joined by Justice Neil Gorsuch. Justice Elena Kagan filed an opinion concurring in the judgement, joined by Justice Sonia Sotomayor and Justice Ketanji Brown Jackson. Justice Brett Kavanaugh also filed an opinion concurring in the judgement, joined by Justice Sotomayor, Justice Kagan, and Justice Jackson. *Id*.

'streams, oceans, rivers and lakes.'"[299] Citing *SWANCC,* Justice Alito reasoned that the Court has previously held that the usage of the term "navigable" in the CWA "at least shows that Congress was focused on 'its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made,'" so, at a minimum "navigable" refers to bodies of traditional waters like oceans, lakes and rivers.[300] The opinion also noted how Congress used "waters" elsewhere in the CWA and other laws, observing that the CWA used the term to refer to bodies of open water, and correlates the term to rivers, lakes and oceans.[301]

Justice Alito then considered which wetlands are included as WOTUS. The Court first looked to the 1977 amended CWA, which added a section that authorized states to apply to EPA to administer their own programs to issue permits for the discharge of dredged or fill material into specific waters.[302] State permitting programs can regulate discharges into any "waters of the United States . . . 'including wetlands adjacent thereto.'"[303] The Court looked to the term "adjacent," finding dictionaries define the term as "contiguous" or "near."[304] The Court stated, however, that interpreting statutory language does not simply rely on the dictionary definitions and, in this case, only one meaning of the word is compatible with the rest of the law—that wetlands "separate from traditional navigable waters cannot be considered part of those waters, even if they are located nearby."[305]

Justice Alito was concerned that EPA's argument—using the significant nexus test that wetlands are adjacent if they are neighboring to covered waters, even if they are separated by a road—is too broad and raises vagueness concerns for criminal penalties.[306] He rejected EPA's approach saying the "boundary between a 'significant' and an insignificant nexus is far from clear," and the test adds another confusing term in "similarly situated."[307] This leaves the test too vague as it provides "little notice" to the landowners of their obligations under the CWA and the Act provides severe criminal penalties even for

299. *Id.* at 671 (quoting Rapanos v. United States, 547 U.S. 715, 739 (2006)).
300. *Id.* at 672 (quoting Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs, 531 U.S. 159, 172 (2001)).
301. *Id.* at 672–73.
302. *Sackett*, 598 U.S. at 675.
303. *Id*. (quoting 33 U.S.C. § 1344(g)(1)).
304. *Id.* at 676.
305. *Id.*
306. *Id.* at 679–80.
307. *Id.* at 681.

negligent violations.[308] The Court reasoned an overly broad interpretation of the CWA would impinge on states' traditional authority to regulate land and water use.[309] The Court concluded that because the significant nexus test is not mentioned in the CWA, EPA had no statutory basis to impose it.[310] Although the Court discussed its impact on states, notably absent was an evaluation of how a change in definition would impact tribes and the federal-tribal relationship.[311]

Citing Justice Scalia's test in *Rapanos,* Justice Alito's opinion in *Sackett* held that the CWA only extends to those wetlands that are "as a practical matter indistinguishable from waters of the United States."[312] This newly-announced test rejects the policy of the USACE and EPA since the 1970s. *Sackett* now requires that the adjacent body of water be a traditional WOTUS and that the wetland have a "continuous surface connection" with that adjacent body of water, such that it is "difficult to determine where the 'water' ends and where the 'wetland' begins."[313] The Court reversed the lower court's ruling, and held the wetlands on the Sacketts' lot are distinguishable from other covered waters, so they did not meet the new test for wetlands to be considered WOTUS.[314]

Pursuant to the new definition announced in *Sackett*, EPA and the USACE issued a conforming rule in 2023 to redefine WOTUS consistent with the Court's new approach to the limits of federal jurisdiction over WOTUS.[315] This rule: 1) redefined "adjacent" waters to mean "having a continuous surface connection," 2) removed "significant nexus" wherever it appeared, 3) struck "interstate wetlands" from the defined list of WOTUS categories, and 4) struck wetlands and streams from WOTUS category of "additional waters."[316]

When issuing the conforming rule, EPA estimated that 63% of wetlands and an estimated 1.2 to 4.9 million miles of ephemeral streams nationwide would no longer be covered under federal jurisdiction.[317]

308. *Sackett*, 598 U.S. at 681.
309. *Id.* at 679–80.
310. *Id.* at 680.
311. *Id.* at 683.
312. *Id.* at 678.
313. *Id.* at 678–79.
314. *Sackett*, 598 U.S. at 684.
315. Revised Definition of "Waters of the United States"; Conforming, 88 Fed. Reg. 61964 (Sept. 8, 2023) (to be codified at 33 C.F.R pt. 328).
316. *Id.* at 61969.
317. U.S. Env't Prot. Agency, *Policy Webinar: Updates on the Definition of "Waters of the United States*," 24:01-24:18, YOUTUBE (Sept. 12, 2023, 03:00 PM EST)

For wetlands that are no longer jurisdictional for the Section 404 program, they will not be regulated unless the state or tribe in which the wetland is located has created regulatory authority that goes beyond federal jurisdiction. Therefore, regulatory protection for non-federal wetlands and ephemeral streams relies on state and tribal programs that have a broader scope than federally-defined WOTUS.

In the next section, we will examine the post-*Sackett* responses at various levels of government: federal, federally-recognized tribes, and states. We sort the state responses into those that strengthened or weakened protections of wetlands and show a discordant state reaction that will result in uneven protections for the Nation's waters.

IV. FEDERAL, TRIBAL, AND STATE RESPONSES TO *SACKETT*

A. Federal Court Challenges Post-*Sackett*

There have been a few legal challenges since *Sackett* that raise interpretative issues. Two cases in particular warrant discussion here. In June 2024, a federal district court in North Carolina ruled on the legality of EPA's post-*Sackett* conforming rule when a landowner sought an injunction. In a pending administrative appeal, the Pacific Legal Foundation is representing a landowner in Iowa who wants to escape federal jurisdiction over an unnamed tributary.

In January 2023, EPA filed a complaint in federal court in North Carolina against Robert White, in which it sought injunctive relief and civil penalties for violations of the CWA.[318] White's dredge and fill activities impacted a total of about 11.85 acres of wetlands across three properties.[319] EPA asserted the forested and marsh wetlands, into which White discharged dredge and fill materials, are "directly adjacent to traditionally navigable waters and therefore, are [WOTUS] . . . ."[320] The complaint states the USACE and EPA made efforts over the

https://www.youtube.com/watch?v=lcCVelsAy2c [https://perma.cc/A3T5-8MLK]; *See also* Allyson Chui, *Biden Rule, Heeding Supreme Court, Could Strip Over Half of U.S. Wetlands' Protections,* WASH. POST (Aug. 29, 2023), https://www.washingtonpost.com/climate-environment/2023/08/29/epa-new-wetland-rule/ [On File with the Columbia Journal of Environmental Law].

318. Complaint ¶ 1, U.S. v. White, No. 2:23-cv-00001, (E.D.N.C. Jan. 6, 2023), ECF No. 1. The complaint states that from 2015 until late 2017, White discharged pollutants, including dredge and fill material into WOTUS at three locations (known as "the Site") in or near Elizabeth City, Pasquotank County, North Carolina, without proper authorization under the CWA. *Id.* ¶¶ 1, 20. These three locations, called "the Site" in the complaint, consist of properties: 1) off Shadneck road, 2) off Pine Shore Road, and 3) off Wades Point Road. *Id.* ¶ 20.

319. *Id.* ¶ 23.

320. *Id.* ¶ 26.

past couple of years to negotiate a remedy for White's violations but White "refused to restore the aquatic functions" of the open waters and wetlands that were degraded by the construction and filling.[321]

Then on March 14, 2024, White countered by seeking declaratory and injunctive relief on the basis that EPA's amended September 8, 2024 conforming rule post-*Sackett* does not comply with *Sackett* because the rule's definition of "adjacent" wetlands unlawfully omits *Sackett's* requirement that the wetland be indistinguishable from the traditional WOTUS.[322] On June 17, 2024, the district court held that White was unlikely to succeed on the merits, and denied White's motion for a preliminary injunction to enjoin the USACE and EPA from applying the conforming rule.[323] In reaching its holding, the court discussed *Sackett's* "two-pronged test for adjacent wetlands" and whether the conforming rule is consistent with it.[324] The court observed the rule removed any reference to "significant nexus" and amended the definition of "adjacent" to "having a continuous surface connection."[325] The court rejected White's argument that the amended definition is invalid because it lacks the "practically indistinguishable" element the Supreme Court used in the *Sackett* decision. The court reasoned that for a water to be "practically indistinguishable" from a traditional navigable water, it needs a continuous surface connection. Thus, the focus on continuous surface connection is sufficient to conform with the meaning of *Sackett.*[326]

In a second post-*Sackett* case, the Pacific Legal Foundation is representing a landowner in Iowa in an administrative appeal that challenges USACE's January 2, 2024 JD on property owned by Dan Ward and a company, Genesis 27:3, LLC.[327] The landowners planned to construct an approximately nine acre recreational pond across approximately 2,800 linear feet of an unnamed tributary's reach on the landowners' property.[328] The JD stated the USACE had jurisdiction over

321. U.S. v. White, No. 2:23-cv-00001, (E.D.N.C. Jan. 6, 2023) ¶ 28.

322. Complaint for Declaratory and Injunctive Relief, White v. U.S. Env't Prot. Agency, No. 2:24-CV-00013-BO, 2024 WL 3049581 (E.D.N.C. June 18, 2024), ECF No. 1.

323. *White*, 2024 WL 3049581, at *1.

324. *Id.* at *9.

325. *Id.* (citing Revised Definition of "Waters of the United States"; Conforming, 88 Fed. Reg. 61964, 61966 (Sept. 8, 2023) (to be codified at 33 C.F.R pt. 328).

326. White, 2024 WL 3049581, at *10.

327. Request for Appeal of U.S. Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of Sackett v. EPA, 143 S. Ct. 1322 (Feb. 26, 2024) (File Number 2022-1472), at 1, https://pacificlegal.org/wp-content/uploads/2024/02/2024-02-26-Ward-v-army-corps-request-for-appeal.pdf [https://perma.cc/GR8J-NX3P].

328. *Id.* at 8.

an unnamed tributary on Ward/Genesis' property.[329] The request for an administrative appeal of the JD argued: 1) the unnamed tributary does not meet the standard set forth in *Sackett* to be considered WOTUS, 2) the district engineer acted in an arbitrary and capricious manner by failing to identify a "rational connection between the facts found and the choice made" in violation of the Administrative Procedure Act, and 3) the district engineer violated the CWA by asserting authority over a tributary that was never or will never be used as a highway of interstate or foreign commerce.[330]

The complaint argued the tributary does not meet the standard under *Sackett* for three reasons.[331] First, under *Sackett,* the relevant inquiry is "whether a reasonable person would—taking into account visual observation of the relatively permanent presence of standing or continuously flowing water—describe the feature in question as a 'stream[], ocean[], river[], [or] lake[].'"[332] In this case, the complaint argues that no reasonable person would describe the unnamed tributary using the terminology above. Second, the complaint argues the "ordinary presence of water is not sufficient for a feature to qualify as a water," but the ordinary presence of water is "at the very least necessary for regulation."[333] Therefore, a regulable water must at least be marked by the ordinary presence of water—or, in other words, it must be more likely than not that, on any given day of the year, there will be water present. The complaint argues that the unnamed tributary does not meet this minimal qualification as photographs demonstrate that it is typically dry.[334] Third, the complaint argues that even if *Sackett* did not preclude seasonal rivers, the unnamed tributary is not categorized as one. The complaint argues the district engineer erred when concluding the unnamed tributary flows in a "seasonal and predictable manner during the spring when groundwater may be present" based on one day's observations.[335] This case is pending at the time of this publication.

These are only some examples of cases after *Sackett*, occurrences of which may only rise as *Sackett* has increased the confusion

329. *Id.* at 1.
330. *Id.* at 1–2.
331. *Id.* at 9.
332. *Id.* (quoting Sackett v. Env't Prot. Agency, 598 U.S. 651, 671 (2023)).
333. Request for Appeal of U.S. Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of Sackett v. EPA, 143 S. Ct. 1322 (Feb. 26, 2024) (File Number 2022-1472), at 9.
334. *Id.* at 10.
335. *Id.*

surrounding the definition of WOTUS and widened the door for impacts to wetlands and ephemeral and intermittent streams without federal jurisdiction.

B. Federal Government Actions Post-*Sackett*

The Federal government may take actions to mitigate the impacts of *Sackett* on federal regulatory jurisdiction over wetlands and ephemeral and intermittent streams. However, some scholars argue that federal executive and legislative actions face substantial challenges because after *Sackett*, "federal agencies lack the statutory authority to take major steps, and Congress is unlikely to pass new legislation authorizing regulatory limits."[336] Consistent with this observation, in April 2024, the Biden-Harris Administration announced a new "America the Beautiful Freshwater Challenge," that seeks to inspire sub-national governments to take action, rather than federally addressing the regulatory gap. The challenge sets a national goal to "protect, restore, and reconnect 8 million acres of wetlands and 100,000 miles of our nation's river and streams" by 2030.[337] For wetlands, the challenge emphasizes forested, vegetated, peat soil, brackish, and tidal wetlands.[338] The challenge claims, "Congressional Republicans are continuing a decades-long effort to undermine Clean Water Act safeguards."[339] In light of this assessment that the federal government cannot legislate a return to fuller federal jurisdiction over wetlands, the "action" element of the challenge encourages states, tribes, and local communities to advance wetland-protection policies, and includes a one billion dollar investment in tribal water protections.[340]

336. Michael Vandenbergh et. al., *Filling the Sacket Gap: The Private Governance Option*, 109 MINN. L. REV. (forthcoming), at 4.

337. *The America the Beautiful Freshwater Challenge*, THE WHITE HOUSE, https://www.whitehouse.gov/ceq/the-america-the-beautiful-freshwater-challenge/ [https://perma.cc/W99S-QKFD] (last visited July 25, 2024) [hereinafter *Freshwater Challenge*]; *see also FACT SHEET: At White House Water Summit, Biden-Harris Administration Announces Bold National Goal to Protect and Restore Freshwater Resources, Delivers Over $1 Billion for Tribal Clean Water Projects*, THE WHITE HOUSE (Apr. 23, 2024), https://www.whitehouse.gov/briefing-room/statements-releases/2024/04/23/fact-sheet-at-white-house-water-summit-biden-harris-administration-announces-bold-national-goal-to-protect-and-restore-freshwater-resources-delivers-over-1-billion-for-tribal-clean-water-projects/ [https://perma.cc/X8ZU-XAQW] [hereinafter *Fact Sheet*].

338. *Freshwater Challenge*, *supra* note 337.

339. *Fact Sheet*, *supra* note 337.

340. *Freshwater Challenge*, *supra* note 337; *Fact Sheet*, *supra* note 337.

C. Tribal and State Regulatory Frameworks and Actions Post-*Sackett*

With federal jurisdiction rolled back, it falls to tribes and states to decide what action to take. While the Biden-Harris Freshwater Challenge emphasizes state and tribal action, it is important to note the resource constraints of these governments and the limitations in existing state laws that tie state jurisdiction to federal jurisdiction. Prior scholars have documented that about half the states have laws that require wetland protections to be no more stringent than federal protections.[341] In this section, we will discuss actions some tribes and states have taken post-*Sackett* to show the patchwork of responses that has been emerging.

1. Tribal Responses to *Sackett*

a. Tribal Nations—Trust Relationship with Federal Government and Sovereignty

Tribal nations are sovereigns that exist within the borders of the United States. This is recognized through hundreds of treaties with tribal nations.[342] U.S. treaties with tribal nations are on the same level as treaties with other foreign governments, and take precedence over any conflicting state laws.[343] Uniquely, tribal citizens are citizens of their tribal nation, the U.S., and the state where they reside.[344] As of January 2024, there are 574 federally-recognized tribes in the U.S.[345]

341. Vandenbergh et. al., *supra* note 336, at 4.

342. NAT'L CONG. OF AM. INDIANS, TRIBAL NATIONS AND THE UNITED STATES: AN INTRODUCTION 18 (2020).

343. *Id.*

344. *Id.*

345. MAINON A. SCHWARTZ, CONG. RSCH. SERV., R47414, THE 574 FEDERALLY RECOGNIZED TRIBES IN THE UNITED STATES 1 (2024). According to the U.S. Department of the Interior Bureau of Indian Affairs, a federally-recognized tribe is "an American Indian or Alaska Native tribal entity that is recognized as having a government-to-government relationship with the United States, with the responsibilities, powers, limitations, and obligations attached to that designation, and is eligible for funding and services from the Bureau of Indian Affairs." Federally-recognized tribes are also "recognized as possessing certain inherent rights of self-government (i.e., tribal sovereignty) and are entitled to receive certain federal benefits, services, and protections because of their special relationship" with the U.S. *Why Tribes Exist Today in the U.S.,* U.S. DEP'T INTERIOR BUREAU INDIAN AFFS., https://web.archive.org/web/20240308192945/https://www.bia.gov/frequently-asked-questions [https://perma.cc/7WSE-JRE2] (last visited Mar. 6, 2024). Brothertown Nation is the only Tribe in Wisconsin that is not federally recognized. However, the Tribe continues its long-standing effort to regain federal recognition. *Restoration,* BROTHERTOWN INDIAN NATION, https://brothertownindians.org/restoration/ [https://perma.cc/5BG2-3LP5] (last visited Mar. 6, 2024).

Federal recognition, also called federal acknowledgement, is a "term of art formalizing a government-to-government relationship" between the U.S. and a specific tribal nation.[346] Federal recognition generally means that the tribe is afforded certain rights and protections "including limited sovereign immunity, powers of self-government, the right to control the lands held in trust for them by the federal government, and the right to apply for some federal services."[347]

Among other things, treaties established the idea of the federal "trust responsibility" between tribal nations and the federal government.[348] According to the 2020 edition of *Tribal Nations and the United States: An Introduction,* by the National Congress of American Indians (*2020 Guide to Tribal Nations*), this trust responsibility obligates the federal government to "protect tribal self-governance, tribal land, assets, resources, and treaty rights," and to accomplish the directives of federal statutes and court cases on tribal land.[349] However, this trust responsibility is undermined by the fact that it was only voluntary on behalf of the U.S., not the tribes.[350] Beyond these general principles, each tribe has its relationship with the U.S., as shaped by its specific treaties or other legal documents.[351]

Given the federal government has a trust responsibility to tribes to protect their land and resources, including water,[352] the U.S. has a duty to "protect Tribal lands and resources that it does not shoulder with other groups."[353] Sulliván et al. discusses how, although initially meant to play a protective role, this trust responsibility served as the basis for the expansion of federal authority on tribal lands, which today is considered "plenary," and the idea that tribal sovereignty is subject to the authority of the U.S.[354] This combination has led tribes to "heavily rely on" federal environmental legislation instead of their inherent sovereignty for environmental protections within tribal lands.[355] Sulliván et al. discusses how the scientific grounding of the current definition of WOTUS fails to adequately protect tribal water

346. SCHWARTZ, *supra* note 345, at 1.

347. *Id.* at n.4.

348. NAT'L CONG. OF AM. INDIANS, *supra* note 342, at 18.

349. *Id.* at 23.

350. Robert T. Anderson, *Indigenous Rights to Water & Environmental Protection,* 53 HARV. C.R.-C.L. L. REV. 337, 343 (2018).

351. EXECUTIVE BOARD OF AUTHORS AND EDITORS, COHEN'S HANDBOOK OF FEDERAL INDIAN LAW Ch.1 (Mathew Bender & Company, Inc., LexisNexis, 2024).

352. Sulliván et al., *supra* note 139, at 1.

353. *Id.* at 1.

354. *Id.*

355. *Id*.

resources because connectivity on tribal lands must be viewed and quantified based on the values of Indigenous peoples beyond what is measured by the current science used.[356] To fill this gap, Sulliván et al. propose a parallel set of standards for WOTUS determinations on tribal lands to "appropriately reflect traditional and contemporary ways that Tribal peoples use water on their homelands."[357]

b. Tribal Responses to *Sackett*

As Dean Elizabeth Kronk Warner highlighted, tribal sovereignty can be a "reference to both a physical place, as well as to the people who occupy that space. For many Indians, their tribes' sovereignty contributes to their very personhood."[358] According to the *2020 Guide to Tribal Nations*, the heart of tribal sovereignty is the "ability to govern and to protect and enhance the health, safety, and welfare of tribal citizens within tribal territory."[359] Tribal governments have the power to determine their own structures of governance and enforce their laws through police departments and tribal courts.[360] They are also responsible for a variety of governmental activities on tribal lands including environmental protections and managing natural resources.[361] As Dean Kronk Warner explained, many tribal communities and individuals have "a close connection to the land" and so environmental laws may "acquire even greater meaning in Indian country."[362] About 56 million acres of land are held in trust by the U.S. for Indian tribes and individuals,[363] approximately 2% of the U.S. land

356. *Id.* at 3.

357. *Id.* at 6.

358. Elizabeth Ann Kronk Warner, *Tribes as Innovative Environmental "Laboratories,"* 86 U. COLO. L. REV. 789, 836 (2015).

359. NAT'L CONG. OF AM. INDIANS, *supra* note 342, at 23.

360. *Id.* at 23.

361. *Id*.

362. Kronk Warner, *supra* note 358, at 793.

363. NAT'L CONG. OF AM. INDIANS, *supra* note 342, at 26; *Fee to Trust Land Acquisitions,* U.S. DEP'T INTERIOR BUREAU INDIAN AFFS., https://www.bia.gov/bia/ots/fee-to-trust [https://perma.cc/52TN-4RHB] (last visited Dec. 15, 2024). Land held in trust includes both reservation lands and other lands held by the U.S. Under 25 U.S.C. § 2201(4), "(i) 'trust or restricted lands' means lands, title to which is held by the United States in trust for an Indian tribe or individual, or which is held by an Indian tribe or individual subject to a restriction by the United States against alienation; and (ii) 'trust or restricted interest in land' or 'trust or restricted interest in a parcel of land' means an interest in land, the title to which interest is held in trust by the United States for an Indian tribe or individual, or which is held by an Indian tribe or individual subject to a restriction by the United States against alienation." Additionally, the 1991 U.S. Supreme Court decision, Oklahoma Tax Comm'n v. Citizen Band Potawatomi Indian Tribe, 498 U.S. 505 (1991), affirmed that trust land qualifies as a reservation where "it has been

base.[364] As highlighted by Dean Kronk Warner, there are two main avenues through which tribes enact environmental regulations: through their own tribal sovereignty as nations and when EPA has delegated authority through Section 518 of the CWA to treat tribes in a similar manner as states ("TAS" provisions).[365]

After *Sackett*, many tribes signed on to the America the Beautiful Freshwater Challenge, including: the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, Gila River Indian Community, Jamestown S'Klallam Tribe, Navajo Nation, Nez Perce Tribe, Confederated Tribes and Bands of the Yakama Nation, Yurok Tribe, and Nottoway Indian Tribe of Virginia.[366]

Tribes have also been involved in WOTUS rulemaking and filed an Amicus Brief in *Sackett* consistently arguing against reducing federal jurisdiction. Prior to *Sackett,* numerous tribes, entities representing tribes, and tribal organizations submitted comments to EPA expressing the importance of the wetlands to tribes and urging the agency to not reduce federal jurisdiction through proposed rules to re-define WOTUS.[367] When the Supreme Court was considering the issues in

validly set apart for the use of the Indians as such, under the superintendence of the Government." *Id.* at 506.

364. NAT'L CONG. OF AM. INDIANS, *supra* note 342, at 26.

365. Kronk Warner, *supra* note 358, at 792; *see supra* text accompanying note 187 (discussing "Tribes as States" (TAS) permitting under §518(e) of the CWA).

366. *Freshwater Challenge*, *supra* note 337.

367. Comments for the Tribal Consultation period on the proposed changes to WOTUS can be found on EPA's website. *Tribal Consultation – Pre-Proposal of a Revised Definition of Waters of the United States*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wotus/tribal-consultation-pre-proposal-revised-definition-waters-us [https://perma.cc/NE7T-BMQG] (last updated Sept. 8, 2023). *See, e.g.*, Little Traverse Bay Bands of Odawa Indians, Notification of Consultation and Coordination on Revising the Definition of "Waters of the United States" (Sept. 28, 2021), https://www.epa.gov/system/files/documents/2021-11/ltbb_10-4-2021_508.pdf [https://perma.cc/YMC8-ZCQ5]; Navajo Nation, Navajo Nation's Comments in Response to Letter to Tribal Leaders, "Notification of Consultation and Coordination on Revising the Definition of 'Waters of the United States'" (July 29, 2021) and Notice of Public Meetings Regarding "Waters of the United States"; Establishment of a Public Docket; Request for Recommendations, 86 Fed. Reg. 147 41911 (August 4, 2021) (Oct. 1, 2021), https://www.epa.gov/system/files/documents/2021-11/navajo1.pdf [https://perma.cc/4CR9-LVSY]; Pueblo of Jemez, Comments of Pueblo of Jemez in Response to Request for Recommendations on Defining "Waters of the United States" (Oct. 4, 2021), https://www.epa.gov/system/files/documents/2021-11/pueblo1_0.pdf [https://perma.cc/7D3R-7YQH]; Bad River Band of Lake Superior Tribe of Chippewa Indians, Tribal Comments as Consultation on Waters of the United States (WOTUS) Rulemaking (Oct. 4, 2021), https://www.epa.gov/system/files/documents/2021-11/letter1.pdf [https://perma.cc/VW5R-RD5M]; Great Lakes Indian Fish and Wildlife Commission, Notification of Consultation and Coordination on Revising the Definition of "Waters of the United States" (Oct. 4, 2021),

Sackett, many tribes filed an Amicus Brief of Tribes, discussed above, arguing the importance of wetlands and ephemeral and intermittent streams.[368] However, the Supreme Court was silent on how its decision would impact tribes when it wrote the opinion in *Sackett*.

2. State Responses to *Sackett*

With the federal government unable to mount a regulatory response to the loss of federal jurisdiction, the focus turns to the states and what will be a piecemeal approach to waters of regional and national significance. The Environmental Law Institute's report, *Filling the Gaps: Strategies for States/Tribes for Protection of Non-WOTUS Waters*, shows the different programs prior to the *Sackett* decision.[369] In May 2023, twenty-four states relied primarily on federal jurisdiction to "protect freshwater wetlands and tributaries from dredge and fill, rather than on independent state permit programs;"[370] nineteen states had permitting programs applicable to their waters, including wetlands, that may go beyond federal jurisdiction;[371] and seven states had enacted "specialized laws and regulations, or case-by-case review practices, that are expressly intended to fill identified gaps in CWA coverage."[372]

https://www.epa.gov/system/files/documents/2021-11/glifwc_10-4-2021_508.pdf [https://perma.cc/6NF6-RTQ8]. Additionally, letters were submitted on behalf of some tribes in the public comment period. *Revising the Definition of "Waters of the United States*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/wotus/revising-definition-waters-united-states [https://perma.cc/96F7-H28F] (last updated Sept. 3, 2024). *See for example* Great Lakes Indian Fish and Wildlife Commission, GLIFWC Comments on Proposed Rule, Docket ID No. EPA-HQ-OW-2021-0602 (Feb. 7, 2022); Earthjustice, Proposed Revised Definition of "Waters of the United States" Rule, Docket ID No. EPA-HQ-OW-2021-0602 (Oct. 4, 2021); Comments of Tohono O'odham Nation, Quinault Indian Nation, Bad River Band of Lake Superior Chippewa, Suquamish Tribe, Menominee Indian Tribe of Wisconsin, Fond du Lac Band of Lake Superior Chippewa, Swinomish Indian Tribal Community, Pascua Yaqui Tribe, and Iowa Tribe of Oklahoma (Feb, 7, 2022) [On File with the Columbia Journal of Environmental Law].

368. Amicus Brief of Tribes, *supra* note 142.

369. KIHSLINGER ET AL., *supra* note 171, at 4.

370. States that relied on federal authority as of May 2023 for coverage of these waters are: Alabama, Alaska, Arkansas, Colorado, Delaware, Georgia, Hawaii, Idaho, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, South Carolina, South Dakota, Texas, and Utah. *Id.* at 4.

371. It is important to note that coverage of these programs varies. The states identified in the ELI Report are: California, Connecticut, Florida, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, Washington, and Wisconsin. *Id*.

372. These states are: Ohio, Indiana, Wyoming, North Carolina, Arizona, Illinois, and West Virginia, plus the District of Columbia. *Id.* at 4–5.

Similar to how the federal government defines WOTUS, each state has their own definitions of "waters of the state."[373] State definitions can include additional waters including groundwater, wetlands, and springs.[374] These definitions identify "waters of interest to the states" for both regulatory (such as water quality) and non-regulatory (such as resource planning, conservation, or recreation) reasons.[375]

Post-*Sackett,* states have responded in a variety of ways that we group here into three strategies: strengthening regulatory protections beyond federal jurisdiction, weakening regulatory programs to mirror federal jurisdiction, and emphasizing non-regulatory wetland and stream protections, such as conservation easements or purchases.

a. Strengthened/Increased Protections over Wetlands

Some states have enacted or have proposed legislation strengthening regulatory wetland protections to fill the gaps left by the reduction in federal jurisdiction. Here, we highlight efforts in Colorado, Delaware, and Illinois.

Pre-*Sackett*, Colorado had been a state that relied on federal jurisdiction for regulatory authority over wetlands and ephemeral streams. In response to *Sackett,* Colorado signed on as a member of the Biden-Harris America the Beautiful Freshwater Challenge.[376] Then, Colorado passed HB24-1379 and Governor Jared Polis signed the Bill on May 29, 2024.[377] The new law's legislative declaration states that, as of March 2024, Colorado had no state permitting program to authorize the discharge of dredged or fill material into state waters and, instead, relied on USACE under Section 404 of the CWA.[378] The legislative declaration directly states that *Sackett,* and the resulting narrowing of federal jurisdiction over wetlands, has created a need for a state permitting program due to the risk of harm to Colorado's waters.[379] The declaration acknowledges that water is Colorado's "most critical natural resource" and protecting water quality is an utmost priority.[380] The law specifically notes wetlands and seasonal streams have a crucial role in "maintaining water quality . . .

373. McElfish, *supra* note 170, at 10681.
374. *Id*.
375. *Id*.
376. *Freshwater Challenge*, *supra* note 337.
377. H.B. 24-1379, 74th Gen. Assemb., Reg. Sess. (Colo. 2024).
378. COLO. REV. STAT. § 25-8-205.1(1)(a)(II) (2024).
379. *Id.*
380. *Id.* § 25-8-205.1(1)(b)(I).

recharging groundwater, controlling floods, and keeping pollution from entering larger bodies of water."[381] Additionally, the declaration states it is in the "state's interest to expressly include 'wetlands' as a category of 'state waters,'" when considering the vital role wetlands play in protecting Colorado's water resources.[382]

This new law charges the Water Quality Control Commission in the Colorado Department of Public Health and the Environment to promulgate rules to "implement a state dredge and fill discharge program" by December 31, 2025.[383] Further, the rules "must focus on avoidance and minimization of adverse impacts and on compensation for unavoidable adverse impacts of dredge and fill activity."[384] The law defines wetlands as "areas that are inundated or saturated by surface or groundwater at a frequency and for a duration sufficient to support, under normal circumstances, a prevalence of vegetation typically adapted for life in saturated soil conditions."[385] It further defines isolated wetlands as "wetlands wholly surrounded by uplands" with some exceptions.[386] This law creates a state permitting program for the discharge of dredge or fill material that the USACE's Section 404 program, prior to *Sackett,* can serve as a model to build Colorado's program on.[387]

Prior to the *Sackett* decision, Delaware relied on federal jurisdiction under the CWA for wetlands regulation.[388] Delaware's Senate Bill 290 was proposed on May 8, 2024 and would institute a state nontidal wetlands program that would "cover gaps in federal jurisdiction under the CWA and mitigate the uncertainty surrounding the limits to federal jurisdiction."[389] The bill includes a purpose section, stating in part that "the preservation of tidal and nontidal wetlands is crucial to the protection of the natural environment."[390] Additionally, the purpose section states that the "loss or despoilation" of wetlands

381. *Id.* § 25-8-205.1(1)(b)(II).

382. *Id.* § 25-8-205.1(1)(b)(III).

383. *Id.* § 25-8-205.1(4)(a)(I).

384. COLO. REV. STAT. § 25-8-205.1(4)(a)(I).

385. *Id.* § 25-8-205.1(3)(v) (2024).

386. "The term 'isolated wetlands' does not include wetlands where any portion of the wetland is within the one-hundred-year floodplain or within one thousand five hundred feet of the ordinary high watermark of other state waters. In the absence of one-hundred-year floodplain mapping by the federal emergency management agency, the 1,500 feet distance criterion applies." *Id.* § 25-8-205.1(3)(p) (2024).

387. *Id.* § 25-8-205.1(1)(B)(VI) (2024).

388. KIHSLINGER ET AL., *supra* note 171, at 4.

389. An Act to Amend Title 7 of the Delaware Code Relating to the Protection of Wetlands, S.B. 290, 152nd Gen. Assemb. (Del. 2024).

390. Del. S.B 290 § 6602.

"substantially impairs our resiliency as a State to withstand the impacts of climate change."[391]

Currently, Delaware regulates (1) tidal wetlands and (2) nontidal wetlands larger than 400 acres and not used for agricultural purposes.[392] Under Delaware's current laws, tidal wetlands only include areas that are subject to tidal action along certain waterways and that grow or are capable of growing certain plant species.[393] A permit is required for any activity in these tidal wetlands barring certain exemptions.[394]

The proposed bill would change the current definition of wetlands: "all tidal and nontidal wetlands in the state . . . shall be defined in regulations adopted by" Delaware's Department of Natural Resources and Environmental Control and "based upon generally accepted criteria and methodologies, including (i) the U.S. Army Corps of Engineers Wetlands Delineation Manual dated January 1987, (ii) any regional supplemental guidance pertaining to local conditions, and (iii) National Wetlands Inventory Maps."[395] Under the proposed bill, activities in both tidal and nontidal wetlands, removing the 400 acre minimum, would require a permit barring certain exemptions.[396] Additionally, the applicant would have the burden of proving whether the proposed activity is or is not on a tidal or nontidal wetland.[397] The bill is assigned to the Senate Environment, Energy, and Transportation Committee and is pending.[398]

391. *Id*.

392. DEL. CODE ANN. tit. 7, § 6603(h) (2024). *See also What's Regulated?*, DEL. DEP'T OF NAT. RES. & ENV'T CONTROL, https://dnrec.delaware.gov/water/wetlands/whats-regulated/ [https://perma.cc/Q2SE-MZJQ] (last visited June 26, 2024).

393. DEL. CODE ANN. tit. 7, § 6603(h) (2024).

394. DEL. CODE ANN. tit. 7, § 6606 (2024). Exemptions include mosquito control activities authorized by the Department; construction of directional aids to navigation; duck blinds; foot bridges; the placing of boundary stakes; wildlife nesting structures; grazing of domestic animals; haying; hunting; fishing and trapping. DEL. CODE ANN. tit. 7, § 6606 (2024).

395. Del. S.B. 290 § 6603(i).

396. The current exemptions remain the same, but they are extended to all wetlands. Permit exemptions added for nontidal wetlands are:

> [n]ormal activities established prior to the adoption of [these] regulations….required for the farming and production of food crops, such as plowing, seeding, cultivating and harvesting provided that such activity is part of an established and on-going operation for the farming and production of food crops, and an operation ceases to be established when the area on which it was conducted has been converted to another use or has lain fallow or idle for 5 years except as part of a conventional, crop rotation cycle.

Del. S.B. 290 § 6606.

397. Del. S.B. 290 § 6604(c).

398. Del. S.B. 290.

Prior to *Sackett,* Illinois was one of seven states that provided some regulatory authority over specific activities in wetlands.[399] In response to *Sackett,* Illinois signed on as a member of the America the Beautiful Freshwater Challenge.[400] In Illinois, Senate Bill 3669 was proposed on February 9, 2024, and would create a Wetlands and Small Streams Protection Act.[401] This Act aims to "restore protections for wetlands and small streams that were formerly protected from pollution and destruction by the Clean Water Act."[402] The Act's findings and intent section states Illinois has "historically relied on" the CWA's 404 permit program through the USACE and EPA to "prevent harm to aquatic resources from unauthorized discharges of dredge or fill material."[403] Specifically, the findings and intent section states the *Sackett* decision has rolled back the scope of WOTUS, removing CWA protections for many waters of the state, including wetlands.[404]

Further, the findings and intent section highlights streams as well as wetlands. It states Illinois has 9,894 miles of streams that "provide water for surface water intakes, supplying public drinking water systems that rely at least in part on intermittent, ephemeral, or headwater streams."[405] This acknowledges that non-continuous streams are important to water resources and should also be afforded regulatory protections.

Currently, Illinois' state wetland regulation is based in the Interagency Wetland Policy Act of 1989,[406] protecting wetlands from certain state-funded activities.[407] Under the Wetland Policy Act, "wetlands," like the definition used by USACE, are defined as:

> land that has a predominance of hydric soils (soils which are usually wet and where there is little or no free oxygen) and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of hydrophytic vegetation (plants typically found in wet habitats) typically adapted for life in saturated soil conditions. Areas which are restored or created as the result of mitigation or planned construction

399. KIHSLINGER ET AL., *supra* note 171, at 5.

400. *Freshwater Challenge*, *supra* note 337.

401. Wetlands and Small Streams Protection Act, S.B. 3669, 103rd Gen. Assemb. (Ill. 2024).

402. A parallel bill was proposed in the house on the same date. H.B. 5386, 103rd Gen. Assemb. (Ill. 2024). For the purposes of this article, we will track and refer to Senate Bill 3669.

403. Ill. S.B. 3669 § 5(7).

404. Ill. S.B. 3669 § 5(9).

405. Ill. S.B. 3669 § 4(4).

406. 20 ILL. COMP. STAT. 830 (2024).

407. 20 ILL. COMP. STAT. 830/1-3 (2024).

> projects and which function as a wetland are included within this definition even when all three wetland parameters are not present.[408]

The proposed bill would change this definition to "those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."[409]

The proposed bill would create a state wetland permitting program, stating no person may discharge dredge or fill material from a point source into a wetland or small stream protected by this act unless authorized.[410] It also creates 3 classes of wetlands—Class I, Class II, and Class III—with Class I requiring an individual permit, Class II requiring either a general or individual permit, and Class III requiring a general permit unless the Illinois Department of Natural Resources notifies the applicant that the regulated activity will cause a "significant negative impact on State water quality," and will require an individual permit instead.[411] The bill is currently pending and, as of April 2024, was re-referred to Assignments.[412]

b. Weakened/Decreased Protections over Wetlands

On the other end of the spectrum, some states have responded to *Sackett* by proposing legislation that weakens existing state laws to scale back programs and mirror an emaciated federal jurisdiction. Generally, these rollbacks are pushed by the National Association of Home Builders,[413] the National Association of Realtors, and the Farm Bureau.[414] Here we highlight efforts in North Carolina and Indiana.

Rollbacks in wetlands protections in North Carolina have been backed by the North Carolina Home Builders Association.[415] North Carolina's response post-*Sackett* has been to reduce regulatory

408. 20 ILL. COMP. STAT. 830/1-6(a) (2024).

409. Ill. S.B. 3669 § 10.

410. Ill. S.B. 3669 § 25(a).

411. Ill. S.B. 3669 § 25(b).

412. Ill. S.B. 3669 § 15(c).

413. *See generally Builders Score Big in SCOTUS Decision on WOTUS*, NAT'L ASS'N OF HOME BUILDERS (May 26, 2023), https://www.nahb.org/blog/2023/05/scotus-wotus-decision [https://perma.cc/6S58-L23F]; Miranda Willson, *Homebuilders Flex as Feds Cede Wetland Oversight to States*, E&E NEWS BY POLITICO (Mar. 28, 2024), https://www.eenews.net/articles/homebuilders-flex-as-feds-cede-wetland-oversight-to-states/ [https://perma.cc/SVA5-BRJ7].

414. Willson, *supra* note 413.

415. *See id.*; John Flesher & Michael Phillis, *States at the Forefront of Fights Over Wetlands Protections After Justices Slash Federal Rules,* ASSOCIATED PRESS (Aug. 30, 2023), https://apnews.com/article/wetlands-supreme-court-state-rules-development-4917c6df50c0cd15da2915fc12f9445e [https://perma.cc/H2YC-KUD3].

controls while simultaneously increasing non-regulatory protections. On June 27, 2023, Senate Bill 582, otherwise known as the North Carolina Farm Bill, passed when the legislature overrode Governor Roy Cooper's veto.[416] This law restricts wetlands classified as waters of the state to mirror waters defined as WOTUS, and it further specifies that wetlands do not include prior converted cropland.[417] This new North Carolina law rolls back prior protections the state had in place for isolated wetlands.[418]

Prior to *Sackett,* Indiana had state regulatory protections beyond the federal minimum for wetlands.[419] The state wetlands program, mainly focused on isolated wetlands, classifies wetlands into three categories—Class I, Class II, and Class III[420]—with Class III afforded the most protections.[421] Indiana's Governor Eric Holcomb signed House Bill 1383 on February 12, 2024.[422] This new state law redefines Class III, thus re-categorizing some previously Class III wetlands into Class II, which are not afforded as many protections under the state program.[423]

Before this new law, Class II wetlands were defined as "[a]n isolated wetland that supports moderate habitat or hydrological functions, including an isolated wetland that is dominated by native species but is generally without: (A) the presence of; or (B) habitat for; rare, threatened, or endangered species."[424] Class III wetlands were defined as an isolated wetland that either (1) "is located in a setting undisturbed or minimally disturbed by human activity or development and that supports more than minimal wildlife or aquatic habitat or hydrologic function;" or (2) is one of the rare and ecologically important types

416. S.B. 582, 2023 Gen. Assemb. (N.C. 2024).

417. N.C. S.B. 582 § 15(c).

418. *Legislature Overrides Veto of Bill Cutting Wetland Regulation,* COASTAL REV. (June 27, 2023), https://coastalreview.org/2023/06/legislature-overrides-veto-of-bill-cutting-wetland-regulation/ [https://perma.cc/EFM4-8EQE].

419. KIHSLINGER ET AL., *supra* note 171, at 6.

420. IND. CODE § 13-11-2-25.8(a) (2024).

421. IND. CODE § 13-18-22-2 (2024).

422. H.B. 1383, 123rd Gen. Assemb., 2d Reg. Sess. (Ind. 2024); *see also* Whitney Downard, *Holdcomb Signs First Bill of 2024, Rolls Back Wetlands Protections*, IND. CAP. CHRON. (Feb. 12, 2024), https://indianacapitalchronicle.com/briefs/holcomb-signs-first-bill-of-2024-rolls-back-wetlands-protections/ [https://perma.cc/W9AH-5N4S].

423. IND. CODE § 13-11-2-25.8(a) (2024); Lauren Baldwin, *Indiana Wetlands Bill Becomes Law,* ENV'T L. NEWS, INDIANAPOLIS BAR ASS'N (Mar. 4, 2024), https://www.indybar.org/?pg=EnvironmentalLawNews&blAction=showEntry&blogEntry=104278# [https://perma.cc/H73P-7CCN].

424. An Act to Amend the Indiana Code Concerning Environmental Law, H.B. 1383, 123rd Gen. Assemb., 2d Reg. Sess. (Ind. 2024).

listed in code (i.e., acid bog, fen, forested fen, dune and swale, or sand flat).[425]

Class II wetlands now mean either: (1) "isolated wetland[s] that support[] moderate habitat or hydrological functions, including an isolated wetland that is dominated by native species but is generally without: i) the presence of; or ii) habitat for rare, threatened, or endangered species"[426] or (2) certain types of wetlands (i.e., acid bog, acid seep, circumneutral bog, circumneutral seep, cypress swamp, or dune and swale) that are: (i) "located in a setting more than minimally disturbed by human activity or development" or (ii) support "less than minimal wildlife or aquatic habitat or hydrologic function."[427] Class III wetlands are redefined to mean isolated wetlands that: (1) are at least one of the rare and economically important type categories listed in the code (e.g., sand flat, muck flat, panne, etc.); or (2) are "located in a setting undisturbed or minimally disturbed by human activity or development and that support[] more than minimal wildlife or aquatic habitat or hydrologic function" and that are at least one of the rare and economically important type categories listed in the code (e.g., wet sand prairie, wet floodplain forest, shrub swamp, etc.).[428] Class II wetlands are exempted from regulation if they are: (1) not located within the boundaries of a municipality and have an area of not more than more than three-eighths of an acre; or (2) located within the boundaries of a municipality and have an area of not more than three-fourths of an acre.[429]

Ultimately, fewer isolated wetlands are now covered by this state program, leaving a gap in wetland protection.

In the next section, we will discuss non-regulatory actions taken in some states to increase protections for wetlands.

c. Increases in Non-Regulatory Protections for Wetlands

Some states chose other actions, including executive and program actions besides creating a wetland permitting program, to pursue wetland protections. Since these non-regulatory approaches can be pursued by executive action despite legislative authority that opposes wetland regulations, they offer a more flexible approach. The Biden-

425. *Id.*
426. IND. CODE § 13-11-2-25.8(a)(2)(A) (2024).
427. IND. CODE § 13-11-2-25.8(a)(2)(B) (2024).
428. IND. CODE § 13-11-2-25.8(a)(3) (2024).
429. IND. CODE § 13-11-2-74.5(a)(6) (2024).

Harris Freshwater Challenge is the federal example. Here we highlight efforts in North Carolina, New Mexico, and Wisconsin.

North Carolina is a member of the America the Beautiful Freshwater Challenge.[430] And while the legislature enacted post-*Sackett* wetland regulatory reforms that reduced state jurisdiction, the Governor used executive action to further wetlands protection. On February 12, 2024, Governor Roy Cooper signed Executive Order No. 305, "An Order to Protect and Restore North Carolina's Natural and Working Lands."[431] EO 305's wetlands-specific goals include, by 2040, to: permanently conserve one million new acres of North Carolina's natural lands, with a focus on wetlands; and restore or reforest one million new acres of the state's forests and wetlands as measured from 2020.[432] The EO directs respective agencies to avoid or minimize projects that would impact vulnerable wetlands such as pocosins (peat bogs); to study the social, economic, and environmental value of protecting the state's wetlands, especially wetlands that recently lost state and federal protections; "to go after federal funding to protect and restore wetlands to enhance flood resiliency, improve water quality, and sequester carbon;" and "to promote and support new and ongoing conservation and restoration, and climate resiliency efforts within tribal communities."[433]

Governor Cooper's EO spoke directly to the *Sackett* decision as well as the North Carolina General Assembly's legislative override of the Governor's veto of the NC Farm Bill, discussed above, as recent actions warranting further protections for wetlands.[434] The EO also recognized the "paramount importance" of wetlands for flood control, filtration, aquifer regeneration, recreation, habitat, biodiversity, and reducing the risk of wildfire for communities.[435] It also highlighted the importance of pocosins (peat bogs)—as North Carolina has the most in the world—for carbon sequestration, water quality through filtration, and mitigating flood and fire risks.[436]

430. *Freshwater Challenge*, *supra* note 337.

431. Exec. Order No. 305 (N.C. 2024).

432. *Id.*

433. *Id.*; see also Press Release, N.C. Off. of the Governor, Governor Cooper Signs Executive Order Setting Statewide Conservation Goals for Forests and Wetlands (Feb. 12, 2024), https://governor.nc.gov/news/press-releases/2024/02/12/governor-cooper-signs-executive-order-setting-statewide-conservation-goals-forests-and-wetlands [https://perma.cc/U2DB-JQHQ].

434. Exec. Order No. 305 (N.C. 2024).

435. *Id.*

436. *Id.*

Further, the EO recognizes the increasing impacts of climate change on North Carolina including more frequent and intense hurricanes, flooding, extreme temperatures, sea level rise, and saltwater intrusion which are already impacting the state, causing more than $250 billion in damages in recent years.[437] In terms of flooding, the EO notes that North Carolina is investing millions of dollars into flood resiliency activities.[438] The EO also provides definitions, defining wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."[439] The definition also includes a statement that wetlands generally include swamps, marshes, bogs, pocosins, bays and similar areas.[440] The EO states the definition "does not depend on state or federal law" and intends to be "broader in scope than the current law."[441]

New Mexico is a member of the America the Beautiful Freshwater Challenge.[442] Prior to *Sackett,* New Mexico relied entirely on the CWA for regulatory protection of their waters and wetlands.[443] New Mexico, as discussed above, has a state wetlands program that is not regulatory. After *Sackett,* the focus shifted to funding wetlands mapping and monitoring. Initial efforts to pass S.B. 111 to appropriate funding to support monitoring and enforcement of water regulations and increase mapping did not pass.[444] A similar funding effort was launched in H.B. 2, the General Appropriations Act of 2024, which ultimately passed and was signed by Governor Michelle Grisham on March 6, 2024.[445] This law transfers $7 million to the water quality management fund for the "development, implementation, and administration of state surface water and groundwater permitting programs."[446]

437. *Id.*
438. *Id.*
439. Exec. Order No. 305 (N.C. 2024).
440. *Id.*
441. *Id.*
442. *Freshwater Challenge*, *supra* note 337.
443. KIHSLINGER ET AL., *supra* note 171, at 4.
444. An Act Making an Appropriation to the Department of Environment to Provide Additional Resources to Protect Water in the State, S.B. 111, 56th Gen. Assemb., 2d Reg. Sess. (N.M. 2024); *See also* 2024 Legislative Outcome – Protect State Waters, CONSERVATION VOTERS N.M. (Mar. 5, 2024), https://cvnm.org/2024-legislative-outcomes-protect-state-waters/ [https://perma.cc/X2KW-VBL7].
445. An Act Making General Appropriations and Authorizing Expenditures by State Agencies Required by Law, H.B. 2, 56th Gen. Assemb., 1st Reg. Sess. (N.M. 2024).
446. N.M. H.B. 2 § 5(152).

Wisconsin, one of the nineteen states that had an existing state wetlands program on the books before *Sackett,* is another state that increased wetlands protections outside of regulatory efforts after the decision. Governor Tony Evers signed S.B. 222 into law on April 3, 2024.[447] This Bill creates the Pre-Disaster Flood Resilience Grant Program, which provides grants for the "purpose of identifying flood vulnerabilities, identifying options to improve flood resiliency, and restoring hydrology in order to reduce flood risk and damages in flood-prone communities."[448]

Now that the definition of WOTUS has changed resulting in limited federal jurisdiction over isolated wetlands and ephemeral streams, regulation and protection falls to states and tribes. Some states have strengthened their regulations since *Sackett,* but others took the chance to decrease protections to isolated wetlands and ephemeral streams, making it easier for developers or other entities to impact these water features. This has resulted in various approaches over the Nation. Water is not static; it does not conform to state or other political boundaries. Water from an upstream source can and does have impacts on downstream users, and decreased water resources in water stressed regions can have impacts on the areas.

V. CONCLUSION

In *Sackett,* the Supreme Court unsettled forty-five years of relative stability in the contested definition of which wetlands and nonperennial streams are covered by federal jurisdiction. The resulting narrowed jurisdiction, which requires a continuous surface water connection to a traditional navigable water, has left a gap in CWA protections for vulnerable and vital water resources such as isolated or groundwater-fed wetlands and ephemeral and intermittent streams. *Sackett* has left the protection of these waters, if there is to be any, to tribes and states. Tribes are uniquely positioned within the governmental structure of the U.S. as sovereign nations, and the U.S. has a trust responsibility to tribes to protect their land and natural resources, but the Court was silent in this regard when it reduced federal jurisdiction. Tribes and states are now solely responsible for regulating nonfederal wetlands and ephemeral and intermittent streams. States have responded by considering new legislation that either rolls back protections further to align with federal jurisdiction or creates

447. 2023 Wis. Act. 265; WIS. STAT. § 323.63 (2024).
448. WIS. STAT. § 323.63(2) (2024).

new regulatory programs to fill the gap. This patchwork of programs across the U.S. will result in a mismatch of programs from one area to another. *Sackett's* lowered federal floor and the patchwork response to it will not be sufficient in safeguarding the chemical, physical, and biological integrity of the Nation's waters.