

NAVIGATING MURKY WATERS: THE RISE AND FALL OF CLEAN WATER PROTECTION IN THE UNITED STATES

MARTIN A. MCCRORY* AND ANJANETTE H. RAYMOND*

*In rivers, the water that you touch is the last of what has past and the first
of that which comes... ***

ABSTRACT

According to water quality and monitoring violations from the Environmental Protection Agency (“EPA”),¹ an estimated 63 million people in America were exposed to potentially unsafe water more than once during the past decade. These failures have potentially exposed tens of millions of people to dangerous contaminants; cities like New York

* Associate Professor in the Kelley School of Business, Indiana University. Professor McCrory is the former Chief Diversity Officer for I.U. Bloomington and IU Emeritus Associate Vice President for Diversity Equity and Multicultural Affairs, Vice Provost for Educational Inclusion and Diversity. He is also a former: Deputy Attorney General for the State of Indiana (specializing in environmental law); trial attorney for the United States Department of Justice, the Environmental Enforcement Section (earning DOJ’s national award for Outstanding Service); Senior Attorney for the Natural Resources Defense Council (NRDC); the Director of NRDC’s Public Health Program; member of the Board of Directors for Friends of the Earth (FOE); and Chair of FOE’s Litigation Committee.

* Director, Ostrom Workshop, Program on Data Management and Information Governance; Associate Professor, Kelley School of Business, Indiana University; Adjunct Associate Professor of Law, Maurer School of Law, Indiana University. All opinions are those of the author. The authors would like to thank Mantas Grigorovicus (Maurer Law School) and Kyle Zyck (Indiana University, B.S., Business, 2021). Kyle was also the creator of the visualizations in the paper. We appreciate all of their help.

** The Practical Cogitator (Charles P. Curtis, Jr. & Ferris Greenslet eds., 1945644 Random House, Inc. 1947) (Statement of Leonardo Da Vinci).

¹ Agnel Philip et al., *63 Million Americans Exposed to Unsafe Drinking Water*, USA TODAY (Aug. 14, 2017), <https://www.usatoday.com/story/news/2017/08/14/63-million-americans-exposed-unsafe-drinking-water/564278001/>.

City and Flint, Michigan draw headlines and news attention. Yet, many people suffer without the benefit of media coverage. In fact, 63 percent of Americans are now concerned a “great deal” about drinking water pollution.² “These incidents are getting media attention in a way that they didn’t a few years ago, but the patterns that we see in the data suggest that problems with drinking water quality are not just randomly distributed in the population—that there is a systemic bias out there.”³ Of course, water contamination is not merely about drinking water. In fact, water touches our daily lives in complex and continuous ways—from the food we eat to the lakes and rivers in which we swim. Despite the importance of water and growing concerns about its contamination and resource depletion, complex and confusing regulations exist in the institutional mechanisms we use to protect our water. This Article seeks to highlight the current conflict arising after the U.S. Supreme Court’s Decision in *Rapanos v. United States*, in which the long-understood definition of “waters of the United States” (“WOTUS”) was thrown into chaos.

This Article will first explore the evolution of clean water regulatory protections and enforcement in the United States, along with the definition of WOTUS. It will then analyze the Supreme Court’s decision in *Rapanos* and the resulting confusion in the courts, states, and regulatory agencies, stemming from this decision. This will include a brief discussion of the Obama administration’s approach to clean water regulation and the Trump administration’s current response. Finally, the Article will advocate for the return to the previous definition of WOTUS and its original intent; the necessity of engaging with people personally affected by water pollution in policy creation; and the need for court intervention to facilitate social justice.

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² *Id.*

³ *Id.* (quoting Texas A&M University researcher Manuel Teodoro).

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I. INTRODUCTION

The freshwater resources in the United States are immense and varied; they contain over two million miles of rivers and streams.⁴ However, about 59 percent of those waters are properly characterized as “intermittent or ephemeral.”⁵ That water does not flow all year long; instead, its flow is dependent on rainfall, season, or drought.

In addition to streams and rivers, there is a vast array of large bodies of standing water. In fact, there are approximately forty million acres of lakes, ponds, and reservoirs across the country.⁶ The Great Lakes alone contain over 20 percent of the world’s freshwater⁷ and 84 percent of North America’s surface fresh water.⁸

⁴ Susan Hunter & Richard W. Waterman, *ENFORCING THE LAW: THE CASE OF THE CLEAN WATER ACTS* 13 (1996).

⁵ Jon Devine, Nat’l Res. Def. Council, Comment Letter on Proposed Definition of ‘Waters of the United States’ Under the Clean Water Act, at 2-3 (Nov. 14, 2014) [hereinafter Devine, NRDC 2014 Water Rule Comments], https://www.nrdc.org/sites/default/files/wat_14111702a.pdf.

⁶ *Id.*

⁷ *Facts and Figures about the Great Lakes*, EPA, <https://www.epa.gov/greatlakes/facts-and-figures-about-great-lakes> (last updated Apr. 4, 2019) (stating that the Great Lakes contain 84 percent of North America’s surface fresh water).

⁸ *Id.*

Even more amazing is the fact that there are over one-hundred million acres of wetlands within the United States.⁹ In this context, the legal term “wetlands” is defined as zones of water-saturated soil supporting or capable of supporting vegetation and wildlife ecologically adapted to these particular environmental conditions; it includes areas such as swamps, marshes, or bogs.¹⁰ These numbers begin to illustrate the remarkable amount fresh water located within the borders of this country.

For example, the amount of surface water (the water located on the surface of the ground) that needs protecting from anthropogenic contamination is almost overwhelming. Our surface waters provide the source for 60 percent of the water supplied to American homes.¹¹ Additionally, an estimated 117 million Americans depend upon water supplies that draw at least in part from intermittent, ephemeral, or headwater streams (tributary stream of a river).¹² That means that nearly one-third of all Americans rely on seasonal waters, small streams, and tributaries for their daily drinking water.¹³ Certainly, surface water quality is significant for recreation, wildlife, and sheer aesthetic pleasure, but it is also critically important for drinking, food supply, infrastructure, and power; i.e., for our life.

In addition, U.S. groundwater (water below the surface of the Earth)¹⁴ makes up approximately 33 percent of the water that municipal and county

⁹ Devine, NRDC 2014 Water Rule Comments, *supra* note 5, at 3; *see also* EPA, EPA-843-R-15-005, NATIONAL WETLAND CONDITION ASSESSMENT 2011 25 (2011) [hereinafter EPA, NWCA], https://www.epa.gov/sites/production/files/2016-05/documents/nwca_2011_public_report_20160510.pdf (stating there is an estimated 110 million acres of wetlands in the conterminous United States, not including Alaska and Hawaii).

¹⁰ *See* Navigable Waters Protection Rule, 85 Fed. Reg. 22,250, 22,341 (Apr. 21, 2020) (to be codified at 40 C.F.R. § 120.2(3)(xvi)). *See generally* EPA, NWCA, *supra* note 9, at 1-2 (“Wetlands” is the collective term given to areas of the landscape that are transitional between land and water . . . Wetlands are defined by three important attributes: (1) plants that have adapted to survive and thrive in wet conditions (known as hydrophytes); (2) soils that exhibit features of prolonged saturation and changing wet and dry cycles; and (3) the presence of water at or near the surface of the ground for a time sufficient to produce soils and plant communities characteristic of wetlands.”).

¹¹ Melissa Denchak, *Water Pollution: Everything You Need to Know*, NAT’L RES. DEF. COUNCIL (May 14, 2018), <https://www.nrdc.org/stories/water-pollution-everything-you-need-know>.

¹² Devine, NRDC 2014 Water Rule Comments, *supra* note 5, at 3.

¹³ *Geographic Information Systems Analysis of Surface Drinking Water Provided by Intermittent, Ephemeral, and Headwater Streams in the U.S.*, EPA, <https://www.epa.gov/cwa-404/geographic-information-systems-analysis-surface-drinking-water-provided-intermittent> (last updated May 28, 2020).

¹⁴ *See Water Questions & Answers: How Important is Groundwater?*, U.S. GEOLOGICAL SURV., <https://water.usgs.gov/edu/qa-usage-gw.html> (last visited Oct. 21, 2020) (noting that

departments use every day to supply homes and businesses.¹⁵ Perhaps more important is the fact that almost 100 percent of those who provide their own water obtain it from groundwater sources.¹⁶ The EPA estimates that over thirteen million people rely on their own private wells, which obtain water from groundwater sources.¹⁷ These numbers are astounding and underscore the fact that conservation and protection of our water resources are a massive but imperative undertaking. However, our recent water pollution assessments belie concern for this vital resource.

The Natural Resources Defense Council's ("NRDC") 2017 report on water conditions states that 70.5 percent of all assessed lakes, reservoirs, and ponds had "impaired water quality."¹⁸ Similarly, the EPA's 2017 report found that nearly half of the country's ponds, half of reservoirs, and a third of lakes are so polluted that they are unfit for drinking, swimming, or fishing.¹⁹ The report also found that over 13 million acres of the assessed lakes, ponds, and reservoirs were impaired.²⁰

Incredibly, this number excludes any impairments to the Great Lakes;²¹ the Great Lakes numbers were so dismal, they would have drastically skewed the statistics at large. The EPA's 2017 assessment found that 98 percent of the Great Lakes' waters were impaired for one or more designated uses.²² The leading sources of contamination were three

groundwater is one of the nation's most important natural resources); *see also Private Drinking Water Wells*, EPA, <https://www.epa.gov/privatewells> (last updated July 15, 2020).

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Private Drinking Water Wells*, *supra* note 14.

¹⁸ Jon Devine, *Clean Water Act at 45: Despite Success, It's Under Attack*, NAT'L RES. DEF. COUNCIL (Oct. 18, 2017) (stating that the most recent available data from states indicate that, of assessed lakes, reservoirs, and ponds, 70.5 percent or 12,918,363 acres are impaired relative to applicable water quality standards), <https://www.nrdc.org/experts/jon-devine/clean-water-act-45-despite-success-its-under-attack/>.

¹⁹ *See* EPA, EPA-841-R-16-011, NATIONAL WATER QUALITY INVENTORY: REPORT TO CONGRESS, at 11 (Aug. 2017), https://www.epa.gov/sites/production/files/2017-12/documents/305brtc_finalowow_08302017.pdf (stating that the states identified 13,009,273 acres of lakes, ponds, and reservoirs areas impaired, about another 5,470,004 assessed acres good, and 34,621 acres threatened); *see also* EPA, EPA-841-R-16-113, NATIONAL LAKES ASSESSMENT (2012), https://www.epa.gov/sites/production/files/2016-12/documents/nla_report_dec_2016.pdf (demonstrating a similar and consistent trend in pollution).

²⁰ EPA, EPA-841-R-16-011, NATIONAL WATER QUALITY INVENTORY: REPORT TO CONGRESS, at 11 (Aug. 2017), https://www.epa.gov/sites/production/files/2017-12/documents/305brtc_finalowow_08302017.pdf.

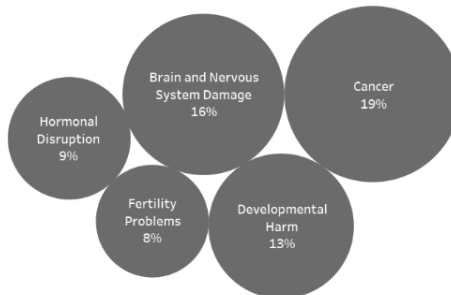
²¹ *Id.*

²² *Id.* at 14.

extremely hazardous substances: polychlorinated biphenyls (“PCBs”), dioxins, and mercury.²³

Rivers and streams fared relatively better, but over half of the rivers tested violated the scientifically established requirements necessary to keep these waters healthy for our use.²⁴ In fact, over 55 percent of all assessed rivers and streams were in violation of their own state’s water quality standards.²⁵ In addition, over 600,000 miles of rivers and streams failed to meet water quality requirements—that is over twice the distance to the moon.²⁶ These facts indicate that water pollution is an immediate existential threat to our citizens.

As established in the chart below, a varied number of contaminants cause direct impacts to individuals in terms of damage to the nervous system, increased of risk of cancer, fertility problems, and even long-term developmental harms.



Result and sum of % of Total Contaminants Tested. Size shows sum of # of Contaminants. The marks are labeled by Result and sum of % of Total Contaminants Tested.

Considering the decades of work done by citizens; industry; grass-root groups; national NGOs; and local, state, and federal agencies, these numbers are staggering. The unceasing struggle for water quality often seems a Sisyphean task.

This Article aims to explore the impact of the policy changes relating to water protections and sets out the research that supports the return to prior policy commitments to protect the “waters of the United States” (“WOTUS”). The detrimental effects of water pollution are often

²³ *Id.*

²⁴ *Id.* at 8.

²⁵ *Id.*

²⁶ EPA, EPA-841-R-16-011, NATIONAL WATER QUALITY INVENTORY: REPORT TO CONGRESS, at 8 (Aug. 2017), https://www.epa.gov/sites/production/files/2017-12/documents/305brtc_finalowow_08302017.pdf.

concentrated in particularly vulnerable communities who often fail to have a voice in policy development; as such, it is imperative that prior policy commitments are restored.

This Article will support these assertions first by examining the evolution of water protections in the United States, including the need to protect those who are at the greatest risk of suffering the negative environmental impacts of water pollution. Second, by considering policy changes prompted by recent Supreme Court holdings, this Article will explore how science and stakeholder-driven governance have influenced the recent promulgation of WOTUS rules. This Article asserts that these cases drastically changed prior water protection mandates and thereby granted permission for sweeping administrative policy changes favoring water polluters. Finally, this Article calls for a return to strong science-based water policy creation for the protection of all members of society.

II. THE EVOLUTION OF ENVIRONMENTAL REGULATORY PROTECTIONS IN THE UNITED STATES

American regulation of water pollution has evolved as the nation's understanding of the threat posed by water pollution has become more sophisticated.²⁷ However, these regulatory provisions remain insufficient. Many of the regulatory shortcomings can be traced to those who made the laws and who influenced the resulting policies. For example, in the past, the United States geared most of its water standards toward healthy adults, but that failed to consider the effects of pollutants on children and other more vulnerable populations.²⁸ Historically, regulatory negotiations did not include parties who specifically represented the interests of young children, despite the fact that, based upon body weight, the average child drinks two or three times as much water as the average adult.²⁹

After children, the groups most affected by water pollution are poor and minority populations.³⁰ They are often the victims of environmental injustice, including environmental racism.³¹ Improper hazardous waste

²⁷ Martin A. McCrory, *Standing in the Ever-Changing Stream: The Clean Water Act, Article III Standing, and Post-Compliance Adjudication*, 20 STAN. ENV'TL L.J. 73, 79 (2001) [hereinafter McCrory, *Standing in the Ever-Changing Stream*].

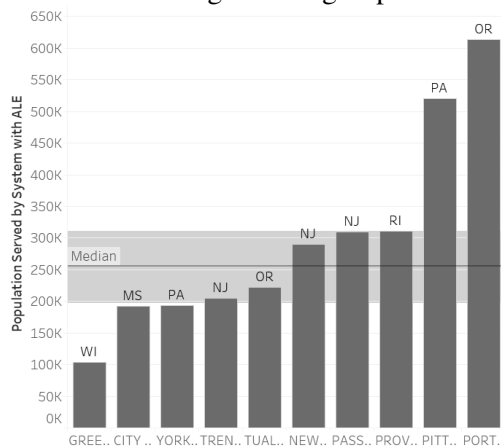
²⁸ KRISTIN SHRADER-FRECHETTE, TAKING ACTION, SAVING LIVES: OUR DUTIES TO PROTECT, ENVIRONMENTAL AND PUBLIC HEALTH 25 (2007).

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.* See generally JUST SUSTAINABILITIES: DEVELOPMENT IN AN UNEQUAL WORLD (Agyeman et al. eds., First MIT Press ed. 2003) (discussing the separate histories and intersections of environmental justice and sustainable development).

management facilities (often resulting in water and air pollution) are more likely to be located in their neighborhoods.³² Accordingly, a wide range of toxic and hazardous pollutants disproportionately burden the neighborhoods where the poor, the working-class, and communities of color reside—often as a result of intentional siting of the materials in these areas.³³ Despite this, the local, state, or federal recovery and remediation discussions rarely include these marginalized groups.³⁴



Sum of Population Served by System with ALE for each PWS Name. The marks are labeled by PWS State.

Ostensibly, large nonprofit environmental and conservation groups have taken on the role of representing the entire population of the United States.³⁵ However, these organizations primarily voice the interests and concerns of their constituencies, comprised of people like themselves—predominately white.³⁶

In the past, middle- and upper-income American males led these monochromatic organizations.³⁷ Quite naturally (and unfortunately), their resulting environmental actions often reflected the will and the voice of these citizens.³⁸

Similarly, state and federal regulatory negotiation talks and statutory construction meetings often have not included local representatives of the

³² David Naguib Pellow & Robert J. Brulle, *POWER, JUSTICE, AND THE ENVIRONMENT: TOWARD CRITICAL ENVIRONMENTAL JUSTICE STUDIES 2* (2005).

³³ *Id.*

³⁴ *Id.* at 12-13.

³⁵ MELISSA CHECKER, *POLLUTED PROMISES: ENVIRONMENTAL RACISM AND THE SEARCH FOR JUSTICE IN A SOUTHERN TOWN 20* (2005).

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

poor, people of color, or other traditionally disenfranchised members of potentially affected communities.³⁹ Thus, rulemakers did not hear first-hand assessments of the risks to those populations.⁴⁰ These affected groups also could not voice their perceptions and values vis-à-vis the scientific data that would affect their communities.⁴¹ Major environmental groups used their power to shape environmental perceptions, discussions, and debates for several decades,⁴² resulting in lopsided environmental protections.⁴³ Consequently, most of the early environmental protection (including water protection) efforts inured to the benefit of the residents of relatively unspoiled middle- and upper-income neighborhoods, while the residents of poor, racial minority, and ethnic minority communities (nearest to hazardous environmental areas) paid the price.⁴⁴

This resulted from at best a complacency and indifference to the distributive consequences of environmental policies for which the major environmental groups were advocating.⁴⁵ In fact, history shows that mainstream conservationism was replete with policies discriminating against the poor and minorities.⁴⁶ Often, mainstream policies and practices overtly or covertly excluded minority and poor citizens from the benefits of the national environmental movement.⁴⁷

Conservationist Gilford Pinchot and preservationist John Muir helped create the environmental philosophies of conservation and preservation,

³⁹ *Id.* at 40.

⁴⁰ *Id.*

⁴¹ See Eileen Guana, *The Environmental Justice Misfit: Public Participation and the Paradigm Paradox*, 17 STAN. ENV'TL L.J. 3, 32 (1998). See generally BENJAMIN A. GOLDMAN, NOT JUST PROSPERITY: ACHIEVING SUSTAINABILITY WITH ENVIRONMENTAL JUSTICE (1993) (discussing the empirical evidence supporting the claim that people of color and low-income communities face disproportionate environmental impacts from pollution).

⁴² CHECKER, *supra* note 35, at 20. For more on the role of environmental nonprofits in shaping U.S. environmental policy, see generally McCrory, *Standing in the Ever-Changing Stream*, *supra* note 27.

⁴³ See Guana, *supra* note 41, at 9-12.

⁴⁴ See *id.* at 10.

⁴⁵ See Jedediah Purdy, *The Long Environmental Justice Movement*, 44 ECOLOGY L.Q. 809, 814 (2018).

⁴⁶ See generally DORCETA E. TAYLOR, THE RISE OF THE AMERICAN CONSERVATION MOVEMENT: POWER, PRIVILEGE, AND ENVIRONMENTAL PROTECTION (2016) (highlighting the role of racism in conservation and the exclusion of the voices of people of color from many of its early formulations).

⁴⁷ See generally CAROLYN FINNEY, BLACK FACES, WHITE SPACES: REIMAGINING THE RELATIONSHIP OF AFRICAN AMERICANS TO THE GREAT OUTDOORS (2014) (providing a historical analysis of environmentalism as it relates to people of color in the United States).

respectively.⁴⁸ For many mainstream environmentalists, their original ideas are still very much alive, centering their thinking upon nature, wildlife, wilderness, and outdoor recreation.⁴⁹ Early mainstream environmentalists had a romantic outdoors epiphany;⁵⁰ to them, nature's beauty was a means of public health and civil virtue; it was a public good for social consumption.⁵¹ To some early environmentalists, however, this celebratory revelation was limited to the more erudite or affluent. They viewed ordinary people as crude in taste and judgement, believing that the public—particularly the poor and working class—lacked a true appreciation of the importance of nature.⁵²

Over time, elite professional advocacy for ecological stability displaced any notion of popular mobilization and participation for the protection of people.⁵³ Mainstream environmentalists seemed to lose track of their covenant regarding the redistribution of power and the distribution of justice regarding environmental protection.⁵⁴

Instead, the mainstream became increasingly comprised of large bureaucratized, hierarchical institutions that grew more and more distant from local grassroots concerns.⁵⁵ They adopted a more “discursive approach” to the environment that failed to mitigate the egregious conditions in which many local communities lived.⁵⁶ The resulting national dialogue revolved around a homogenous understanding of the world; i.e., it lacked the diverse perspective that comes from full integration at all levels of discussion. Regrettably, this national discourse

⁴⁸ *Id.* at 280-82, 306 (comparing the philosophy of Gilford Pinchot, the father of conservationism who was instrumental in the creation of the National Forest Service, against the philosophy of John Muir, who was the co-founder of the Sierra Club advocating for the preservation of these same resources).

⁴⁹ Lincoln L. Davies, *If You Give a Court a Commerce Clause: An Environmental Justice Critique of Supreme Court Interstate Waste Jurisprudence*, 11 *FORDHAM ENV'TL L. REV.* 207, 220 (1999).

⁵⁰ Jedidiah Purdy, *American Natures: The Shape of Conflict in Environmental Law*, 36 *HARV. ENV'TL L. REV.* 169, 199 (2012) (describing the romantic epiphany as giving nature a near-mystical significance, a place that restores harmony and vitality).

⁵¹ *Id.* (“Progressive conservationist’ commitments were shaped by ambivalence about democracy’s fidelity to popular will and utilitarianism’s egalitarianism of satisfactions.”).

⁵² *Id.* (“Ordinary people were pervasively crude in their tastes and judgment . . .”).

⁵³ See Purdy, *The Long Environmental Justice Movement*, *supra* note 45, at 815.

⁵⁴ See *id.*

⁵⁵ See Dorceta E. Taylor, *American Environmentalism: The Role of Race, Class and Gender in Shaping Activism 1820–1995*, 5 *RACE, GENDER & CLASS* 16, 47-49 (1997).

⁵⁶ See CHECKER, *supra* note 35, at 17.

on the environment and ecology had deep and long-lasting effects on the nation, setting the paradigm for decades.⁵⁷

The established national model emphasized an insular “woods-and-waters” approach to environmental protection.⁵⁸ The problem with this narrow, linear thinking is that environmental harms involve complex multivariable systems—real-world solutions demand diverse, multicultural, and multidimensional thinking.⁵⁹

Since the rise of the modern environmental regulatory system, social analysts and activists “have voiced specific concerns about the distributional impact of environmental protection efforts on racial minorities” and the poor.⁶⁰ Consequently, many grassroots organizations began to focus on the socioeconomic repercussions of widespread contamination and long-term exposure to pollutants, particularly in relation to those without a voice.⁶¹ Thus, environmental justice emerged and created a new contextual paradigm emphasizing human rights, working class concerns, and equal access to the full panoply of environmental benefits and protections.⁶²

The new environmental justice movement was specifically concerned with the distributional impacts and inequalities of environmental protection efforts.⁶³ By the 1980s, regulators and mainstream environmentalists began to consider issues of race, poverty, fairness, and distribution with the same seriousness and attention devoted to other environmental issues.⁶⁴ Certainly, civil rights activists had championed the cause of environmental equity and justice long before the 1980s, but the protests and grassroots activism brought national attention and outcry against this particular type of injustice.⁶⁵

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ J.B. Ruhl, *Sustainable Development: A Five-Dimensional Algorithm for Environmental Law*, 18 STAN. ENV'TL L.J. 31, 37 (1999).

⁶⁰ Tseming Yang, *Melding Civil Rights and Environmentalism: Finding Environmental Justice's Place in Environmental Regulation*, 26 HARV. ENV'TL L. REV. 1, 4 (2002).

⁶¹ *See id.* at 5.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ The 1982 Warren County protests, which specifically alleged racism in the disposal of PCB wastes in a predominantly African American rural community, “demonstrated the salience of race and equity issues even within environmental protection.” *Id.* at 5.

⁶⁵ *See* Rene Skelton & Vernice Miller, *The Environmental Justice Movement*, NAT'L RES. DEF. COUNCIL (Mar. 17, 2016), <https://www.nrdc.org/stories/environmental-justice-movement> (describing the previous history of the movement dating back to the 1960s and the culmination of the movement's efforts: the 1994 Executive Order regarding environmental justice).

Edwardo Rhodes states that the EPA's definition of environmental justice is a good first step in framing an operational interpretation with some minor changes.⁶⁶ Rhodes's resulting operational definition includes elements of distributive justice⁶⁷ and participative justice,⁶⁸ which focus on the fair treatment of all races, cultures, incomes, and educational levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that groups without political or economic capital should not disproportionately suffer the negative environmental impacts of pollution, environmental hazard, or be denied their portion of the positive benefits of environmental regulation.⁶⁹

By the 1980s, the environmental justice movement was in full swing.⁷⁰ This can be seen, for example, by the demonstrations in response to dump trucks rolling into the small community of Afton, heading for a newly constructed hazardous waste landfill.⁷¹ The frustrated residents and their allies were furious that state officials had dismissed their concerns over PCBs leaching into drinking water supplies; they confronted the trucks by lying down on roads leading into the landfill.⁷² Six weeks of marches and nonviolent street protests followed.⁷³ This strong local civic engagement increased the use of local actions and drew increasing attention to the negative impact of environmental policy upon those marginalized in its policy creation.⁷⁴

In 1987, the Commission for Racial Justice introduced a seminal report demonstrating the racial and socio-economic disparities involving hazardous waste in the United States.⁷⁵ The study reported that more than

⁶⁶ EDUARDO LAO RHODES, ENVIRONMENTAL JUSTICE IN AMERICA: A NEW PARADIGM 19 (2003).

⁶⁷ Distributive justice refers to the equitable distribution of a society's technological and environmental risks, impacts, and benefits.

⁶⁸ Participatory justice requires the direct participation of those affected most by a particular decision.

⁶⁹ RHODES, *supra* note 66, at 19.

⁷⁰ *See generally* KRISTIN SHRADER-FRECHETTE, ENVIRONMENTAL JUSTICE: CREATING EQUITY, RECLAIMING DEMOCRACY 7 (2002) (describing various foundational 1980s cases, such as the Carver Terrace cases in Texarkana, the Warren County cases in North Carolina, the Cancer Alley cases in Louisiana, and the Churchrock cases in New Mexico).

⁷¹ *See* Skelton & Miller, *supra* note 65.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *See id.*; Yang, *supra* note 60, at 20-21.

⁷⁵ *See* UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC

half of all Americans lived in residential areas containing one or more uncontrolled hazardous waste sites.⁷⁶ Significantly, they discovered that three out of every five African Americans and Hispanic Americans lived in communities with uncontrolled hazardous waste.⁷⁷ Even more shocking was the finding that over 70 percent of African Americans living in the identified metropolitan areas lived in communities with uncontrolled hazardous waste.⁷⁸ The groundwork was set: For the first time, strong, convincing research demonstrated clear adverse impacts of past environmental policies on those residents often left outside policy creation discussions.

By the 1990s, many local environmental justice organizations around the United States came together to call for increased direct participation and representation in environmental decisions.⁷⁹ In the “Letter to the Big Ten,” several organizations signed a letter describing the “genocidal dumping practices” within the United States and the role mainstream environmental groups played therein.⁸⁰ These organizations also discussed how their constituents suffered as a result of these practices, particularly emphasizing that they were never full participants in the decisionmaking processes.⁸¹

CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES 13 (1987), <https://www.nrc.gov/docs/ML1310/ML13109A339.pdf>.

⁷⁶ *Id.*

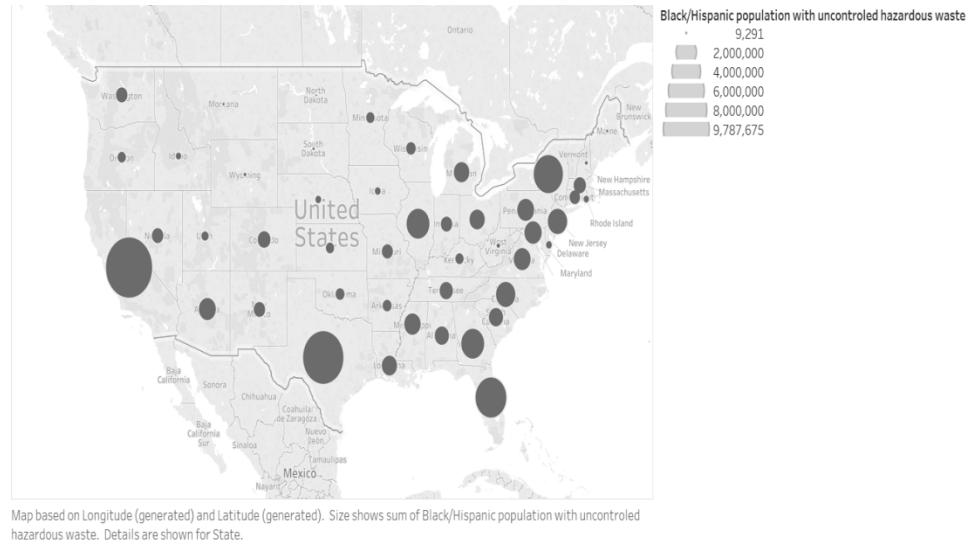
⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *See, e.g.*, Skelton & Miller, *supra* note 65.

⁸⁰ Letter from Richard Moore, Co-Director, Sw. Org. Project, to Jay D. Hair, President, Nat'l Wildlife Fed'n (Mar. 16, 1990), <https://www.ejnet.org/ej/swop.pdf>.

⁸¹ *Id.*



More recently, local groups, grassroots organizations, and small-town environmental activists have taken on the formidable task of securing their own environmental safety. Many local organizations and affected communities are less concerned with recycling, endangered species, and climate change and more concerned with *in situ* contamination, clean water, and childhood cancer.⁸² For them, the environment is not merely ecological green space; it is where they live, work, and play.⁸³ It actually determines their financial health and their ability to live.

Once the problem becomes apparent, the next challenge is to define the source. One central issue is that it is often almost impossible to fingerprint the source of pollutants.⁸⁴ For most communities, this means

⁸² CHECKER, *supra* note 35, at 97.

⁸³ *Id.* at 17 (arguing that the idea of “environment is not just ecological but also includes a host of social factors such as housing, school, neighborhood safety, and employment” and that the pursuit of environmental justice is “the right of all people to share equally in the benefits of a healthy environment”).

⁸⁴ See Martin A. McCrory, *Who’s on First: CERCLA Cost Recovery, Contribution, and Protection*, 37 AM. BUS. L.J. 3, 13 n.63 (1999) (defining fingerprinting as the environmental term used in conjunction with “the identification of the unique properties intrinsic to a

that it can be almost impossible to identify the problem or its source until the problem manifests itself through catastrophic illness. Various industries have dumped hazardous waste on the ground and in the waters until the ground and sediments become a “kind of bottomless sponge,”⁸⁵ soaking up the waste until it creates a “toxic soup.”⁸⁶

Consider the federally mandated Consumer Confidence Report (“CCR”), performed in July of each year, which provides the foundation for the annual water quality report residents receive from their water supplier.⁸⁷ The report’s goal is to identify where drinking water comes from and the contaminants it contains.⁸⁸ However, these reports can be misleading or intentionally incomplete. Returning to Flint, Michigan, for example, various entities conducted testing, which revealed lead and other corrosive agents in the water supply.⁸⁹ Despite this, remediation steps were never taken, even though the remediation was simple and inexpensive.⁹⁰ If the burning Cuyahoga River was the impetus in the sixties,⁹¹ cases like those in Flint, Michigan⁹² and Franklin, Indiana⁹³ are the clarion calls for

company’s specific combination or formulation of chemicals”) [hereinafter McCrory, *Who’s on First*].

⁸⁵ Katrina Fischer Kuh, *Capturing Individual Harms*, 35 HARV. ENV’T L. REV. 155, 156 (2011).

⁸⁶ *Id.*; see also Steve C. Gold, *Dis-Jointed? Several Approaches to Divisibility After Burlington Northern*, 11 VT. J. ENV’T L. 307, 316 (2009) (discussing the problems with divisibility of harm when dealing with a toxic soup of interacting chemicals); McCrory, *Who’s on First*, *supra* note 84, at 13 (discussing the “toxic soup” and “fingerprinting” problems at Superfund sites).

⁸⁷ See *Safe Drinking Water Act: Consumer Confidence Reports (CCR)*, EPA, <https://www.epa.gov/ccr> (last visited Oct. 21, 2020).

⁸⁸ See 40 C.F.R. § 141.151(a) (2006) (establishing the minimum requirements for the content of annual reports regarding community water systems, including water quality and risk of contaminant exposure).

⁸⁹ See FLINT WATER ADVISORY TASK FORCE, FINAL REPORT 73 (2016) (“Throughout 2015, as the public raised concerns and as independent studies and testing were conducted and brought to the attention of MDEQ [Michigan Department of Environmental Quality], the agency’s response was often one of aggressive dismissal, belittlement, and attempts to discredit these efforts and the individuals involved.”).

⁹⁰ *Id.* at 1 (“The Flint water crisis is a story of government failure, intransigence, unpreparedness, delay, inaction, and environmental injustice.”).

⁹¹ Tim Folger, *The Cuyahoga River Caught Fire 50 years Ago. It Inspired a Movement*, NAT’L GEOGRAPHIC (June 21, 2019), <https://www.nationalgeographic.com/environment/2019/06/the-cuyahoga-river-caught-fire-it-inspired-a-movement/>.

⁹² *Flint Water Crisis*, CNN (July 2, 2019), <https://www.cnn.com/2016/03/04/us/flint-water-crisis-fast-facts/index.html>.

⁹³ Sarah Bowman, *Everything You Need to Know About Contamination and Childhood Cancer in Franklin, Indiana*, INDY STAR (Jan. 22, 2019), <https://www.indystar.com/story/news/environment/2019/01/22/childhood-cancer-indiana-suburb-franklin-johnson-county-what-you-need-know/2644663002/>.

the modern generation of community activists seeking justice and relief from water contamination.

III. A BRIEF HISTORY OF U.S. WATER POLLUTION ENFORCEMENT

To understand the interplay between the CWA and WOTUS, one must first understand the history of the CWA and the longstanding struggle to ensure clean water for the citizens of this country.

The U.S. government's involvement in environmental regulation has not always been benevolent. In the 1800s, federal and state governments would pay people to fill wetlands in favor of residential, commercial, and industrial development.⁹⁴ Moreover, for the first hundred years of U.S. history, the control of the disposal of pollution, biological waste, sewage, hazardous materials, and man-made toxins was generally left to local governments and common law.⁹⁵

In *Gibbons v. Ogden*, the U.S. Supreme Court held that Congress had the power to regulate interstate waterways for the purpose of navigation pursuant to the Commerce Clause.⁹⁶ Consequently, the Court has held for nearly two hundred years that the United States has jurisdiction over interstate waters. The Court later held that rivers are "navigable waters of the United States" by themselves or when connecting to other waters.⁹⁷ As such, these waters were also subject to federal regulation.⁹⁸ The Court said that the waters are "the public property of the nation and subject to all requisite legislation of Congress."⁹⁹

As the population of the United States began to urbanize in the 1800s,¹⁰⁰ federal courts became increasingly involved in disputes involving water regulation and quality. By 1893, the federal circuit courts agreed that every riparian had the right to insist that a stream shall flow to his land without material alteration or diminution.¹⁰¹ Longstanding federal

⁹⁴ Peggy B. Johnson, *A Symposium on Regulatory Takings: Panelist: The Takings Issue in the Local Government and Watershed Context*, 1995 DET. C.L. REV. 17, 19 (1995).

⁹⁵ Paul Boudreaux, *A New Clean Water Act*, 37 ENV'TL L. REP. 10171, 10172 (2007).

⁹⁶ See *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 198 (1824).

⁹⁷ See *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (stating that rivers must be regarded as public navigable rivers, which "constitute navigable Waters of the United States").

⁹⁸ *Id.* at 564.

⁹⁹ *Id.*

¹⁰⁰ See generally WILLIAM AIKEN, *EARTHBOUND: NEW INTRODUCTORY ESSAYS IN ENVIRONMENTAL ETHICS* (Tom Regan ed., 1984) (stating that only about 6 percent of the population lived in cities in the 1800s, but by 1900, it had grown to 40 percent).

¹⁰¹ See *Indianapolis Water Co. v. Am. Strawboard Co.*, 53 F. 970, 974 (C.C.D. Ind. 1893).

law established the water rule as, “*aqua currit et debet currere ut currere solebat*,”¹⁰² meaning “water runs and ought to run, as it used to run.”¹⁰³ Riparian owners had the right to insist that water runs its natural course without a lessening of its quantity or quality.¹⁰⁴

For one hundred years, the federal courts have agreed that the riparian owners have the legally enforceable right to water free from pollution, i.e., water that is pure and wholesome.¹⁰⁵ This is especially true if the pollution is continuous.¹⁰⁶ The evolving legal discourse took a temporary detour in 1888. In *Willamette Iron Bridge Co. v. Hatch*, the Supreme Court held that there was no federal law that prohibits a state’s plenary power over obstructions and nuisances in the navigable streams within a state.¹⁰⁷ Yet, this case provided the impetus for the next step in clean water protection.

In response to this holding, the federal government began its first major foray into water quality regulation. The Rivers and Harbor Act (also known as the Refuse Act)¹⁰⁸ specifically regulated dumping and discharge into navigable waters.¹⁰⁹ Unfortunately, the Act was primarily concerned with unimpeded navigation and not water pollution. However, the concern for navigation interference resulted in the concomitant regulation of refuse in the waters.¹¹⁰ As a result, the Act was occasionally used to sue companies for dumping into navigable waters.¹¹¹ Until the 1960s, U.S. enforcement under this statute was primarily limited to instances where discharge explicitly and directly affected either anchorage or navigation

¹⁰² *Id.*

¹⁰³ *Aqua currit et debet currere ut currere solebat*, BLACK’S LAW DICTIONARY (10th ed., 2014).

¹⁰⁴ *Indianapolis Water*, 53 F. at 974.

¹⁰⁵ *Id.* at 975.

¹⁰⁶ *Id.*

¹⁰⁷ *Willamette Iron Bridge Co. v. Hatch*, 125 U.S. 1, 17 (1888).

¹⁰⁸ Rivers and Harbors Act, ch. 425, 30 Stat. 1121, 1152 (1899). See generally CRAIG B. SIMONSEN, ESSENTIALS OF ENVIRONMENTAL LAW (3d ed. 2007) (providing a detailed review of the relevant law); William W. Sapp et al., *From the Fields of Runnymede to the Waters of the United States: A Historical Review of the Clean Water Act and the Term “Navigable Waters,”* 36 ENV’T L. REP. 10190 (2006) (same).

¹⁰⁹ Rivers and Harbors Act, ch. 425, 30 Stat. 1121, 1152 (1899) (stating that it shall be unlawful to throw, discharge, or deposit any refuse of any kind into any navigable water of the United States).

¹¹⁰ See N. William Hines, *History of the 1972 Clean Water Act: The Story Behind How the 1972 Act Became the Capstone on a Decade of Extraordinary Environmental Reform*, 4 GEO. WASH. J. ENERGY & ENV’T L. 80, 94 (2013).

¹¹¹ *Id.*

upon U.S. waters.¹¹² Nevertheless, as the country grew, so did its concomitant pollution.

By 1948, increased industrialization spurred national interest in protecting our water.¹¹³ Accordingly, the government created the Federal Water Pollution Control Act (“FWPCA”)¹¹⁴ as a direct response to public concern over water quality.¹¹⁵ This Act provided state funding for research, development, and implementation of state water pollution control programs.¹¹⁶ Yet, the 1948 FWPCA severely limited the federal government’s authority to deter pollution.¹¹⁷

The statute allowed the states to determine water quality standards based upon intended use of the waterway; water enforcement was based upon the polluter’s ability to pay.¹¹⁸ The 1948 FWPCA left primary enforcement to the states and their respective common laws,¹¹⁹ a task for which the states were ill-equipped to undertake. Federal enforcement was restricted to cases where interstate water pollution actually threatened the health or welfare of U.S. citizens.¹²⁰ With the failures of the early legislation, it is unsurprising that the next two decades saw that “many cities and industries were continuing to use the nation’s surface waters as a convenient disposal site for ever increasing amounts of waste.”¹²¹

Perhaps a part of the explanation lies in the fact that the waters within the United States are so vast that many could not envision water pollution as a major problem. To many people, “dilution was the solution to

¹¹² William L. Andreen, *The Evolution of Water Pollution Control in the United States—State, Local, and Federal Efforts, 1798-1972: Part II*, 22 STAN. ENV’T L.J. 215, 221 (2003) [hereinafter Andreen, *The Evolution of Water Pollution, Part II*].

¹¹³ See Samuel Worth, *Water, Water Everywhere and Plenty of Drops to Regulate: Why the Newly Published WOTUS Rule Does not Violate the Commerce Clause*, 43 B.C. ENV’T AFF. L. REV. 605, 607 (2016).

¹¹⁴ Federal Water Pollution Control Act of 1948, Pub. L. No. 80-845, 62 Stat. 1155. See generally Frank J. Barry, *The Evolution of the Enforcement Provisions of the Federal Water Pollution Control Act: A Study of the Difficulty in Developing Effective Legislation*, 68 MICH. L. REV. 1103 (1970) (discussing the history of water pollution control).

¹¹⁵ See Worth, *supra* note 113, at 607; Hines, *supra* note 110, at 84-85.

¹¹⁶ Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903, 907-08.

¹¹⁷ Vanessa Ramirez, *An Attempt at Clearing the Muddied Waters of the United States*, 34 J. ENV’T L. & LITIG. 161, 163 (2019) (explaining that the premise of the statute was to control water pollution but in practice became a regulatory setback since it only applied to pollution affecting interstate waters and health and safety).

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Andreen, *The Evolution of Water Pollution Control Part II*, *supra* note 112, at 250.

¹²¹ See William L. Andreen, *Beyond Words of Exhortation: The Congressional Prescription for Vigorous Federal Enforcement of the Clean Water Act*, 55 GEO. WASH. L. REV. 202, 202 (1987) [hereinafter Andreen, *Beyond Words of Exhortation*].

pollution.”¹²² But dilution failed to resolve any of the most significant environmental issues.¹²³ As a result, water pollution became an ever-increasing focus of environmentalists, communities, politicians, and the press. Eventually, the problem simply became too dire to ignore.

IV. THE CLEAN WATER ACT

By the 1960s, U.S. lawmaker awareness of environmental issues was on the rise. As an early advocate of modern clean water legislation, then-Senator John F. Kennedy remarked that almost all of the nation’s waters are affected by pollution, so as a nation, we must halt the “destructive filthying of our water” to assure a sound economy and healthy population.¹²⁴ Furthermore, “the need for healthy water goes beyond political boundaries—it is a national need.”¹²⁵ In his address to Congress in 1961, President Kennedy stressed his continuing concerns regarding U.S. water quality, stating that the water pollution problem could no longer be regarded with complacency.¹²⁶

At the same time, Rachel Carson shocked the world with her milestone book, *Silent Spring*.¹²⁷ She posited that the only reason the Bill of Rights does not guarantee our right against the distribution of lethal environmental pollution is because our forefathers could not conceive of such a problem occurring in our nation.¹²⁸ In 1965 under President Johnson, slight progress was made by shifting the focus to enforcing already-set federal water quality standards for interstate waters under the federal Water Quality Act (“WQA”), but this left *intrastate* waters

¹²² See generally NATURE’S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS 200 (Gretchen C. Daily ed., 1997) (explaining that the old adage “dilution is the solution to pollution” persisted until about 1970, when in response to episodes like the Cuyahoga River catching fire, laws began to be passed that required cities and industries to treat their water before releasing it into the environment).

¹²³ See Andreen, *Beyond Words of Exhortation*, *supra* note 121, at 223-230 (describing the ineffectual enforcement and practices and continued pollution in U.S. waters).

¹²⁴ John F. Kennedy, U.S. Sen., Water Pollution, Address at Fond du lac, Wisconsin (Feb. 17, 1960), in *Speeches and Press*, PAPERS OF JOHN F. KENNEDY (John F. Kennedy Presidential Libr. and Museum), <https://www.jfklibrary.org/asset-viewer/archives/JFKSEN/0906/JFKSEN-0906-023> (last visited Oct. 21, 2020) (discussing the pollution of water sources and legislation to expand federal aid for waste treatment projects).

¹²⁵ *Id.*

¹²⁶ John F. Kennedy, Address to Congress (Jan. 30, 1961), in 107 CONG. REC. 2582.

¹²⁷ RACHEL CARSON, *SILENT SPRING* 12-13 (1962).

¹²⁸ *Id.*

unregulated.¹²⁹ Lack of enforcement, coupled with commercial and political pressures, however, ultimately doomed the WQA.¹³⁰

Prior to the 1970s, the majority of water pollution control focused on assisting states in developing water standards in a manner which improved water quality among various waterways. Consequently, in 1971, the Committee on Public Works concluded, “the national effort to abate and control water pollution is inadequate in every vital aspect.”¹³¹

By 1972, only half of the states had set water quality standards; even fewer had begun implementing those standards.¹³² Many in Congress concluded that, “[t]he cancer of water pollution . . . engendered by our abuse of our lakes, streams, rivers, and oceans; . . . has thrived on our half-hearted attempts to control it[.]”¹³³ Fortunately, Congress realized water quality standards were of growing importance and recognized the need to reestablish the integrity of the nation’s waters. As a result of the failures of the WQA, Congress passed the Federal Water Pollution Control Act Amendments of 1972, commonly known as the Clean Water Act (“CWA”).¹³⁴ The CWA¹³⁵ was the first major water pollution control statute in the United States and, in conjunction with its subsequent amendments, constitutes the most recent iteration of federal water regulation that actively regulates the discharge of pollutants into our nation’s waters.¹³⁶ Arguably, the most effective statutory requirement is

¹²⁹ Andreen, *The Evolution of Water Pollution Control Part II*, *supra* note 112, at 248.

¹³⁰ See Murchison, *infra* note 276, at 532; see also McCrory, *Standing in the Ever-Changing Stream*, *supra* note 27, at 80.

¹³¹ See *Weinberger v. Romero-Barcello*, 456 U.S. 305, 319 (1982) (“The national effort to abate and control water pollution has been inadequate in every vital aspect.”); S. REP. NO. 92-414, at 7 (1971).

¹³² See *City and the Environment Symposium: Tailoring Citizen Enforcement to an Expanding Clean Water Act: The San Francisco Baykeeper Model*, 28 GOLDEN GATE U.L. REV. 429, 432-34 (1998) (discussing the history of the CWA); McCrory, *Standing in the Ever-Changing Stream*, *supra* note 27, at 79-85 (briefly outlining the modern evolution of the CWA). See generally ROBERT V. PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY (2nd ed. 1996) (same).

¹³³ See Andreen, *Beyond Words of Exhortation*, *supra* note 121, at 203 n. 4 (noting U.S. Sen. Edmund Muskie’s remarks that “[o]ur planet is beset with a cancer The cancer of water pollution was engendered by our abuse of our lakes, streams, rivers, and oceans; it has thrived on our half-hearted attempts to control it; and like any other disease, it can kill us.”)

¹³⁴ 33 U.S.C. §§ 1251-1387 (1994 & Supp. 1998); see *EPA v. California ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 202-06 (1976) [hereinafter *EPA v. California*] (citing S. REP. NO. 92-414, at 1426 (1971) and describing problems with the WQA that prompted the passage of the CWA).

¹³⁵ Federal Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204, *superseded in* 1972, 33 U.S. 1251-1387 (1994 & Supp. 1998).

¹³⁶ See generally SHRADER-FRECHETTE, *supra* note 28 (outlining laws and political processes affecting environmental injustice).

the CWA's discharge permit system with federally enforceable numerical limitations.¹³⁷ The CWA was enacted "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."¹³⁸ To achieve this objective, Congress declared, "[i]t is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985."¹³⁹ While this goal has still not been fully achieved, its spirit is as important today as it was when the CWA was enacted.

In drafting the CWA, Congress sought to enact significantly stronger water protections than previous water protection laws.¹⁴⁰ For example, the WQA allowed pollution as long as the receiving body of water was large enough to dilute the effects of the harmful chemicals and pollutants. By the 1970s, this "dilution solution" provision quickly became the focus of national debate.¹⁴¹ In contrast to the WQA, the CWA provides that "the discharge of any pollutant by a person shall be unlawful," unless one of the CWA's enumerated exceptions applies.¹⁴² In fact, a Senate report described the change in relation to both emphasis and method:

[Section 301 of the Act, 33 U.S.C. § 1311,] clearly establishes that the discharge of pollutants is unlawful. Unlike its predecessor program which permitted the discharge of certain amounts of pollutants under the conditions described above, this legislation would clearly establish that no one has the right to pollute—that pollution continues because of technological limits, not because of any inherent right to use the nation's waterways for the purpose of disposing of wastes. . . . The Committee believes it is important to clarify this point: *No one has the right to pollute.*¹⁴³

The CWA provides two primary sets of water quality measures to abate pollution: (1) water quality standards and (2) effluent limitations.¹⁴⁴ Turning to the first measure, the CWA further delineates water quality

¹³⁷ The National Pollution Discharge Elimination System ("NPDES") permits.

¹³⁸ 33 U.S.C. § 1251(a) (1994 & Supp. 1998).

¹³⁹ *Id.* § 1251(a)(1) (emphasis added).

¹⁴⁰ See generally Hines, *supra* note 110 (describing the failures of the previous clean water enforcement statutes); see also Andreen, *The Evolution of Water Pollution Part II*, *supra* note 112, at 255-60 (describing the history of the Clean water Act and the socio-political reason for the changes during the Nixon administration).

¹⁴¹ See McCrory, *supra* note 27, at 83-84

¹⁴² 33 U.S.C. § 1311(a) (1994 & Supp. 1998).

¹⁴³ S. REP. NO. 92-414, at 3709 (1971) (emphasis added).

¹⁴⁴ See *Nat'l Wildlife Fed'n v. U.S. Corps of Eng'rs*, 92 F. Supp. 2d 1072, 1074 (D. Or. 2000) (citing *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992)).

standards into three basic elements: (1) designated uses of the waterway; (2) specification of the amount of various pollutants that may be in the waterway in accordance with its uses; and (3) restrictions on the degradation of certain waterways.¹⁴⁵ The second measure is done through the issuance of National Pollution Discharge Elimination System (“NPDES”) permits.¹⁴⁶ These permits, issued either by the Administrator of the EPA or by a state authorized to administer a permit program, must contain “effluent limitations.”¹⁴⁷ These limitations are numerical restrictions on the quantities, concentrations, and rates at which chemical, physical, biological, and other constituents can be discharged.¹⁴⁸

Once an entity obtains the permit, its discharges must stay within the effluent limitations stated within the permit.¹⁴⁹ Moreover, the permits require entities to monitor and report their discharges to the EPA or its state counterpart every month. If the entity fails to file, or if the discharges exceed the permitted emissions, the entity can be subject to both civil and criminal penalties.¹⁵⁰

The existence of penalties arising under an CWA immediately turns a lawyer’s eyes to the entity that will define, explain, and enforce the CWA. In the case of the CWA, even though a state may administer an NPDES program within its borders, there is no delegation of federal authority to an authorized state.¹⁵¹ Rather, there is an accommodation to the states. Even when a state has been approved to implement its own permit program, the EPA retains regulatory authority over the state program.¹⁵²

If the state fails to administer the program in accordance with CWA requirements, the EPA may withdraw its approval of the state’s authority to administer a state permit program for discharges into navigable waters.¹⁵³ Moreover, the language of the CWA expressly reserves the EPA’s authority to enforce the CWA, notwithstanding the approval of a state permit program and the state’s concomitant enforcement powers.¹⁵⁴ If the EPA is dissatisfied with state enforcement efforts or the lack thereof,

¹⁴⁵ *See id.* at 1074-75.

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*; *see* 33 U.S.C. §§ 1311, 1313-14, 1316 (1994); *see also* EPA v. California, 426 U.S. 200, 204-05 (1976).

¹⁴⁹ *See* 33 U.S.C. § 1342(b) (1994); *see also* Jones v. City of Lakeland, 175 F.3d 410, 413 (6th Cir. 1999).

¹⁵⁰ *See* 33 U.S.C. § 1319 (1994).

¹⁵¹ *Id.*

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.* §§ 402(i), 1342(b)(i).

the EPA can bring an independent enforcement action in federal court.¹⁵⁵ As previously described, the CWA is only applicable to WOTUS, as such the CWA must be considered in tandem with the definition of WOTUS.

V. DELINEATING FEDERAL WATER JURISDICTION

Federal agencies with enforcement authority, such as the EPA, are often called upon to issue regulations to assist in interpreting statutory construction. In this instance, the scope of the phrase “Waters of the United States” has required federal definition for many years.¹⁵⁶ The term delimits the ability of federal regulatory agencies to enforce the broad statutory protections contained within the CWA. Congress has failed to define the term, so the courts and regulatory agencies have struggled to give legal guidance for decades. This section will explore the underpinnings of the CWA’s WOTUS jurisdiction, related Supreme Court cases, and resulting federal actions that have thrown CWA enforcement into disarray. More specifically, this section will examine the history of WOTUS jurisdiction, the Supreme Court’s WOTUS analysis in *Rapanos*, and the lasting impacts of both. It will conclude how the nation is now left without a clear regulatory regime in relation to U.S. water protection.

A. DEFINING NAVIGABLE WATERS/WOTUS

Despite the growing recognition of a better need to protect the water in the United States, the early water statutes of the mid-fifties and early sixties failed to define navigable waters or WOTUS.¹⁵⁷ Yet, a review of the legislative history reveals Congress intended to use the definition created by the Supreme Court in *The Daniel Ball*,¹⁵⁸ in which the Court defined navigable waters as waters that were actually capable of navigation.¹⁵⁹ Under this definition, waters are navigable when they are used or capable of customary use as commercial highways for travel or trade over water.¹⁶⁰

The limitations of this definition, however, were successfully challenged in 1972 when a groundswell of public opinion forced Congress

¹⁵⁵ See *United States v. Cargill, Inc.*, 508 F. Supp. 734, 739 (D. Del. 1981).

¹⁵⁶ *Nat’l Ass’n of Mfrs. v. DOD*, 138 S. Ct. 617, 625 (2018).

¹⁵⁷ See Water Pollution Control Act Amendments of 1956, Pub. L. No. 84-660, 70 Stat. 498; Federal Water Pollution Control Act Amendments of 1961, Pub. L. No. 87-88, 75 Stat. 204.

¹⁵⁸ See *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870).

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

to reevaluate federal enforcement of water quality.¹⁶¹ The growing emphasis on water as an environmental imperative culminated in the CWA. During the reevaluation of water protection, senators commented that water enforcement had been almost totally lacking for the previous two decades, resulting in a situation that threatened human existence.¹⁶² A sentiment many environmental and citizens groups echoed.¹⁶³

The CWA quickly became the embodiment of environmental modernity. Again, its central prohibition prohibited *any* unpermitted pollution discharges into navigable waters.¹⁶⁴ This represented a significant change from prior federal water pollution laws. The 1972 amendments firmly established the goal of eliminating the discharge of pollutants in navigable water by 1985.¹⁶⁵ It defined navigable waters as any WOTUS, including territorial seas.¹⁶⁶ The definition of WOTUS, thus, is of paramount importance since it defines the authority of the U.S. Army Corps of Engineers (“Army Corps”) and the EPA to regulate water pollutant discharges. More broadly, the definition grants the federal government regulatory jurisdiction.¹⁶⁷

For decades, the courts have broadly construed this term to include creeks, streams, rivers, or bodies of water that may in any way affect interstate commerce.¹⁶⁸ Courts generally agreed that the CWA was

¹⁶¹ SUSAN HUNTER & RICHARD W. WATERMAN, *supra* note 4, at 22 (stating that 58 percent of the public believed that water pollution was a serious problem by 1968 compared to only 25 percent in 1965).

¹⁶² See ROBIN KUNDIS CRAIG, *THE CLEAN WATER ACT AND CONSTITUTION* 22-24 (2d ed. 2009) (explaining the shift from state to federal primacy in the clean water protection); see also SEN. REP. NO. 92-414 (1971).

¹⁶³ See Andreen, *Evolution of Water Pollution Control in the United States—State, Local, and Federal efforts, 1719–1972: Part I*, 22 STAN. ENV'TL L.J. 145, 196-199 (discussing the growing dissatisfaction with environmental protection). See generally Andreen, *Evolution of Water Pollution Control Part II*, *supra*, note 112 (discussing the continuing problems with the clean water protections and pressures on the federal government to make changes) [hereinafter Andreen, *Evolution of Water Pollution Control Part I*].

¹⁶⁴ 33 U.S.C. § 1311(a) (2018).

¹⁶⁵ 33 U.S.C. § 1251 (1976).

¹⁶⁶ *Id.* § 1362(7).

¹⁶⁷ See generally *Cargill, Inc. v. United States*, 516 U.S. 955 (1995) (denying the Army Corp’s expansion of its regulatory jurisdiction under the CWA to include the effect of water contamination on migratory birds); *Fairbanks N. Star Borough v. U.S. Army Corp. of Eng’rs*, 543 F. 3d 586 (9th Cir. 2008) (discussing the Army Corp’s CWA regulatory authority over a city’s wetland property); *United States v. Johnson*, 437 F.3d 157 (1st Cir. 2006) (deciding whether certain interconnected waters fell within the regulatory jurisdiction of the CWA.)

¹⁶⁸ See, e.g., *Deltona Corp. v. United States*, 657 F.2d 1184, 1186 (Ct. Cl. 1981) (affirming that the CWA was created to create federal jurisdiction over the nations waters to the maximum extent possible and to cover not just some, but all of the WOTUS; *United States v. Earth Sci., Inc.*, 599 F.2d 368, 375 (10th Cir. 1979) (“It seems clear that Congress intended to regulate

intended to cover “all water of the United States, not just some.”¹⁶⁹ Federal regulations subsequently defined WOTUS to include all waters used or susceptible for use in interstate commerce; interstate and wetlands; and all lakes, rivers, streams (including intermittent streams).¹⁷⁰ This long-standing WOTUS definition encompassed wet meadows, ponds, prairie potholes—the degradation or destruction of all of which could in any way affect interstate commerce—and waters that are or could be used for industrial purposes by industries in interstate commerce.¹⁷¹ WOTUS also included waters used for fishing or recreational purposes; as well as any tributaries of such waters, and any impoundments of WOTUS.¹⁷²

By 1981, the Supreme Court agreed with the expansion of the environmental protections and supported congressional regulation of air and water as appropriate under the Commerce Clause.¹⁷³ In the seminal 1985 case *United States v. Riverside Bayview Homes, Inc.*, the Supreme Court held that the jurisdictional basis for regulating water pollution could not be predicated upon artificial lines; rather, the analysis must focus upon “all the waters that together form the entire aquatic system.”¹⁷⁴ The Court recognized that a regulatory agency’s interpretation of an authorizing statute is entitled to great deference so long as it is reasonable and does not expressly conflict with the intent of Congress.¹⁷⁵

The Supreme Court also recognized the difficulty that regulating agencies face in defining the bounds of regulatory authority.¹⁷⁶ The Court found that the ultimate objective of the agency is to maintain and improve the nation’s water quality,¹⁷⁷ and it further agreed that the overall objective of Congress was to protect the nation’s aquatic ecosystem.¹⁷⁸ The Court acknowledged that these environmental systems move in hydrologic cycles; their protection, therefore, requires a broad definition of WOTUS

discharges made into every creek, stream, river or body of water that in any way may affect interstate commerce.”); *United States v. Tex. Pipe Line Co.*, 611 F. 2d 345, 347 (10th Cir. 1979) (holding that the CWA covers tributaries of WOTUS, even if the tributaries do not flow continuously to WOTUS year round).

¹⁶⁹ *Id.*

¹⁷⁰ 40 C.F.R. § 122.2 (1989).

¹⁷¹ *Id.*

¹⁷² *Id.*; *see, e.g.*, 40 C.F.R. § 230.3(s) (1989) (defining WOTUS to include those categories).

¹⁷³ *Hodel v. Va. Surface Mining and Reclamation Ass’n*, 452 U.S. 264, 282 (1981) (permitting congressional regulation of activities causing air or water pollution or other environmental hazards that may have effects in more than one state).

¹⁷⁴ *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985).

¹⁷⁵ *Id.* at 132.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

to further Congress's objectives.¹⁷⁹ The Court also unanimously agreed that wetlands adjacent to navigable waters are included within that WOTUS definition.¹⁸⁰

In 2001, the Supreme Court in *Solid Waste Management Agency of Northern Cook County (SWANCC) v. U.S. Army Corp. of Engineers* limited the expansion of federal authority by rejecting the government's assertion that an isolated pond at the bottom of an abandoned pit wholly inside the state of Illinois constituted a WOTUS.¹⁸¹ The agency argued that this pond served as a habitat for navigable birds, thus bringing it within its jurisdiction.¹⁸² The Court countered that the agency's interpretation would render the phrase "navigable waters" meaningless.¹⁸³ This interpretation of the statute raised the outer limits of the Congress' power; although it may have been seen as the next ineluctable step after *Riverside*, the Court was not willing to allow the agency to push the limits of congressional authority this far.¹⁸⁴ This decision may have prefaced the tenor of the Supreme Court's next major WOTUS decision. Five years later, the pendulum of environmental regulatory protection would begin to swing backwards.

B. *RAPANOS* – THE SUPREME COURT'S WATER BOMB

The federal government has been involved in clean water regulation for over one hundred years.¹⁸⁵ However, the Supreme Court's 2006 decision in *Rapanos v. United States* had a disturbing effect on the previous momentum toward regulation of all pollution affecting WOTUS.¹⁸⁶ In *Rapanos*, the Bush administration sought to use the CWA to regulate four wetlands that were adjacent to ditches or man-made drains that eventually flowed into Lake Michigan. More than thirty state

¹⁷⁹ *Id.*

¹⁸⁰ *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133-34 (1985).

¹⁸¹ *See Solid Waste Agency v. U.S. Army Corps of Eng'rs*, 531 U.S. 159, 171-72 (2001).

¹⁸² *Id.* at 171.

¹⁸³ *Id.* at 172.

¹⁸⁴ *Id.* at 171-73.

¹⁸⁵ Betsy A. Cody & Nicole T. Carter, CONG. RSCH. SERV., R40573, 35 YEARS OF WATER POLICY: THE 1973 NATIONAL WATER COMMISSION AND PRESENT CHALLENGES 1 (2009), <https://aquadoc.typepad.com/files/r40573-final-crs-nwc-report-1.pdf>.

¹⁸⁶ *See Rapanos v. United States*, 547 U.S. 715, 739 (2006) (Scalia, J., plurality opinion) (finding that WOTUS "includes only those 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").

attorneys general and four former EPA directors supported the administration's position.¹⁸⁷

The opposition contended that the term WOTUS under the CWA was limited to waters actually “navigable in fact.”¹⁸⁸ Therefore, it contended that the Bush administration could not regulate wetlands at all under the CWA (even if they were directly adjacent to traditionally navigable waters).¹⁸⁹ The Court rejected this extremely narrow view, referring to precedent in both *SWANCC* and *Riverside* stating that the CWA uses the term navigable waters in much broader terms than its traditional meaning.¹⁹⁰ The primary question became, thus, whether the CWA covered only adjacent wetlands. That is to say, the only wetlands covered by the CWA are those that actually abut traditionally navigable waters.¹⁹¹

Rapanos was a plurality decision (4-1-4), with Justice Scalia writing for the plurality. His opinion restricted the scope of the government's CWA jurisdiction by limiting “Waters of the United States” to only those relatively permanent, standing, or continuously flowing bodies of water “forming geographical features.”¹⁹² According to Justice Scalia, these would specifically include waters that are traditionally described in simple English as oceans, lakes, rivers, or streams.¹⁹³ Justice Scalia's interpretation of the CWA limited WOTUS to only include continuously present, fixed bodies of water.¹⁹⁴ His definition excluded channels containing merely intermittent or ephemeral flows of water;¹⁹⁵ more specifically, he excluded ephemeral streams, drainage ditches, culverts, and directional sheet flows.¹⁹⁶

Justice Scalia remanded the case to the lower court to determine if the ditches and drains are actually waters in the ordinary sense of the word (containing a relatively permanent flow); and if they are, whether the wetlands are “adjacent” to these “waters.”¹⁹⁷ The key question for the lower court was whether the wetlands in question have a continuous surface connection to navigable waters, such that it is difficult to tell

¹⁸⁷ Devine, NRDC 2014 Water Rule Comments, *supra* note 5, at 13.

¹⁸⁸ *Rapanos*, 547 U.S. at 730 (Scalia, J., plurality opinion).

¹⁸⁹ *See id.*

¹⁹⁰ *Id.* at 731.

¹⁹¹ *Id.* at 739.

¹⁹² *Id.* at 732.

¹⁹³ *Id.* (citing WEBSTER'S NEW INTERNATIONAL DICTIONARY (2d ed. 1954)).

¹⁹⁴ *Rapanos v. United States*, 547 U.S. 715, 733 (2006) (Scalia, J., plurality opinion).

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 734.

¹⁹⁷ *Id.* at 757.

where one ends and the other begins.¹⁹⁸ For four members of the plurality decision, wetlands are subject to the CWA's prohibitions and regulations only when there is no clear demarcation between the wetlands and traditional navigable waters or their tributaries.

Justice Kennedy concurred with the decision to remand the case, but not with Justice Scalia's reasoning.¹⁹⁹ He believed the government needed to show a "significant nexus" to a jurisdictional water; by this, Justice Kennedy's test relates to the effects that a discharge could have upon a traditional navigable water.²⁰⁰ Justice Kennedy acknowledged the ecological significance of wetlands and their relationship to protecting the aquatic system.²⁰¹ As wetlands play an important role in pollutant filtration, flood control, and runoff storage, this may be true absent any continuous surface connection.²⁰² Justice Kennedy also recognized the impractical effects of Justice Scalia's definition.

Using the Scalia interpretation of the CWA, a mere continuous trickle would count as a regulated water.²⁰³ Conversely, a thundering torrent would not be regulated if it occurred at irregular intervals.²⁰⁴ Justice Kennedy accepted that adjacency of a wetland to navigable-in-fact waters is sufficient to establish a significant nexus and that adjacency to major tributaries may also be sufficient.²⁰⁵ Nevertheless, he also recognized that adjacency to other tributaries requires the establishment of a significant nexus on a case-by-case basis. For such a water to constitute a WOTUS covered by the CWA, the "water or wetland must possess a 'significant nexus' to waters that are or were navigable in fact or could reasonably be so made."²⁰⁶

The focus of Justice Kennedy's concurrence and the dissent was on defining WOTUS (and protecting those waters);²⁰⁷ the focus of the other four members of the plurality was on defining navigable waters (and

¹⁹⁸ *Id.*

¹⁹⁹ *Rapanos v. United States*, 547 U.S. 715, 759 (2006) (Kennedy, J., concurring).

²⁰⁰ *Id.* at 780 (stating that wetlands possess a requisite nexus and become "navigable waters" if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable").

²⁰¹ *Id.* at 786.

²⁰² *Id.*

²⁰³ *Id.* at 769.

²⁰⁴ *Id.*

²⁰⁵ *Rapanos v. United States*, 547 U.S. 715, 780-81 (2006) (Kennedy, J., concurring).

²⁰⁶ *Id.* at 759.

²⁰⁷ *See id.* (Kennedy, J., concurring); *Id.* at 787 (Stevens, J., dissenting).

limiting CWA federal jurisdiction).²⁰⁸ The decision resulted in even more confusion for the regulating agencies, regulated communities, and affected communities. Once again, the CWA specifically prohibits water pollution,²⁰⁹ but after *Rapanos* it became unclear when the federal government has authority to enforce that prohibition. Similarly, *Rapanos* left unclear what waters the CWA actually protects from pollution. The decision fails to emphasize one of the main purposes of the CWA—protecting people from the hazards of water pollution. Consequently, it remains unclear under what circumstances people are protected from water pollution by their federal government.

C. THE OBAMA ADMINISTRATION’S RESPONSE: A QUEST FOR CLARITY

This lack of clarity led to differing interpretations in the district and circuit courts.²¹⁰ The resulting muddle led the Obama administration to issue new rules in an effort to bring consistency and clarity to the situation. In the spring of 2014, the EPA and Army Corps proposed a new rule. *The Clean Water Rule: Definition of Waters of the United States* was created specifically to explain the scope of the term WOTUS in relation to

²⁰⁸ *Id.* at 733-35 (Scalia, J., plurality opinion); see also Jeffrey G. Miller, *Plain Meaning, Precedent, and Metaphysics: Interpreting the “Navigable Waters” Element of the Clean Water Act Offense*, 45 ENV’T L. REP. 10548, 10568 (2015) (exploring the terms “navigable waters” and “waters of the United States” and examining the EPA’s unitary navigable water theory).

²⁰⁹ 33 U.S.C. § 1251 (2018) (stating the goal of eliminating all pollutant discharges and the restoration and maintenance of the integrity of the Nation’s waters); 33 U.S.C. § 1311(a) (2018) (stating that it is unlawful for any person to discharge any pollutant except in compliance with the CWA).

²¹⁰ Compare *United States v. Moses*, 496 F.3d 984, 988-89 (9th Cir. 2007) (holding that a body of water need not be “navigable” to constitute a WOTUS—a man-made diversion does not necessarily alter a WOTUS), and *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 1000-01 (9th Cir. 2007) (explaining that a rock quarry pit or “basalt pond” had a substantial nexus to a navigable water, subjecting it to CWA regulation), and *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 808-09 (E.D.N.C. 2014) (holding that a lake created from a dammed stream was a WOTUS), and *S.F. Baykeeper v. Cargill Salt Div.*, 481 F.3d 700, 708 (9th Cir. 2007) (finding a pond adjacent to a WOTUS only had a speculative or insubstantial effect on the protected water in question), with *Deerfield Plantation Phase II-B Prop. Owners Ass’n v. U.S. Army Corps of Eng’rs*, 801 F. Supp. 2d 446, 461 (D.S.C. 2011), *aff’d*, 501 F. App’x 268 (4th Cir. 2012) (holding series of ponds connected by ditches and swales are not WOTUS), and *Ohio Valley Env’tl Coal. v. Aracoma Coal. Co.*, 556 F.3d 177, 209 (4th Cir. 2009) (finding stream segments connecting to sediment ponds are not WOTUS), and *Sierra Club v. City & Cty. of Honolulu*, No. 04-00463 DAE-BMK, 2008 WL 3850495, at *9 (D. Haw. Aug. 18, 2008) (rejecting a storm drain as WOTUS because there was no evidence of continuous flow).

the text of the CWA, recent Supreme Court decisions, peer-reviewed science, public input, and the agencies' technical expertise.²¹¹

Through this rule, the federal regulatory agencies intended to reduce the case-specific analysis that could lead to inconsistent interpretations of the CWA's jurisdiction throughout the United States.²¹² The final rule reflected over one million public comments and 400 nationwide meetings with states, small businesses, farmers, academics, miners, energy companies, counties, municipalities, and environmental organizations.²¹³ The rule adopted the significant nexus test stated in *SWANCC* and by Justice Kennedy in *Rapanos*,²¹⁴ defining it as anything that has more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of traditional navigable water, interstate water, or the territorial seas.²¹⁵

In determining which waters have significant nexus to traditional navigable waters, interstate waters, or territorial seas, the regulating agencies attempted to use the best available peer-reviewed science.²¹⁶ In general, the agencies evaluated the idea of significant nexus relative to the CWA's primary objective in restoring and maintaining the chemical, physical, and biological integrity of the nation's waters.²¹⁷ Their rule was in large part based upon the comprehensive scientific reports prepared by the EPA's Office of Research and Development, *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* ("Science Report"), and the EPA's Science Advisory

²¹¹ See Clean Water Rule: Definition of Waters of the United States, 80 Fed. Reg. 37,054, 37,054 (June 29, 2015) (to be codified at 33 C.F.R. pt. 328); Definition of Waters of the United States—Recodification of Preexisting Rules, 82 Fed. Reg. 34,899, 34,899 (July 27, 2017) (to be codified at 33 C.F.R. pt. 328); see also Worth, *supra* note 113, at 621. See generally EPA, EPA/600/R-14/475F, CONNECTIVITY OF STREAMS AND WETLANDS TO DOWNSTREAM WATERS: A REVIEW AND SYNTHESIS OF THE SCIENTIFIC EVIDENCE (2015) [hereinafter EPA, EPA/600/R-14/475F, SCIENCE REPORT] <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=296414>; EPA SCI. ADVISORY BD., EPA-SAB-15-001, SAB REVIEW OF THE DRAFT EPA REPORT CONNECTIVITY OF STREAMS AND WETLANDS TO DOWNSTREAM WATERS (Oct. 2014) [hereinafter SAB, EPA-SAB-15-001, REVIEW OF THE DRAFT EPA REPORT]; EPA SCI. ADVISORY BD., EPA-SAB-14-007, SAB CONSIDERATION OF THE ADEQUACY OF THE SCIENTIFIC AND TECHNICAL BASIS OF THE EPA'S PROPOSED RULE TITLED "DEFINITION OF WATERS OF THE UNITED STATES UNDER THE CLEAN WATER ACT" (Sept. 2014) [hereinafter SAB, EPA-SAB-14-007, ADEQUACY OF THE SCIENTIFIC AND TECHNICAL BASIS OF THE EPA'S PROPOSED RULE].

²¹² Clean Water Rule: Definition of Waters of the United States, 80 Fed. Reg. at 37,055.

²¹³ *Id.* at 37,057.

²¹⁴ *Id.* at 37,091.

²¹⁵ *Id.*

²¹⁶ *Id.* at 37,084.

²¹⁷ *Id.* at 37,081. See generally 33 U.S.C. § 1251(a) (2018) (stating CWA statutory purpose).

Board (“SAB”); both described the idea of connectivity and critical contribution in relation to hydrology and ecology.²¹⁸

The *Science Report* and the SAB confirmed the cumulative effect of individual streams and wetlands upon the entire watershed.²¹⁹ These synergistic relationships were critical in forming the rule.²²⁰ The science demonstrates that our waters are connected in a myriad of ways, and these connections can result in critical contributions relative to the chemical, physical or biological integrity of downstream waters.²²¹ The rule was created to reflect these scientific findings vis-à-vis the interconnectedness between upstream waters and downstream traditional navigable waters.²²²

While the new rule did much to clear the confusion after *Rapanos*, it, unfortunately, did not herald in a new age of environmental protection and justice. In fact, neither the reports nor the subsequent rule used this opportunity to discuss the critical, and often disastrous, effects upstream use can have on the actual users of the downstream waters.²²³

Additionally, the rule specifically failed to protect other waters that arguably have a direct effect upon and significant nexus to traditionally navigable waters.²²⁴ For example, vernal pools, playa lakes, and pocosins are waters that should be categorically protected, since they can significantly affect the chemical, physical, and biological integrity of navigable waters, interstate waters, and territorial seas.²²⁵ The rule also

²¹⁸ Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,054, 37,062 (to be codified at C.F.R. pt. 328). *See generally* EPA, EPA/600/R-14/475F, SCIENCE REPORT (synthesizing the scientific literature on how streams, wetlands, and open waters may affect the physical, chemical, and biological integrity of downstream waters); SAB, EPA-SAB-15-001, REVIEW OF THE DRAFT EPA REPORT (noting that the *Science Report* is a “thorough and technically accurate review of the literature on the connectivity of streams and wetlands to downstream waters”); SAB, EPA-SAB-14-007, ADEQUACY OF THE SCIENTIFIC AND TECHNICAL BASIS OF THE EPA’S PROPOSED RULE (finding that “the available science provides an adequate scientific basis for the key components of the proposed rule”).

²¹⁹ Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. at 37,064; *see* EPA, EPA/600/R-14/475F, SCIENCE REPORT, at 6-14; SAB, EPA-SAB-14-007, ADEQUACY OF THE SCIENTIFIC AND TECHNICAL BASIS OF THE EPA’S PROPOSED RULE, at 1.

²²⁰ *See* 80 Fed. Reg. at 37,057 (discussing the science and relationship of the connectivity of streams and downstream waters).

²²¹ *Id.*

²²² *Id.*

²²³ *See generally id.* (failing to properly discuss upstream pollution upon downstream users).

²²⁴ Devine, NRDC 2014 Water Rule Comments, *supra* note 5, at 37-50 (stating that the new rule should include categorical protections for a host of others waters, that the new rule should include man-made tributaries unless there is a scientific basis for excluding them, and that the new rule should limit exemption for water treatment systems).

²²⁵ *Id.*

categorically excluded groundwater as a potential WOTUS, even when it has a significant nexus to a protected WOTUS.²²⁶

Therefore, in many ways, the rule merely codified the established regulatory practice of the time. At most, it was a minor circumscription of regulatory authority that clarified long-standing terms. In fact, it can be easily argued that the Obama WOTUS rule did not make any major additions to the existing agency practice or longstanding federal precedent.²²⁷

Despite these facts, many organizations actively opposed the rule,²²⁸ and a number of cases were filed opposing its implementation as a draconian increase in federal authority.²²⁹ By the end of 2018, the Congressional Research Service found that the 2015 Clean Water Rule was in effect in twenty-two states and had been enjoined in twenty-eight other states.²³⁰ Consequently, the 1986 and 1988 rules promulgated by the Army Corps and the EPA, respectively, were used to regulate water pollution in some states, while the 2015 Obama-era rule was used in other states.²³¹ The courts and the states were divided on the how to best regulate the waters within the country.²³²

²²⁶ 33 C.F.R. § 328.3(b)(5) (2018).

²²⁷ See John Devine, Nat'l Res. Def. Council, Comment Letter on the Proposed Rule "Definition of 'Waters of the United States'—Recodification of Preexisting Rules," at 4 (Sept. 27, 2017) [hereinafter Devine, NRDC 2017 Water Rule Comments] (characterizing the 2015 rule as a modest response to our water quality challenges), <https://www.nrdc.org/sites/default/files/cwr-repeal-comments-devine-20170927.pdf>; see also Patrick Parenteau, *The Clean Water Rule: Not Dead Yet*, 48 ENV'TL L. 377, 388 (2018) (arguing that when one compares the Obama WOTUS rule to the 1986 rule, it reveals a sizable reduction in waters formerly protected by the Clean Water Act).

²²⁸ See Worth, *supra* note 113, at 606 (giving examples of several organizations that opposed the 2015 rule including the National Association of Homebuilders, the Kansas Livestock Association, and the National Cattlemen's Beef Association).

²²⁹ For example, in *North Dakota v. EPA*, North Dakota, Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nevada, Wyoming, the New Mexico Environment Department, and the New Mexico State Engineer filed a motion for preliminary injunction against the WOTUS rules in June 2015. 127 F. Supp. 3d 1047 (D.N.D. 2015). Another example is *Ohio v. U.S. Army Corps of Engineers* (*In re* EPA & DOD Final Rule), in which seventeen states and the North Carolina Department of Environmental and Natural Resources filed a consolidated case challenging the validity of the final WOTUS rule in October 2015. 803 F.3d 804 (6th Cir. 2015), *vacated*, *Murray Energy Corp. v. U.S. DOD* (*In re* U.S. DOD), 713 F. App'x 489 (6th Cir. 2018). The seventeen states there were Ohio, Michigan, Tennessee, Oklahoma, Texas, Louisiana, Mississippi, Georgia, West Virginia, Alabama, Florida, Indiana, Kansas, Kentucky, Utah, Wisconsin, and South Carolina. *Id.*

²³⁰ LAURA GATZ, CONG. RSCH. SERV., R4524, "WATERS OF THE UNITED STATES" (WOTUS): CURRENT STATUS OF THE 2015 CLEAN WATER RULE 7 (2018), <https://crsreports.congress.gov/product/pdf/R/R45424>.

²³¹ *Id.*

²³² *Id.* at 10.

D. THE TRUMP ADMINISTRATION'S REPLY: A RETURN TO A MORE RESTRICTIVE INTERPRETATION

Soon after President Trump took office, he moved to repeal the 2015 WOTUS rules of the previous administration. Accordingly, on February 28, 2017, President Trump issued Executive Order No. 13,778—*Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States Rule”*—which called for a narrower interpretation of “Waters of the United States.”²³³ Specifically, Executive Order No. 13,778 required the Administrator of the EPA and the Assistant Secretary of the Army for Civil Works (who oversees the Army Corps) to review the final 2015 WOTUS rule.²³⁴ The agencies were ordered to rescind or revise the rule if it was not consistent with keeping the nation’s navigable waters free from pollution, while at the same time promoting economic growth, minimizing uncertainty, and showing due regard for the respective roles of the states and federal government.²³⁵ It also explicitly ordered the EPA and the Army Corps to consider interpreting the term navigable waters in a manner consistent with Justice Scalia’s plurality opinion in *Rapanos*.²³⁶

In December 2018, the regulatory agencies proposed a new rule defining WOTUS, and on February 14, 2019, the proposed rule was published in the Federal Register.²³⁷ The rule seeks to create a more streamlined and definitive statement of the United States’ role in protecting its waters.²³⁸ However, the rule leaves many unanswered questions and may actually lessen the protection of those waters.²³⁹ In fact,

²³³ Exec. Order No. 13,778, 82 Fed. Reg. 12,497 (Feb. 28, 2017), <https://www.federalregister.gov/documents/2017/03/03/2017-04353/restoring-the-rule-of-law-federalism-and-economic-growth-by-reviewing-the-waters-of-the-united>.

²³⁴ *Id.*

²³⁵ *Id.*

²³⁶ *Id.*

²³⁷ Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)), <https://www.federalregister.gov/documents/2019/02/14/2019-00791/revised-definition-of-waters-of-the-united-states>.

²³⁸ *Id.* at 4170 (stating that the proposed rule is intended to establish categorical bright lines that provide clarity and predictability for regulators and the regulated community).

²³⁹ See, e.g., EPA & DEP’T ARMY, APPENDICES TO THE RESOURCE AND PROGRAMMATIC ASSESSMENT FOR THE PROPOSED REVISED DEFINITION OF “WATERS OF THE UNITED STATES,” at 23-27 (revised Dec. 18, 2018) [hereinafter EPA & DEP’T ARMY, RPA], https://www.epa.gov/sites/production/files/2018-12/documents/wotus_proposed_step_2_rpa_appendices_for_clearance_12-18-18_508c.pdf (noting the methodological and analytical problems associated with the narrower WOTUS definition adopted by Justice Scalia in *Rapanos*).

the agencies acknowledged some of these problems by quantifying and predicting potential problems associated with the rule.²⁴⁰ These concerns led the agencies to create the *Appendices to the Resource and Programmatic Assessment for the Proposed Revised Definition of “Waters of the United States”* (“RPA”).²⁴¹

Fortunately, the new WOTUS rule still covers traditional navigable waters.²⁴² Despite this mainstay, the new rule eliminates some of the strongest safeguards in U.S. water protection history, reversing years (in some cases, decades) of federal clean water law.²⁴³

1. Reversing Policy: Ignoring the Water Nexus

The Trump administration’s WOTUS rule eliminates Justice Kennedy’s significant nexus test.²⁴⁴ In light of our modern knowledge of water use and contamination, and its potential health risks,²⁴⁵ it is ill-advised—and almost inconceivable—to diminish federal regulation and resources relative to clean water in the United States at all. Furthermore, it is incredible that the federal government would fail to protect waters that may ecologically connect to and substantially influence a WOTUS—i.e., those with a significant nexus to jurisdictional waters.

What is even more incredible is that the new rule eliminates the “significant nexus” protections *without* a detailed analysis of how this will increase or maintain the chemical, physical, or biological integrity of adjacent waters.²⁴⁶ The rule, moreover, fails to explain how this may affect citizens using waters that are no longer protected under this new test.²⁴⁷ The expressed purpose of this part of the rule was to end the current practice of conducting significant nexus analysis to determine the effects on protected waters.²⁴⁸ But it did more than this; it successfully ended

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² Revised Definition of “Waters of the United States,” 84 Fed. Reg. at 4170.31.

²⁴³ See generally *supra* Section III (discussing the long and varied history of water pollution control); *supra* notes 107-113 (discussing the history of water protection safeguards).

²⁴⁴ *Id.*

²⁴⁵ See generally *supra* Sections I and II discussing the breadth of U.S. waters and the risk posed by contamination; SHRADER-FRECHETTE, TAKING ACTION, SAVING LIVES: OUR DUTIES TO PROTECT, ENVIRONMENTAL AND PUBLIC HEALTH, *supra*, note 2 (discussing potential health risks associated with pollution).

²⁴⁶ See generally Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154, *et seq.* (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)) (failing to properly discuss the rules effect on the integrity on adjacent waters).

²⁴⁷ *Id.*

²⁴⁸ *Id.* at 4186.

decades of steady progress toward federal remediation and elimination of pollution in our waters.

2. Reversing Policy: Removing Wetlands

Under the new rule, wetlands are no longer included as a WOTUS.²⁴⁹ In fact, the rule eliminates the wetlands category and replaces it with “adjacent wetlands,”²⁵⁰ which limits coverage to only those wetlands with a direct hydrologic surface connection to a traditional navigable water.²⁵¹

More specifically, the new rule eliminates federal regulatory jurisdiction over wetlands that are not directly touching or connected on the surface to navigable-in-fact waters. This effectively abolishes the regulation of any pollution of wetlands if its connection to a WOTUS is via ephemeral streams, groundwater, or subsurface connection.²⁵² As a result, the rule ignores the chemical and biological connectivity of groundwater.²⁵³ It fails to consider how pollutants and hazardous substances move through the groundwater and the cumulative effects of such movement.²⁵⁴

Even more disturbing, the rule states that ecological connections between a traditionally navigable water and wetland are now irrelevant.²⁵⁵ In doing so, one of the oldest and most robust environmental statutes in history was effectively eviscerated. It is difficult to fathom how agencies charged with the protection and restoration of our nation’s waters would ignore the science behind these ecological connections.

3. Reversing Policy: Deregulating Ephemeral Streams

Ephemeral streams are categorically excluded from CWA jurisdiction by the rule,²⁵⁶ but the agencies do not demonstrate how this will increase or even maintain the current protections if those streams actually flow

²⁴⁹ *Id.* at 4171.

²⁵⁰ *Id.* at 4172.

²⁵¹ *Id.* at 4185.

²⁵² Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154, 4188 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)).

²⁵³ See Jon Devine, Nat’l Res. Def. Council, Comment Letter on Proposed Rule on Revised Definition of “Waters of the United States,” at 23 (Apr. 15, 2019) [hereinafter, Devine, NRDC 2019 Water Rule Comments], <https://www.nrdc.org/sites/default/files/letter-to-epa-opposition-rolling-back-protections-clean-water-rule.pdf>.

²⁵⁴ See *id.*

²⁵⁵ See Revised Definition of “Waters of the United States,” 84 Fed. Reg. at 4188.

²⁵⁶ *Id.* at 4173-75.

with pollution.²⁵⁷ The agencies also fail to evaluate whether this categorical exclusion will influence the environmental protection of traditionally navigable waters.²⁵⁸ This revision could lead to disastrous results throughout the United States given the estimate that ephemeral streams compose 57 percent of total stream miles within the United States.²⁵⁹

As a result, millions of miles of water within the United States became deregulated. For example, 84 percent of Arizona's, 56 percent of Colorado's, and 61 percent of Maine's streams are now unprotected under federal law.²⁶⁰ These tributaries are essential capillaries of the nation's water systems; as such, they must be zealously protected under federal law to assure clean water.

Furthermore, the rule fails to recognize environmental realities of these ephemeral streams. Waters that flow from ephemeral streams can be more impactful than other continuous streams.²⁶¹ In some regional areas, such as the Southwest, most tributaries are seasonally dry, hence ephemeral.²⁶² Yet, when in flow, these streams supply substantial amounts of surface water to other tributaries and rivers.²⁶³ The agencies, however, ignore the cumulative effect of these waters and their aggregate ecological effect on WOTUS.²⁶⁴ Given the current polluted state of U.S. waters,²⁶⁵ implementing this new rule could disastrously rollback existing protections.

²⁵⁷ See generally Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154 *et seq.* (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)) (failing to properly discuss how the rule will maintain or increase current protections).

²⁵⁸ See Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 72.

²⁵⁹ Jan Goldman-Carter, Nat'l Wildlife Fed'n, Comment Letter on Proposed Rule on Revised Definition of "Waters of the United States," at 76 (Feb. 14, 2019) [hereinafter Goldman-Carter, NWF 2019 Water Rule Comments], <https://www.agri-pulse.com/ext/resources/pdfs/w/NWF-American-Rivers-CWA-Rollback-Rule-Comments-41519.pdf>.

²⁶⁰ *Id.*

²⁶¹ Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 22.

²⁶² Devine, NRDC 2017 Water Rule Comments, *supra* note 227, at 13.

²⁶³ *Id.*

²⁶⁴ See Jay Austin, et al., *Regulatory Reform in the Trump Era*, ENV'TL L. INST., Mar. 2017, at 11-12, <https://www.eli.org/sites/default/files/eli-pubs/regulatory-reform-trump-era.pdf> (explaining the need to apply the nexus rule to streams); Devine NRDC 2019 Water Rule Comments, *supra* note 253, at 72; Goldman-Carter, NWF 2019 Water Rule Comments, *supra* note 259, at 75-76.

²⁶⁵ See *supra* Section I (discussing the state of water pollution within the United States).

4. Reversing Policy: Shifting Burdens/Creating Unfunded Mandates

Another important omission is the lack of a detailed analysis describing how the agencies expect the local and state regulators to shoulder this new regulatory burden without a drastic increase in federal funding. Correspondingly, the agencies fail to quantitatively analyze the potential for increased pollution due to states' inability to handle increased, unfunded regulatory obligations.²⁶⁶ This lack of funding, personnel, equipment, technology, and (in some cases) incentive brought about the creation of federal water pollution control. The previous failures of state-driven water protection, for example, resulted in the 1969 fires on the Cuyahoga River and the death of Lake Erie; these and other environmental disasters inspired the 1972 CWA.²⁶⁷

Under the Trump administration's rule, states are now required to individually shoulder regulatory burdens associated with protecting waters that have been federally regulated for decades. Yet, there is no federal guidance or detailed analysis explaining how states will pay for this increase in regulatory costs.²⁶⁸ This is despite the fact that, in the RPA, the agencies recognize that the potential change in CWA jurisdiction will strain the state and local water systems.²⁶⁹

5. Reversing Policy: Ignoring Interstate Waters

The regulatory agencies have not offered an assessment of how the new rule will ensure national consistency in the protection of our nation's waters.²⁷⁰ Without safeguards, the implementation of the new rule could lead to disparities relative to water safety. This is of particular concern since the new rule also removes protections for some previously-covered interstate waters.²⁷¹ The rule categorically excludes interstate waters that are not connected to traditionally navigable waters; i.e., waters which

²⁶⁶ See Goldman-Carter, NWF 2019 Water Rule Comments *supra* note 259, at 81,103.

²⁶⁷ *Id.* at 84.

²⁶⁸ Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 59.

²⁶⁹ EPA & DEP'T ARMY, RPA, *supra* note 239, at 103-10.

²⁷⁰ *Id.* at 70 (discussing the potential effects of the new rule on different states, local governments and tribes. See generally Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154 *et seq.* (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)) (failing to properly discuss how the rule will maintain national consistency in relation to clean water protection).

²⁷¹ Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154, 4171-72 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)).

cross state lines but do not have the required surface connectivity.²⁷² The agencies admit, however, that they have not performed the research necessary to justify this change to longstanding regulatory practice.²⁷³

6. Reversing Policy: Abdicating Governance

For over half a century, the United States engaged in one of the most ambitious and successful pollution abatement and elimination programs in history.²⁷⁴ The CWA was the one of the best designed and most artfully drafted statutes of its kind—it formed the backbone of this nation’s continuing efforts to protect its citizens from pollution.²⁷⁵ With all of its faults, the CWA and its regulatory enforcement has been a mainstay of U.S. homeland protection since President Nixon.²⁷⁶ On the other hand, recent attempts to redefine its terminology, reallocate responsibilities, and remove regulatory water protections have left gaps in national environmental governance. The three most significant of these gaps are: (1) confusion caused by a rollback of well-established water-protection approaches; (2) failure to consider affected communities; and (3) misaligned enforcement regimes.

a. Rollback

The current rule threatens or eliminates many of the federal regulatory protections created over the past half century without a calculus for whether this regulatory change will increase environmental protection. On the contrary, this rollback in protections seems to threaten to health and safety.²⁷⁷ For example, the new rule may adversely affect well over twenty-five million people living in Great Lake states who rely upon drinking water systems stemming from ephemeral, intermittent, and

²⁷² *Id.* at 4172.

²⁷³ EPA & DEP’T ARMY, RPA, *supra* note 239, at 36.

²⁷⁴ See Hines, *supra* note 110, at 80; see also Craig, *supra* note 162, at 1-3 (describing the how the benefits of the CWA outweigh the costs); McCrory, *supra* note 27, at 79-81 (describing the failures of previous water laws leading to the CWA).

²⁷⁵ See Hines, *supra* note 110, at 80.

²⁷⁶ See generally Kenneth M. Murchison, *Learning from More Than Five-And-A-Half Decades of Federal Water Pollution Control Legislation: Twenty Lessons for the Future*, 32 B.C. ENV’T L. REV. 527 (2005) (discussing the evolution of the CWA, including its accomplishments and failures); Worth, *supra* note 113 (discussing the 2015 WOTUS rules vis-à-vis the Commerce Clause and the history of the CWA).

²⁷⁷ *Id.*

headwaters streams.²⁷⁸ The agencies' proposed redefinition could additionally remove protections for as much as 70 percent of U.S. tributaries and 50 percent of wetlands.²⁷⁹ Furthermore, the reduction in regulatory protections threatens drinking water sources for over two hundred million citizens.²⁸⁰ The new rule fundamentally undermines longstanding efforts to restore many water bodies including the Everglades, Chesapeake Bay, and Great Lakes.²⁸¹

b. Failure to Consider Affected Community

Amazingly, the agencies failed to demonstrate how this new rule will maintain the health and safety of the general population, let alone how it will alleviate increased risks to children, the elderly, minorities, and those most vulnerable to environmental contamination. In fact, the agencies specifically stated that the change in the water rule does not present a disproportionate health risk to children, indigenous people, or minorities.²⁸² But in doing so, the regulatory agencies completely ignored the predictable impacts on the public health and safety.²⁸³

There is no specific mention of the people currently affected by water pollution in the "stakeholder outreach" section of the rule.²⁸⁴ Although there is a recitation of a webinar outreach to public advocacy²⁸⁵—which ostensibly includes environmental justice—this is not the same as reaching out to people who are currently suffering from the now transgenerational effects of hazardous water pollution. The agencies acknowledge that the change in the scope of federal protections may affect water quality and require increased treatment, but they do not assess the magnitude of the water degradation caused by their regulatory changes.²⁸⁶

The agencies also fail to demonstrate how the regulatory changes will lessen the risk of harm to our communities.²⁸⁷ Low income and rural

²⁷⁸ See Goldman-Carter, NWF 2019 Water Rule Comments, *supra* note 259, at 84.

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ *Id.* at 84-87.

²⁸² Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154, 4203 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)).

²⁸³ Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 51.

²⁸⁴ Revised Definition of "Waters of the United States," 84 Fed. Reg. at 4163.

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 4200-02; EPA & DEP'T ARMY, RPA, *supra* note 239, at 36-38, 94-108; see also Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 57.

²⁸⁷ See Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154 *et seq.* (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)) (failing to discuss the risk to potential affected

communities and communities of color already face unaffordable rates for clean drinking water and water sanitation.²⁸⁸ Small rural areas are especially vulnerable to water pollution and have less capacity to access resources to recognize or remediate the harm until it is too late.²⁸⁹

For example, in Franklin, Indiana, a small Midwestern town, contamination from trichloroethylene and tetrachloroethylene (known carcinogens)²⁹⁰ have been found in several places including the groundwater.²⁹¹ Accordingly, there is a high correlative level of childhood cancer in the area, and as expected, the community is very concerned.²⁹² During a town meeting with the EPA, a homeowner spoke about contamination in the waterways and flooding, stating, “The creek stuff really worries me. You don’t know what it’s like when it’s flooding. It’s a sight to see.”²⁹³ The flooding brings with it the concern of an expanding toxic plume. The people in this community have been adversely and directly affected by soil, air, and water contamination.²⁹⁴ Although the consent of the governed is a mainstay of U.S. democracy, no one is asking these citizens if federal water pollution control regulations should be weakened or strengthened.

The lack of transparency, inclusion, and consent often leads to pollution victims rather than the polluters ultimately paying the price for

communities); Executive Summary, 80 Fed Reg. at 37,057 (discussing who was actually invited to give input through outreach); 80 Fed Reg. at 37,103-04 (making a blanket statements that there are no disproportional effects on children, low-income, or minority populations); *see also* Goldman Carter, NWF 2019 Water Rule Comments, *supra* note 259, at 73 (stating that the regulation actually demonstrates that it will threaten national drinking water supplies); Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 53 (stating that the agency’s lack of impact assessment will increase the risk of contamination that can cause illness downstream).

²⁸⁸ Goldman-Carter, NWF 2019 Water Rule Comments, *supra* note 259, at 105.

²⁸⁹ *Id.*

²⁹⁰ *Id.*

²⁹¹ Sarah Bowman, *Everything You Need to Know About Contamination and Childhood Cancer in Franklin, Indiana*, INDY STAR (Jan. 22, 2019), <https://www.indystar.com/story/news/environment/2019/01/22/childhood-cancer-indiana-suburb-franklin-johnson-county-what-you-need-know/2644663002/>.

²⁹² *Desperate for Answers: Testing for Toxins*, 13 WTHR (July 2018); *see also High levels of suspected toxins force the shut down of 2 Franklin Elementary Schools*, 13 WTHR (last updated Mar. 22, 2019), <https://www.wthr.com/article/news/investigations/13-investigates/high-levels-suspected-toxins-force-shut-down-2-franklin-elementary-schools/531-e1570788-1b4f-4806-864d-67462e5b4efc>.

²⁹³ *Id.*

²⁹⁴ *See New Report: Areas of Toxic exposures likely overlooked in franklin by EPA*, 13 WTHR (June 27, 2019) (reporting on the concerns over the high rates of pediatric cancer and hazardous contamination in the area).

the contamination.²⁹⁵ The current water rules typify the opaque regulatory formation that undercuts citizens' rights to know and jeopardizes their rights to give or withhold consent for health risks associated with contamination.²⁹⁶ The Trump administration did not adequately engage affected (and potentially affected) citizens in the democratic rulemaking process when it proposed and modified its interpretation of WOTUS.²⁹⁷ Those most likely to be at risk of suffering the environmental consequences of the WOTUS rules in question should have a meaningful opportunity to be heard before the rules are adopted.

VI. GUIDANCE FOR THE FUTURE

A. RETURN TO BROAD POWERS OF ENFORCEMENT

The recent administrative rule stands in direct contrast to years of federal case interpretation and guidance. It has left those making decisions concerning water and those affected by the decisions in an untenable position. Faced with regulations out of step with the decades of evolving legal protection, the rule hinders administrators' ability to protect the nation's waters.

There are choices to be made in terms of governance, especially as it relates to engaging citizens and shepherding sweeping mandates to enable multiple stakeholders, institutions, and authorities to have ownership in a common approach to water protection and justice. At a minimum, the current administration needs to leave in place longstanding broad water protection laws. Without these protections, enforcement becomes fragmented, incentives became slanted, and mere political capital rules decisions. Currently, state and local authorities are left with little federal assistance and new unfunded mandates.²⁹⁸ The absence of an appreciation of the significance of the nexus between water has left U.S. citizens without basic water protection.

²⁹⁵ See SHRADER-FRECHETTE, *supra* note 28, at 109-11 (describing how regulatory delay and cost benefit analysis denies justice and shifts the burden and costs of pollution to the poor).

²⁹⁶ *Id.*

²⁹⁷ Revised Definition of "Waters of the United States," 84 Fed. Reg. 4154, 4200-02 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)); EPA & DEP'T ARMY, RPA, *supra* note 239, at 36-38, 94-108; *see also* Devine, NRDC 2019 Water Rule Comments, *supra* note 253, at 57.

²⁹⁸ *See* Devine NRDC, 2019 Water rule Comments *supra* note 253, at 59; EPA & DEP'T ARMY, RPA *supra* note 239, at 103-10. *But see* Revised Definition of "Waters of the United States," 84 Fed. Reg. at 4202 (stating that rule does not contain any unfunded mandates).

B. RETURN TO PRIOR ADMINISTRATIVE REGULATION

Under the current definitions and administrative mandates, local, state, and federal regulators cannot clearly determine which waters fall within the scope of the WOTUS definition. Until better information, community engagement, and new statutory language can be considered, at a minimum, the 2015 WOTUS definition must be reinstated.

Of course, this can only be a stopgap. While returning to prior administrative advice is a good first step, it must be followed immediately by a comprehensive, well-organized shift in the mechanisms underlying WOTUS protections. Successful governance must include local participants in water regulation. The merging of governance research and thinking into the area of environmental protection and justice is not new and must be considered in tandem with reinstating the regulatory status quo.

C. GOVERNANCE IN THE AGE OF DEVOLVED COLLABORATION

In 1990, Nobel Laureate Elinor Ostrom identified eight design principles characterizing best practices describing rules and structures of robust institutions associated with sustainable governance of common-pool resources.²⁹⁹ These eight design principles relate to the boundaries of the system; congruence with local conditions; opportunities for collective choice and local self-determination; approaches to monitoring, sanctions, and conflict resolution; and incorporation of multiple, nested layers of organization.³⁰⁰ Within the Workshop in Political Theory and Political Analysis, scholars of natural resource management found a correlation between success and longevity of common-pool resource systems and the Ostrom set of institutional characteristics.³⁰¹

²⁹⁹ See generally ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990) (delineating eight design principles for solving collective action problems).

³⁰⁰ See *id.* at 26-28.

³⁰¹ See Vincent Ostrom, *Water and Politics California Style*, in *POLYCENTRIC GOVERNANCE AND DEVELOPMENT: READINGS FROM THE WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS* 32-36 (Michael D. McGinnis ed., 1999) (discussing the movement from complexity to a water industry); Vincent Ostrom and Elinor Ostrom, *Legal and Political Conditions of Water Resource Development*, in *POLYCENTRIC GOVERNANCE AND DEVELOPMENT: READINGS FROM THE WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS* 50-51 (Michael D. McGinnis ed., 1999) (identifying the central task of water resource development will be one of conceptualizing appropriate institutional solutions that will take account of the heterogenous sets of interests involved among diverse communities of water users”).

Research following *Governing of the Commons* has found support for these principles. For example, scholars researching community-based irrigation systems have argued that a shift from centralized to decentralized, participatory, and community-based systems is desirable.³⁰² This is one example of the long line of research that supports the use of decentralized, participatory, community-based systems.³⁰³

The shift to decentralized, participatory, community-based governance strategies has been used in the past by the EPA, such as in its Community-Based Environmental Protection Initiative. Other federal agencies, particularly those exploring land or natural resource governance, have similarly advocated a greater role for local decisionmakers and have expanded Ostrom's principles to embrace collaborative problem solving.

It is important to note that the move toward decentralized decisionmaking is a clear rejection of the "command-and-control" regulatory approach, which embraces top-down, uniform national standards.³⁰⁴ Instead, it calls upon agencies to expand the influence and power of local groups.³⁰⁵ With an emphasis on collaboration over "announce-and-defend" administrative decision-making, the rethinking of appropriate administrative decisionmaking power has undergone a fundamental shift in emphasis and locus of control.³⁰⁶ Moreover, the shift toward devolved collaboration promotes the recognition of environmental justice and "distributional and procedural equity in environmental and natural resource decisions[;]"³⁰⁷ both of which are necessary considerations for those who are impacted the most by the Trump administration's regulatory changes.

Unfortunately, recent efforts to implement the command-and-control, or announce-and-defend, administrative decisionmaking model are likely

³⁰² See, e.g., Elinor Ostrom, *Design Principles in Long-Enduring Irrigation Institutions*, in POLYCENTRIC GOVERNANCE AND DEVELOPMENT: READINGS FROM THE WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS 83 (Michael D. McGinnis ed., 1999).

³⁰³ See *id.* at 75.

³⁰⁴ Shahla Ali, *Measuring Success in Devolved Collaboration*, 26 J. LAND USE & ENV'TL L. 93, 94 (2010).

³⁰⁵ *Id.*

³⁰⁶ "Announce-and-defend" decisionmaking occurs when government agencies make crucial decisions without public involvement, instead seeking to announce and defend decisions to the public. See Eileen Gay Jones, *Risky Assessments: Uncertainties in Science and the Human Dimensions of Environmental Decisionmaking*, 22 WM. & MARY ENV'TL L. & POL'Y REV. 1, 25 n.107 (1997) (noting that "announce and defend" is a well-worn phrase in environmental literature).

³⁰⁷ Sheila Foster, *Environmental Justice in an Era of Devolved Collaboration*, 26 HARV. ENV'TL L. REV. 459, 461 (2002) (relying on UNEQUAL PROTECTION: ENVIRONMENTAL JUSTICE AND COMMUNITIES OF COLOR (Robert D. Bullard ed., 1994)).

to fail, as has occurred in the past. Fortunately, Ostrom considered this eventuality a dilemma of enforcement that might be resolved through polycentricity.³⁰⁸

In the current administrative model of command-and-control hierarchical organization, enforcement occurs through the information-dependent “monitor-and-enforce system.” Within this monitor- and-enforce system

Monitors and enforcers need to be monitored and sanctioned if they fail to fulfil their duties, and the second layer of monitors and enforcers also needs to be monitored, and so on. This creates an apparent paradox. At each layer of monitoring and enforcement, there exists a possibility of failure, either due to personal interests and opportunism of the parties involved, due to lack of legitimacy, or due to errors and lack of information.³⁰⁹

Of course, the more complexity within the hierarchical system, the more inefficient the overall monitoring and enforcement becomes. The endless loop of creating more enforcement by pushing the problem to higher and higher levels of authority does little to remedy the growing issue. Ultimately, systems solve the dilemma by creating an idealized version of a benevolent and informed third party. In actuality, the authority is more detached, has fewer incentives, and is besieged with monitoring and information costs.

The solution to such a dilemma is to stop the upward escalation toward an idealized hierarchical authority by looking to local self-governance and a polycentric sharing of authority. This idea is the essence of devolved collaboration and easily merges with the notion of demosprudence.³¹⁰

³⁰⁸ The term “polycentricity” describes a social system of many decision centers having limited and autonomous prerogatives and operating under an overarching set of rules. Michel D. McGinnis, *Series Forward*, in *POLYCENTRIC GOVERNANCE AND DEVELOPMENT: READINGS FROM THE WORKSHOP IN POLITICAL THEORY AND POLICY ANALYSIS* xi-xiv (Michael D. McGinnis ed., 1999).

³⁰⁹ Paul Dragos Aligica & Vlad Tarko, *Institutional Resilience and Economic Systems: Lessons from Elinor Ostrom’s Work*, 56 *COMP. ECON. STUD.* 52, 65 (2014), https://www.researchgate.net/publication/263326790_Institutional_Resilience_and_Economic_Systems_Lessons_from_Elinor_Ostrom's_Work.

³¹⁰ See Lani Guinier & Gerald Torres, *The Meaning of the Civil Rights Revolution: Changing the Wind: Notes Toward a Demosprudence of Law and Social Movements*, 123 *YALE L.J.* 2740, 2749-56 (2014).

D. USING DEMOSPRUDENTIAL THINKING TO FURTHER WATER JUSTICE

Throughout U.S. history, the Supreme Court's attitude toward federal environmental regulation has been at times tepid, and at others, openly hostile.³¹¹ Nonetheless, the judiciary could become an essential entity to assist in returning the focus to those who are actually affected by pollution—a concept known as demosprudence.

Demosprudence is a term coined by Lani Guinier and Gerald Torres that describes the process of creating and interpreting laws from an external perspective, outside of legal thinking.³¹² The premise is that major legal change can only occur when cultural modifications accompany the technical legal rule changes.³¹³ Demosprudence postulates that social movements can create predictable and inevitable legal changes.³¹⁴

Social movements help change the way we understand the minimum obligations the law owes its citizens and the obligations citizens owe each other.³¹⁵ This dynamic balance of power between lawmaking and social action describes demosprudence.³¹⁶ When dynamic constituencies choose to call power to account through contentious politics and legal actions, they can reshape the nation.³¹⁷ Accordingly, the collective wisdom and voice of the people should always inform the rulemaking enterprise in our democracy.³¹⁸

Similar to devolved collaboration and the Ostroms philosophy, demosprudence explores how ordinary people become engaged in meaningful participatory democracy.³¹⁹ It queries whether political, social, and economic minorities are actively engaged in productive dialogue so

³¹¹ See Richard J. Lazarus, *Restoring What's Environmental About Environmental Law in the Supreme Court*, 47 UCLA L. REV. 703, 771 (2000) (concluding that the Supreme Court's attitude toward environmental law has historically been apathetic and is growing increasingly skeptical and even openly hostile).

³¹² See Gerald Torres, *The Eighty-Third Cleveland-Marshall Fund Visiting Scholar Lecture: Legal Change*, 55 CLEV. ST. L. REV. 135, 135-36 (2007) (describing a theory of legal change based upon social movements, showing how durable social movements influence and are uninfluenced by lawmaking).

³¹³ *Id.* at 137 (quoting Professor Stoddard's essay describing the difference between rule shifting and culture shifting, suggesting that mere formal rule changes are always going to be insufficient to produce significant social change).

³¹⁴ See Guinier & Torres, *supra* note 310, at 2755-57.

³¹⁵ See Torres, *supra* note 312, at 144.

³¹⁶ See Guinier & Torres, *supra* note 310, at 2749-56.

³¹⁷ *Id.* at 2750-51.

³¹⁸ *Id.*

³¹⁹ *Id.* at 2750.

that it is obvious that “We the People” plays a role in the lawmaking.³²⁰ This general notion of inclusive collaboration is an old concept in U.S. democracy.

In his speech on the *Dred Scott* decision, Fredrick Douglass said:

“We, the people”—not, we the white people—not we, the citizens, or the legal voters—not we, the privileged class, and excluding all other classes but we, the people . . . the men and women, the human inhabitants of the United States[.]³²¹

All three branches of government can and should play an active role in a participatory democracy. Nevertheless, if the legislative branch and the executive branch cannot ensure this foundational principal, it becomes a judicial imperative.

The courts can and should become an active force in the shaping of social conscience and justice. The courts have the ability to force conscious awareness of problems faced by disenfranchised or disadvantaged groups that are easily shut away from public view.³²² As a result, courts can shed light upon societal needs for intervention and help alleviate the problems long before they become too dire.³²³ New WOTUS rules defining CWA jurisdiction must reflect meaningful participatory democracy.³²⁴ To do this, there must be a collaborative effort between the legislature, regulatory agencies, courts, and affected communities—all working together as moral actors calling democracy to account.³²⁵ Regulatory transformation and judicially driven change only achieve their enduring power from, “We the People”.³²⁶

If Congress will not act to clarify CWA jurisdiction, and the regulators will not work to protect vulnerable communities, courts must work to advance the cultural shift necessary to safeguard these communities. Consequently, courts become the catalyst for this genuine

³²⁰ Lani Guinier, *The Supreme Court, 2007 Term Foreword: Demosprudence Through Dissent*, 122 HARV. L. REV. 4, 138 (2008).

³²¹ Frederick Douglass, Speech in New York on the Anniversary of the American Abolition Society on the *Dred Scott* decision (May 14, 1857), in TWO SPEECHES BY FREDERICK DOUGLASS: ONE ON WEST INDIA EMANCIPATION, AND THE OTHER ON THE DRED SCOTT DECISION 27, 40 (C.P. Dewey prtg. 1857), http://www.libraryweb.org/~digitized/books/Two_Speeches_by_Frederick_Douglass.pdf.

³²² Anna Spain Bradley, *The Disruptive Neuroscience of Judicial Choice*, 9 U.C. IRVINE L. REV. 1, 46 (2018).

³²³ *Id.* at 47.

³²⁴ See Guinier & Torres, *supra* note 310, at 2751.

³²⁵ *Id.* at 2753.

³²⁶ *Id.* at 2745.

form of democratic accountability.³²⁷ Longstanding legal thinking has argued that courts are the bastion of social change and justice. Years ago, Justice Cardozo wrote,

What really matters is that the judge is under a duty, within the limits of his power of innovation, to maintain a relation between law and morals, between precepts of jurisprudence and those of reason and good conscience.³²⁸

He stated that the ultimate purpose of law is the welfare of society and that existing rules had to be extended or restricted based upon societal welfare.³²⁹ He recognized that the court had considerable latitude in effecting social welfare; the power of the court needs to be both supple and adaptive.³³⁰ Accordingly, there is no moral quandary; courts are required to use their insight to determine social values and their innovation to advance social justice.³³¹

Toward these ends, courts must ensure that “We the People” deliberately includes a fully consenting community of affected poor, minorities, women, and children.³³² Courts must also work with rural and urban, working-class people who need clean and safe communities in which to raise their families. Courts should seek to reinvigorate regulators, lawmakers, and other public officials by scrutinizing the people’s role (or the lack thereof) in the environmental lawmaking process.³³³ The judiciary must become a dynamic participant in shaping our nation’s future by comprehensively and constantly evaluating this nation’s legal rules and processes to promote social justice.³³⁴

Courts must act when rules are made about essential environmental safeguards without the requisite approval of those people most likely to be adversely affected. Informed consent is imperative in environmental rulemaking, especially when it involves freshwater pollution. Yet, there is no indication that the Trump administration solicited or seriously considered the concerns of vulnerable communities before drafting the

³²⁷ Guinier, *supra* note 320, at 114.

³²⁸ BENJAMIN N. CARDOZO, *THE NATURE OF THE JUDICIAL PROCESS* 133-34 (1921).

³²⁹ *Id.* at 66-67.

³³⁰ *Id.* at 136-37.

³³¹ *Id.*

³³² See Guinier, *supra* note 310, at 48.

³³³ See generally Guinier & Torres, *supra* note 310, at 5460 (postulating that the declaration of rights must connect to both remedies and the life experiences of those on whose behalf rules are being shifted).

³³⁴ *Id.*

current WOTUS rule.³³⁵ The promulgation and enforcement of clean water rules should not continue to reflect the ever-shifting balance between the influential leaders in business, academics, politics, governments (conservative or liberal), and NGOs.³³⁶

All of these groups certainly have important roles to play, but environmental regulatory negotiations must begin and end with the will of the communities of the people most likely to be impacted by such regulations. The fate of families living in cancer clusters and other affected communities cannot constantly rely upon the swing of the political pendulum. Specifically, courts must work to ensure a cultural shift that makes our clean water rules a direct reflection of the will of those directly and tangibly impacted by the federal government's exercise of CWA jurisdiction (or its refusal to do so). The judiciary and others must promote a shift in the national culture to guarantee democratic accountability, and most importantly, that non-elite voices are heard and effectuated.³³⁷

VII. CONCLUSION

For over a century, it has been almost impossible for people to determine when their federal government protected their water. The lack of state enforcement and an increasing awareness of pollution led to the forming of a strong national water protection statute in the CWA. Yet, the enigmatic nature of the jurisdictional terms “navigable waters” and “Waters of the United States” cannot lessen the national significance of the CWA. This groundbreaking statute was created to clean U.S. waters and prohibit U.S. water pollution. The shift from comprehensive clean water protection to deregulation fundamentally affects whose water we are (or are not) protecting. Too often, it is the most vulnerable among us who are caught in the political crossfire relating to environmental enforcement and protection.

³³⁵ See Devine NRDC, 2019 Water rule Comments *supra* note 253, at 59; EPA & DEP'T ARMY, RPA *supra* note 239, at 103-10. *But see* Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154, 4202 (Feb. 14, 2019) (to be codified at 40 C.F.R. § 230.3(s)) (stating that rule does not contain any unfunded mandates).

³³⁶ See Torres, *supra* note 312, at 142 (explaining that the goal of demosprudence is to create new forms of representation that bring the voices and bodies of non-elites into the conversation, ensuring shifts in power that are not merely pendulum swings between different groups of elite actors).

³³⁷ See *id.* at 143 (stating that the calculus of demosprudence includes a cultural shift in deciding who creates the narrative of justice and ensuring marginalized groups participate meaningfully in decision-making).

Therefore, before there are any significant changes to water regulation, it is imperative that the changes reflect the voices of people who either have been or are currently at risk of being harmed by water pollution. Courts must play an active part in creating a new cultural paradigm reflecting devolved collaborations and polycentric decisionmaking. The judiciary must assure that environmental law is less easily manipulated by the elites and more readily accountable to the public.

Instead of resurrecting timeworn regulatory concepts of the late 1800s, courts must guarantee that regulatory agencies allow the CWA to evolve with current scientific understanding relating to water pollution. As President Abraham Lincoln said, “[t]he dogmas of the quiet past are inadequate for the stormy present. The occasion is piled high with difficulty, and we must rise with occasion . . . [W]e must think anew, and act new.”³³⁸ Antiquated concepts of federal water protection will cause the CWA to sink into the quagmire. As time moves on, water law must flow with it or stagnate.

³³⁸ President Abraham Lincoln, Second Annual State of the Union Address to Congress (Dec. 1, 1862) (transcript available at <https://www.presidency.ucsb.edu/documents/second-annual-message-9>).