

Struggling to Find a *Rapanos* Nexus: *Maui* and the Expansion of Clean Water Act Regulation

James Pollack* and Frank Sturges**

The Supreme Court has long struggled to define the scope of federal jurisdiction over pollution control under the Clean Water Act (CWA). During the Court's last term, that issue returned to the forefront in County of Maui, Hawaii v. Hawaii Wildlife Fund. The case involved pollution from a wastewater treatment facility that reached the Pacific Ocean and caused coral die-offs at a nearby beach park. However, the facility did not discharge pollutants directly into the Pacific, but rather through groundwater. The Court heard the case to answer the question of whether pollution that reached federally covered waters indirectly, such as through groundwater, required CWA permits. On the way to the Supreme Court clash, an unusual relationship between a local government and an industry-aligned law firm led the county to reframe the case from a factual disagreement to a clash over the jurisdictional scope of the CWA.

The Supreme Court held that discharges that reach navigable waters after traveling through another medium require permits if they are the “functional equivalent” of a direct discharge based on a multi-factor test. This test extends far beyond the particular context of discharges through groundwater. Past disputes in both in the courts and over rulemakings in the CWA's implementing agencies focused on the definition of the statutory term “waters of the United States” (WOTUS) to set the reach of the CWA's federal jurisdiction. However, the Maui test shows that the real jurisdictional reach of the Act extends to discharges that eventually enter those waters. As a result, federal jurisdiction is broader than past cases indicated, not only for pollutants that travel through groundwater, but for any water pollution. This jurisdictional scope will cover

DOI: <https://doi.org/10.15779/Z38Z02Z93Z>

Copyright © 2021 Regents of the University of California.

* JD, Harvard Law School; MPP, Harvard Kennedy School.

** JD, Harvard Law School; MS, University of Michigan; MPP, University of Michigan.

The authors provided research and edits for the Brief of Amici Curiae Former EPA Officials in Support of Respondents for *County of Maui v. Hawai'i Wildlife Fund*. We would like to thank Shaun Goho for his valuable insight on this case and its implications. Any mistakes are the authors' own.

not only point source pollution but also wetlands regulation. As a result, Maui will become the most important case on the federal reach over water pollution.

Introduction	50
I. The Jurisdictional Nexus.....	54
A. Clean Water Act Jurisdictional Cases	56
B. Clean Water Act Jurisdictional Regulations.....	62
C. The Road to <i>Maui</i>	65
II. <i>County of Maui</i>	69
A. Federal District Court, District of Hawai‘i.....	73
B. The United States Court of Appeals, Ninth Circuit.....	75
C. A Circuit Split Emerges.....	76
D. Supreme Court Argument.....	81
E. Supreme Court Decision.....	83
III. The Impact of <i>Maui</i>	86
A. Narrow Impact: Clean Water Wins	87
1. The <i>Maui</i> Test is a Win for the Environment.....	88
2. Conservative Ideological Interests Failed in <i>Maui</i>	90
B. Broad Impact: Significant Nexus is Dead, Long Live Functional Equivalent.....	94
1. Reframing the Jurisdictional Question	95
2. From Point Sources to Dredge and Fill	96
3. Superseding <i>Rapanos</i>	100
4. The Functional Equivalent of Significant Nexus	102
a. Comparing Factors for Navigable Waters Analysis	102
b. Functional Equivalence of Wetlands.....	104
c. The Relative Importance of the <i>Maui</i> Factors in Implementation.....	107
5. Rulemaking Opportunities	109
Conclusion.....	112

INTRODUCTION

With its passage of the Clean Water Act (CWA) in 1972, Congress set an extraordinary goal: “[T]o restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹ At a time when rivers frequently went up in flames,² Congress dared to imagine waterways clear of pollution, ready for people to swim, fish, and appreciate thriving aquatic ecosystems. To achieve that end, Congress committed to the *complete elimination* of pollutant

1. 33 U.S.C. § 1251(a) (2018).

2. See Ariel Wittenberg, *Did a burning river really fuel landmark law’s passage?*, E&E NEWS (June 18, 2019), <https://www.eenews.net/greenwire/2019/06/18/stories/1060582811>.

discharges into navigable waters by 1985.³ Nearly fifty years later, we have seen the impact of the CWA in the improvement of many waterways—but the original ambitions of the CWA have yet to be achieved. Part of this delayed realization relates to ongoing battles over the scope of the CWA and efforts to limit its reach.

The core of the CWA prohibits “the discharge of any pollutant by any person” without a permit under the National Pollution Discharge Elimination System (NPDES).⁴ The Act goes on to define “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source.”⁵ Each component of this short directive has been litigated, but none to the same extent as “navigable waters.” The term is defined elsewhere in the Act as “waters of the United States, including the territorial seas,”⁶ but that language provides little clarity on the scope of waters covered, which could conceivably range from isolated wetlands and seasonal streams on one extreme to the Pacific Ocean on the other.

Opponents of CWA regulation targeted the “navigable waters” component of the Act in order to limit its scope. The theory goes that if the Act covers a limited set of waters, then the Act will cover fewer potential discharges into those waters. Limitations on CWA authority help ideological interests that seek to limit federal authority and economic interests that benefit from emitting pollutants or developing wetlands. On the other side, environmental interests seek to protect the expansive and ambitious scope of the CWA from attack.

Over the last few decades, the “navigable waters” jurisdictional war played out in the courts and regulatory state alike. It included a number of Supreme Court cases⁷ and regulatory actions across Democratic and Republican administrations.⁸ No matter the context, however, the focus has remained on the scope of waters encompassed in the “navigable waters” term.

In the last Supreme Court opinion on the matter, *Rapanos v. United States*,⁹ the Court split along ideological lines with a four-vote plurality written by Justice Antonin Scalia, a four-vote dissent by Justice John Paul Stevens, and Justice

3. 33 U.S.C. § 1251(a)(1). To implement this goal, the CWA declares that the “discharge of any pollutant by any person shall be unlawful” without a permit. *Id.* § 1311.

4. *Id.* § 1311(a). This provision must be read with the definition of “discharge of a pollutant” as “any addition of any pollutant to *navigable waters* from any point source.” *Id.* § 1362(12) (emphasis added).

5. *Id.* § 1362(12).

6. *Id.* § 1362(7).

7. *See, e.g.*, *United States v. Riverside Bayview Homes*, 474 U.S. 121 (1985); *Solid Waste Agency of N. Cook Cty. (“SWANCC”) v. U.S. Army Corps of Eng’rs*, 531 U.S. 159 (2001); *Rapanos v. United States*, 547 U.S. 715 (2006); *see also Sackett v. EPA*, 566 U.S. 120 (2012) (involving the finality of EPA CWA orders); *U.S. Army Corps of Eng’rs v. Hawkes*, 136 S. Ct. 1807 (2016) (involving the finality of a Corps wetland determination).

8. *See, e.g.*, Memorandum, EPA & Army Corps, Clean Water Act Jurisdiction Following the U.S. Supreme Court’s Decision in *Rapanos v. United States & Carabell v. United States* (Dec. 2, 2008) [hereinafter *Rapanos* Guidance]; Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,053 (Aug. 28, 2015); The Navigable Waters Protection Rule: Definition of “Waters of the United States,” 85 Fed. Reg. 22,250 (Apr. 21, 2020).

9. 547 U.S. at 715.

Anthony Kennedy's vote concurring in judgment.¹⁰ The resulting split opinion created extraordinary and intractable confusion over the scope of the CWA by offering two tests: the "significant nexus" test fashioned by Justice Kennedy and Justice Scalia's alternative test that waters must share a relatively permanent and continuous surface connection to be jurisdictional.¹¹

With the retirement of Justice Kennedy in July 2018, the new conservative Supreme Court majority appeared poised for another battle on the "navigable waters" question. To that end, the Court granted certiorari in *County of Maui, Hawaii v. Hawaii Wildlife Fund* on February 19, 2019.¹² In *Maui*, a group of environmental non-profit organizations alleged that the County of Maui was operating a wastewater facility in violation of the CWA.¹³ The County's wastewater facility discharged three to five million gallons of effluent on a daily basis into the groundwater below that facility, and studies found that a significant portion of those discharges migrated through groundwater and reached the Pacific Ocean.¹⁴ Although *Rapanos* did not reach the issue of discharges through groundwater, lower courts had relied on that decision in order to understand whether such discharges violated the CWA. Advocates saw this case as an opportunity to settle the "navigable waters" question once and for all.¹⁵

The Supreme Court decided *Maui* on April 23, 2020. In a 6–3 decision, the Court established a new test for water pollution under the CWA, extending liability to cover discharges of pollutants that are the "functional equivalent" of a direct discharge to navigable waters.¹⁶ Justice Stephen Breyer authored the opinion. He was joined by the rest of the liberal wing of the Court, Justices Ruth Bader Ginsburg, Elena Kagan, and Sonia Sotomayor, along with Chief Justice John Roberts, and Justice Brett Kavanaugh. To determine the functional equivalence of a discharge, the Court provided a variety of factors, such as transit time, distance traveled, and dilution.¹⁷ Justice Kavanaugh authored an additional

10. Justice Kennedy did not join the Justice Scalia opinion, but instead, was only "concurring in the judgement," *Rapanos*, 547 U.S. at 759, creating the resulting 4-1-4 split.

11. See *id.* at 759 (Kennedy, J., concurring); *id.* at 742 (Scalia, J., plurality).

12. *Cnty. of Maui v. Haw. Wildlife Fund*, 139 S. Ct. 1164 (2019).

13. *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020).

14. See Craig R. Glenn et al., *Lahaina Groundwater Tracer Study - Lahaina, Maui, Hawaii, Final Report*, UNIVERSITY OF HAWAII AT MANOA 1–16 (June 2013), <https://archive.epa.gov/region9/water/archive/web/pdf/lahaina-gw-tracer-study-final-report-june-2013.pdf>; Meghan Dailer et al., *Using δ^5 Values in Algal Tissue to Map Locations and Potential Sources of Anthropogenic Nutrient Inputs on the Island of Maui, Hawaii, USA*, 60 MARINE POLLUTION BULL. 655–71 (2010) [hereinafter Dailer Study] (finding elevated nutrient levels in the algae and algal blooms in ocean areas adjacent to the Lahaina Wastewater Reclamation Facility).

15. Petition for Writ of Certiorari at 23, 31–36, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018); Brief of Amicus Curiae Pacific Legal Foundation in Support of Petitioner at 2–15, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (May 16, 2019).

16. See *Maui*, 140 S. Ct. at 1468.

17. See *id.* at 1476–77. Other factors included the material through which the pollutant travels, the extent to which the pollutant is diluted or chemically changed as it travels, the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, and the manner by or area in which the pollutant enters the navigable water. See *id.*

concurrency, Justice Clarence Thomas authored a dissent joined by Justice Neil Gorsuch, and Justice Samuel Alito authored a separate dissent.

Although each opinion in *Maui* relied at least in part on citations from the four-vote Justice Scalia plurality in *Rapanos* to bolster its reasoning, the navigable waters question remains unanswered. In fact, the *Maui* majority leaves the issue almost completely unaddressed. As a result, it would be reasonable for someone to think that this groundwater case was a mere sideshow to the true CWA jurisdictional war. But that could not be further from the case.

In this Article, we argue that the Court's recent decision in *Maui* has completely upended the traditional CWA jurisdictional fight over what constitutes "navigable waters." In fact, its "functional equivalent" test may ultimately overtake the "navigable waters" debate. The *Maui* test is extraordinarily powerful because it is medium agnostic. According to the Court, the path from a point source to a navigable water could be through groundwater, over land, or through the air—to interpret the CWA otherwise would be an "absurdity."¹⁸ So why not an ephemeral tributary? Or the floodplain connection of a wetland? Or a subsurface connection between a wetland and a navigable water? Or some combination thereof? The functional equivalent test opens the door for fact-specific hydrological analysis that could realize the full scope of the CWA as it was originally envisioned—as "the most comprehensive and far-reaching water pollution bill [Congress has] ever drafted."¹⁹

To situate this argument, we will first present the history of the judicial and administrative battles over the scope of the CWA. These battles almost exclusively focused on the meaning of the term "navigable waters" in the Act. Next, we provide a detailed look at *Maui* and its path through the courts. This in-depth study provides a fascinating look at how special interests identified and cultivated this case as a potential site for the next CWA jurisdictional battle.

Finally, we provide an assessment of the narrow and broad implications of *Maui*. From a narrow perspective, the case settled a circuit split on how to treat pollutant discharges through groundwater that reach navigable waters.²⁰ Environmentalists have rightly celebrated this environmental win in spite of a conservative Court, and it could have massive implications for litigation over pipeline leaks, coal ash ponds, and other sources of pollution leaching through groundwater. However, commentators and advocates alike have failed to grapple with the broad implications of *Maui* and its functional equivalent test. Justice Breyer cleverly crafted a test that protects the CWA's jurisdiction not only for discharges through groundwater, but for discharges across the board. It provides

18. See *id.* at 1475–76.

19. *Milwaukee v. Illinois*, 451 U.S. 304, 318 (1981) (quoting statement of Representative Wilmer "Vinegar Bend" Mizell (R-NC-5)).

20. See, e.g., *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637, 641 (4th Cir. 2018); *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 933 (6th Cir. 2018); *Tenn. Clean Water Network v. TVA*, 905 F.3d 436 (6th Cir. 2018); see also Ellen M. Gilmer, *Groundwater's Muddy Legal History Under the Clean Water Act*, E&E NEWS (Dec. 4, 2018), <https://perma.cc/4JHR-PLJW>.

a safety valve that will capture discharges even as the legal boundary of what qualifies as a “navigable water” shifts. We argue that the functional equivalent test has the potential to completely upend the CWA status quo, providing a powerful new tool for citizen suits and the new Biden administration. With this new tool in hand, we may finally realize the full potential of the CWA.

I. THE JURISDICTIONAL NEXUS

The stakes of the *County of Maui* case extend far beyond the dispute over pollution at one beach in Hawai‘i—and even past the regulation of groundwater. This case instead became the latest vehicle for a decades-long effort to gut the CWA by limiting its jurisdiction. The straightforward yet uncommon facts of the case could have blown a hole in the law wide enough to severely curtail federal regulation of surface waters, allowing polluters to push states to engage in a race-to-the-bottom competition that would render the CWA toothless.²¹

At stake was federal regulation of water pollution, which can significantly benefit the quality of environment and the water that people rely on. Before European colonization of the United States, the lower forty-eight states contained over 220 million acres of wetlands, but development has cut that number in half.²² These remaining wetlands are the “most valuable parts of our landscape in ecosystem service assessments.”²³ Additionally, public drinking water comes from over 357,404 total miles of streams, over half of which are intermittent or ephemeral.²⁴ The value of these wetlands and streams are enormous, and the reach of federal jurisdiction under the CWA determines how protected they are.

At the same time, development in these areas can be time-consuming and expensive. The average time to evaluate a 404 dredge-and-fill permit is 217 days.²⁵ An individual 404 permit can cost a base of \$62,000 plus \$16,800 per acre.²⁶ Permit fees for NPDES vary by state: the filing fee for an application for a single permit in Hawai‘i costs \$1,000, while the permit fees for the largest publicly owned treatment works exceed \$200,000 per year.²⁷ Those numbers do

21. See Kirsten H. Engel, *State Environmental Standard-Setting: Is There a “Race” and Is It “To the Bottom”?*, 48 HASTINGS L.J. 271, 283 (1997) (defining “race-to-the-bottom” for state environmental regulations).

22. *Wetlands Values & Trends RCA Issue Brief #4*, NAT’L RES. CONSERVATION SERV. (1995), <https://perma.cc/PZ5T-Y5MT>.

23. William J. Mitsch et al., Editorial, *Ecosystem Services of Wetlands*, 11 INT’L J. BIODIVERSITY SCI., ECOSYSTEM SERVS. & MGMT. 1, 1 (2015).

24. *Geographic Information Systems Analysis of the Surface Drinking Water Provided by Intermittent, Ephemeral, and Headwater Streams in the U.S.*, EPA, <https://perma.cc/7HRU-TAY8>.

25. Issuance and Reissuance of Nationwide Permits, 82 Fed. Reg. 1860, 1863 (Jan. 6, 2017). These permits are commonly known as “404 permits” as a reference to the section of the CWA they implement. See 33 U.S.C. § 1344. For more information on 404 permits, see *infra* Subpart III.B.2.

26. EPA & ARMY CORPS, ECONOMIC ANALYSIS OF THE EPA-ARMY CORPS CLEAN WATER RULE 39 (2015).

27. See *id.* at 22 (maximum annual Michigan fee for wastewater treatment plants of \$213,000); ASS’N OF CLEAN WATER ADMINS., REPORT ON STATE NPDES FEE PERMITTING PROGRAM STRUCTURES 14 (Haw. 2014).

not cover the costs of treatments, technologies, or mitigation measures necessary to comply with the terms of a permit.

The structure of the CWA reflects this tension between the benefits of pollution control and the costs of development. The first listed purpose of the CWA is scientific: “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”²⁸ The law accomplishes that purpose through perhaps the most ambitious “goal” of any federal environmental law: “the discharge of pollutants into the navigable waters be eliminated by 1985.”²⁹ The CWA also declares “the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution . . . of land and water resources.”³⁰ How can such a dramatic federal goal—the elimination of the discharge of pollutants—coexist with leaving power to states? This framework of “cooperative federalism”³¹ often results in conflict rather than cooperation.

The question of the CWA’s success or failure comes down to the jurisdictional reach of federal CWA enforcement.³² The CWA splits waters and pollution into several different categories. For pollution sources, the Act divides between point source pollution, which originates in discrete conveyances that are subject to federal regulation, and nonpoint source pollution, which covers runoff and other similar sources that are regulated by the states.³³ For jurisdictional waters, the Act defines the scope of federal regulation as the “waters of the United States,” also known as “WOTUS.”³⁴ All waters that do not fall into that category are left to the states to regulate. The distinction between these jurisdictional categories creates a means to limit federal jurisdiction. Even at the federal level, jurisdictional authority is split between EPA and the Army Corps of Engineers.

These categorical distinctions, however, are often dissolved by the fluid reality of water. A series of Supreme Court decisions, most recently *Rapanos v. United States*,³⁵ illustrate the difficulties of administering an ambitious

28. 33 U.S.C. § 1251(a) (2018).

29. *Id.* § 1251(a)(1). To implement this goal, the CWA declares that the “discharge of any pollutant by any person shall be unlawful” without a permit. *Id.* § 1311.

30. *Id.* § 1251(b).

31. See Robert L. Fischman, *Cooperative Federalism and Natural Resources Law*, 14 N.Y.U. ENV’T L.J. 179, 184 (2005) (describing forms of federalism in environmental law). The CWA accomplishes this structure through the delegation of permitting authorities to states and American Indian tribes, see 33 U.S.C. § 1341, revolving state funds, see 33 U.S.C. § 1381, and certification of compliance with state water quality standards and state plans, see 33 U.S.C. § 1313. States can set more stringent standards than the federal floor in the CWA. See 33 U.S.C. § 1370.

32. Because the CWA includes a citizen suit provision, 33 U.S.C. § 1365, this jurisdictional reach determines not just where the federal government can enforce antipollution laws but also where ordinary citizens can wield the power of the statute to stop polluters.

33. Compare 33 U.S.C. § 1311 (point source pollution) with *id.* § 1329 (nonpoint source pollution).

34. 33 U.S.C. § 1362(7) (definition).

35. 547 U.S. 715 (2006).

regulatory system split between the states, American Indian tribes,³⁶ and two different federal agencies. Unfortunately, those cases are difficult to parse—*Rapanos* left behind a messy 4-1-4 decision and regulatory uncertainty has existed for over a decade.

Until *Maui*, Supreme Court cases addressing the reach of WOTUS have mostly dealt with whether the CWA covers wetlands and tributaries and, if so, what connection must exist between these and other covered waters.³⁷ *Maui* presented a new but dangerous opportunity: the ability to cut off jurisdiction when pollution travels through groundwater. Opponents of federal environmental regulation could use such a bright-line ruling to bypass the CWA by simply discharging pollutants through the air, over dispersed land, or into a pipe buried just below the surface. For the opponents of federal regulation, the case also presented a tantalizing chance to secure a judicial decision limiting the type of connection that must exist between a pollution source and surface waters through groundwater. Those opponents could then argue the opinion should provide the logic governing the required connections between wetlands and other surface waters. *Maui* appeared to be the perfect subterranean route to gut the CWA where a ruling constraining federal jurisdiction in one part of the Act could have ripple effects in other provisions. To see just what was at stake and how the case could have that effect, we must take a step back to understand the foundation of CWA jurisdiction and the case law leading up to *Maui*.

A. Clean Water Act Jurisdictional Cases

The federal government regulates “navigable waters” in the CWA, which the Act defines as “the waters of the United States, including the territorial seas.”³⁸ This jurisdictional scope cabins the two main prohibitions in the Act: “the discharge of any pollutant by any person” without a permit under NPDES,³⁹ and “the discharge of dredged or fill material into . . . navigable waters” under the “404 permit” program.⁴⁰ But what connection must exist between federally regulated waters and the location of a pollution discharge or fill? The answer to this question has proven a major point of contention in a series of Supreme Court cases over several decades. These decisions have done little to clear the waters.

36. We use the term ‘American Indian tribe’ in this article because the term is “firmly ensconced in legal documents and vocabulary.” Sarah Krakoff, *They Were Here First: American Indian Tribes, Race, and the Constitutional Minimum*, 69 STAN. L. REV. 491, 494 n.3 (2017). That includes the CWA. See 33 U.S.C. § 1377. We recognize, however, that ‘Native nation’ is the preferred contemporary term for Indigenous political sovereigns, so we employ that term interchangeably along with ‘American Indian tribe.’

37. See *infra* Subpart I.A.

38. 33 U.S.C. § 1362(7).

39. *Id.* § 1311(a). This provision must be read with the definition of “discharge of a pollutant” as “any addition of any pollutant to *navigable waters* from any point source.” *Id.* § 1362(12) (emphasis added).

40. *Id.* § 1344(a).

The term “navigable waters” traces its roots to the Refuse Act of 1899’s declaration that “[it] shall not be lawful to throw, discharge, or deposit . . . any refuse matter . . . into any navigable water of the United States, or into any tributary of any navigable water . . . whereby navigation shall or may be impeded or obstructed.”⁴¹ The Refuse Act was a rudimentary tool in efforts to restrict pollution in the years before the passage of the CWA.⁴² The drafters of the CWA drew upon and sought to expand this definition to cover a broader class of waters.⁴³

Regulated parties bristled at the reach of the CWA and turned to the courts to limit its scope. The first Supreme Court decision on the meaning of the term “waters of the United States” came down in *United States v. Riverside Bayview Homes*⁴⁴ thirteen years after the passage of the CWA. That case involved the filling of “80 acres of low-lying, marshy land near the shores of Lake St. Clair” in Michigan to build a housing development.⁴⁵ The Court considered whether or not the jurisdiction of the CWA, through Army Corps regulations issued in 1975, extended to “wetlands adjacent to navigable or interstate waters and their tributaries,” thereby requiring the developers to obtain a 404 permit.⁴⁶ Using the framework of *Chevron v. NRDC*,⁴⁷ which had just been decided the year before, the Court held that the Army Corps “acted reasonably in interpreting the Act to require permits for the discharge of fill material into wetlands adjacent to the ‘waters of the United States.’”⁴⁸ That holding left open the question of what constituted an “adjacent” wetland.

Sixteen years later, the Supreme Court again considered the reach of WOTUS in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (“*SWANCC*”).⁴⁹ At issue was the validity of the Army Corps’ 1986 regulation defining “waters of the United States” to cover “intrastate waters . . .

41. *Id.* § 407. The term’s common law roots stretch back even further, as navigability determined the ownership of submerged lands tracing back to English common law. See *The Daniel Ball*, 77 U.S. 557, 563 (1870) (distinguishing the American approach from the English common law interpretation of navigability-in-fact).

42. See Ross Sandler, *The Refuse Act of 1899 Key to Clean Water*, 58 AM. BAR ASS’N J. 468, 468 (1972) (describing the Refuse Act’s discharge prohibition as “language that approaches a Biblical commandment”).

43. U.S. GOV’T PRINTING OFF., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 250 (“[T]he conference bill defines the term ‘navigable waters’ broadly for water quality purposes. It means all ‘the waters of the United States’ in a geographical sense. It does not mean ‘navigable waters of the United States’ in the technical sense as we sometimes see in some laws.”). The report continued by reviewing Supreme Court precedent on the term and stating “this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill.” *Id.*

44. 474 U.S. 121 (1985).

45. *Id.* at 124.

46. *Id.* at 129.

47. *Chevron U.S.A., Inc., v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842–43 (1984).

48. *Riverside Bayview*, 474 U.S. at 139.

49. 531 U.S. 159 (2001).

[w]hich are or would be used as habitat by other migratory birds which cross state lines,” also known as the “Migratory Bird Rule.”⁵⁰ The conservative Rehnquist Court viewed this case through the holdings in a pair of decisions that had limited the reach of Congress’s Commerce Clause power.⁵¹ Those two decisions opened the door for new challenges to regulatory statutes, and put environmental laws at particular risk. Although the Court did not go so far as to rule on Commerce Clause grounds, it referenced those decisions to note that there were “significant constitutional questions raised by the [Army Corps’] application of their regulations.”⁵² Because the CWA contained “no clear statement from Congress” as to the reach of “waters of the United States,” the Court read the CWA narrowly, holding the Migratory Bird Rule exceeded the Army Corps’ statutory authority.⁵³

Perhaps the most important part of the *SWANCC* decision comes from the Court’s description of *Riverside Bayview*. In that discussion, the Court introduced a new term that would exert outsized influence over the CWA: “significant nexus.” Explaining why the Court had previously held that the CWA’s jurisdiction covered adjacent wetlands, the Court observed that “[i]t was the *significant nexus* between the wetlands and ‘navigable waters’ that informed our reading of the CWA in *Riverside Bayview*.”⁵⁴ The isolated gravel pits in *SWANCC*, by contrast, lacked that significant nexus and therefore were not “adjacent.” The Supreme Court established that there was a dividing line for CWA jurisdiction, somewhere between adjacent wetlands and isolated pits. Precisely where that line fell remained unanswered after the decision.

The dispute over the reach of CWA jurisdiction again came to a head in *Rapanos v. United States*.⁵⁵ In their petition for writ of certiorari, the Pacific Legal Foundation (PLF), a non-profit legal organization focused on property rights and libertarian interests, told the story of a sympathetic “landowner who faced the threat of *prison* for the simple desire to develop land he reasonably believed was not regulable wetland.”⁵⁶ This portrayal simplified matters considerably by discussing only one of three potential properties that John

50. *See id.* at 164 (quoting 51 Fed. Reg. 41,206, 41,217 (Nov. 13, 1986)).

51. *See id.* at 173 (“Twice in the past six years we have reaffirmed the proposition that the grant of authority to Congress under the Commerce Clause, though broad, is not unlimited.”) (citing *United States v. Morrison*, 529 U.S. 598, (2000); *United States v. Lopez*, 514 U.S. 549 (1995)); *see also* U.S. CONST. art. I, § 8, cl. 3 (Commerce Clause); Christine A. Klein, *The Environmental Commerce Clause*, 27 HARV. ENV’T L. REV. 1, 35–39 (2003). The Supreme Court did not completely ignore the focus on *Chevron* from *Riverside Bayview* in *SWANCC*, but the Court instead resolved the case at *Chevron* Step One. *See SWANCC*, 531 U.S. at 172 (finding the CWA provision was not ambiguous).

52. *SWANCC*, 531 U.S. at 174.

53. *Id.* The Court’s ruling only struck down the Migratory Bird Rule and did not impact other parts of the 1986 regulations, which remained in place.

54. *Id.* at 167 (emphasis added).

55. 547 U.S. 715 (2006).

56. James Pollack, Note, *The Takings Project Revisited: A Critical Analysis of this Expanding Threat to Environmental Law*, 44 HARV. ENV’T L. REV. 235, 250 (2020) (citing Petition for Writ of Certiorari at 2–4, *Rapanos*, 547 U.S. 715 (No. 04-1034) (2016)).

Rapanos hoped to develop, overstating the distance of the wetlands to other jurisdictional waters, and ignoring his bad faith efforts to ignore legal notices.⁵⁷ The Supreme Court took the bait and accepted the case, teeing up what seemed to be a clear question on the reach of the CWA as a result. But the outcome would be far from clear.

The Court split along ideological lines, with a four-vote plurality written by Justice Scalia, a single-vote opinion “concurring in the judgment” by Justice Kennedy, and a four-vote dissent by Justice Stevens.⁵⁸ Justice Kennedy reportedly originally planned to join the Scalia opinion, which would have created a clear five-vote majority, but apparently chose not to because Scalia went too far in his opinion.⁵⁹ The resulting split opinion would create new confusion over the Court’s vision for CWA jurisdiction.⁶⁰

Justice Scalia’s plurality opinion prescribed the narrowest scope for CWA jurisdiction. Scalia outlined a two-part test for whether or not a wetland was “adjacent” to another covered water and therefore within the CWA’s jurisdiction. According to this test: first, the adjacent water must be “a relatively permanent body of water connected to traditional interstate navigable waters”—creating a jurisdictional test for the necessary flow for tributaries—and second, the wetland must possess “a continuous surface connection with that water, making it difficult to determine where the ‘water’ ends and the ‘wetland’ begins.”⁶¹

Anticipating the potential complications for this test’s application, Justice Scalia responded in dicta to concerns about how the test he outlined might affect the NPDES program even though *Rapanos* involved a 404 permit.⁶² Looking at the definitions and structure of the NPDES program, Scalia pointed out that the CWA “does not forbid the ‘addition of any pollutant *directly* to navigable waters from any point source,’ but rather the ‘addition of any pollutant to navigable waters.’”⁶³ Scalia observed that “from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant *that naturally washes downstream* likely violates § 1311(a), even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but

57. *Id.* at 251.

58. Justice Kennedy did not join the Scalia opinion but instead was only “concurring in the judgment,” creating the resulting 4-1-4 split. *Rapanos*, 547 U.S. at 759.

59. See RICHARD J. LAZARUS, *THE RULE OF FIVE 247* (2020) (citing Richard J. Lazarus, *Back to “Business” at the Supreme Court: The “Administrative Side” of Chief Justice Roberts*, 129 HARV. L. REV. F. 33, 66 (2015)).

60. See, e.g., Bradford C. Mank, *Implementing Rapanos—Will Justice Kennedy’s Significant Nexus Test Provide a Workable Standard for Lower Courts, Regulators, and Developers?*, 40 IND. L. REV. 291 (2007); Wade Foster, *Parsing Rapanos*, VA. ENVTL. L.J.F. (2018), available at <https://perma.cc/QAJ8-Q3X5>; Interpreting the Rapanos/Carabell Supreme Court Decision Senate subcommittee hearing S. Hrg. 109-1071 (Aug. 1, 2006), <https://perma.cc/Q55A-6CE8>.

61. *Rapanos*, 547 U.S. at 742 (Scalia, J., plurality opinion).

62. *Id.* at 742–46.

63. *Id.* at 743 (quoting 33 U.S.C. § 1362(12)(A) (emphasis in original); *id.* § 1311(a)).

pass ‘through conveyances’ in between.”⁶⁴ Parsing the text, Scalia found the lack of the word “directly” to be significant.

Justice Kennedy rejected Justice Scalia’s test. Under Kennedy’s test, “the Corps’ jurisdiction over wetlands depends upon the existence of a *significant nexus* between the wetlands in question and navigable waters in the traditional sense.”⁶⁵ Kennedy found the name for his significant nexus test in the *SWANCC* Court’s description of the earlier *Riverside Bayview* decision.⁶⁶ The test sought to implement the CWA’s “objective . . . to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”⁶⁷ To that end, he argued that Scalia’s test “makes little practical sense in a statute concerned with downstream water quality”⁶⁸ and that the opinion “reads nonexistent requirements into the Act.”⁶⁹

At the same time, Justice Kennedy took issue with Justice Stevens’ dissent “read[ing] a central requirement out—namely, the requirement that the word ‘navigable’ in ‘navigable waters’ be given some importance.”⁷⁰ Kennedy noted that the Corps could establish adjacency to regulate a wetland, but that “[a]bsent more specific regulations, the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries.”⁷¹ In other words, Kennedy placed the regulation of wetlands and tributaries on a case-by-case basis until the agencies implementing the CWA could promulgate a regulation to effectuate the significant nexus test.

In the dissenting opinion, Justice Stevens argued that the Army Corps’ “decision to treat these wetlands as encompassed within the term ‘waters of the United States’ is a quintessential example of the Executive’s reasonable interpretation of a statutory provision” under the framework of *Chevron* deference.⁷² In a separate dissent, Justice Breyer objected to Justice Kennedy’s significant nexus test but set out a path for its adoption by writing that the Army Corps “may write regulations defining the term—something that it has not yet

64. *Id.* (quoting *United States v. Velsicol Chemical Corp.*, 438 F. Supp. 945, 946–947 (W.D. Tenn. 1976)) (emphasis in original).

65. *Id.* at 779 (Kennedy, J., concurring in the judgment) (emphasis added).

66. *Id.* at 766–67 (Kennedy, J., concurring in the judgment).

67. *Id.* at 759 (quoting 33 U.S.C. § 1251(a)).

68. *Id.* at 769.

69. *Id.* at 778.

70. *Id.*

71. *Id.* at 782.

72. *Id.* at 788 (Stevens, J., dissenting) (citing *Chevron USA, Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–45 (1984)). Interestingly, when Justice Scalia penned the majority in a later opinion holding that the *Chevron* doctrine applied to jurisdictional questions, he included “[w]here do the ‘waters of the United States’ end?” as an example of one such jurisdictional question the doctrine covered. *City of Arlington v. Fed. Comm. Comm’n*, 569 U.S. 290, 300 (2013) (citing *United States v. Riverside Bayview Homes*, 474 U.S. 121, 123, 131 (1985)). Scalia did make a passing reference to *Chevron* in his *Rapanos* opinion, although it was mostly to reframe the arguments he had already laid out in the language of *Chevron* Step Two without undertaking any detailed analysis. See *Rapanos*, 547 U.S. at 739 (Scalia, J., plurality opinion) (“The Corps’ expansive interpretation of the ‘waters of the United States’ is thus not ‘based on a permissible construction of the statute.’” (quoting *Chevron*, 467 U.S. at 843)).

done. And the courts must give those regulations appropriate deference.”⁷³ Although the Supreme Court did not clearly resolve the scope of the CWA’s jurisdiction, it set a path for a resolution—at least, after the agencies implementing the law acted.

In the ensuing years, lower courts have grappled with how to apply *Rapanos* since no opinion carried a majority. Many circuits have applied the *Marks* doctrine to analyze split Supreme Court decisions to try and untangle this case.⁷⁴ Ultimately, a string of appellate decisions all held that Justice Kennedy’s significant nexus test was controlling, either on its own or allowing agencies to follow either the Kennedy or Scalia test.⁷⁵ Even the newest member of the Supreme Court, Justice Amy Coney Barrett, joined an opinion while on the Seventh Circuit holding “that Justice Anthony Kennedy’s concurrence controls.”⁷⁶ Across the circuits, the single-vote Kennedy opinion has largely carried the day.

Despite the divided vote, the Supreme Court did not shy away from wetlands CWA cases in the ensuing years. In *Sackett v. EPA*,⁷⁷ the Court ruled unanimously on procedural grounds that a compliance order was a “final agency action” for the purposes of review under the Administrative Procedure Act.⁷⁸ As a result, the Court avoided having to “resolve the dispute on the merits.”⁷⁹ PLF presented the merits in a way that would tell a compelling story of a family looking to build a house caught unawares by a federal enforcement action—although the reality was far different.⁸⁰ The factual errors that came to light before the Supreme Court might have turned it away from using that case as a vehicle to resolve the *Rapanos* split. Although the Court left the merits of *Sackett* for another day, Justice Alito still took a shot at the CWA’s jurisdiction in a concurring opinion as “notoriously unclear.”⁸¹

73. *Rapanos*, 547 U.S. at 811 (Breyer, J., dissenting) (citing *Chevron*, 467 U.S. 837).

74. See *Marks v. United States*, 430 U.S. 188, 193 (1977). *Rapanos* is one of the most frequently cited cases in conjunction with the *Marks* rule by appellate courts. Richard M. Re, *Beyond the Marks Rule*, 132 HARV. L. REV. 1942, 1956 tbl.1 (2019). Applying the *Marks* rule in practice can be exceedingly complicated. See *id.* at 1979, 1982, 1990 (applying differing *Marks* analyses to *Rapanos*).

75. See, e.g., *United States v. Gerhke Excavating, Inc.*, 464 F.3d 723, 724 (6th Cir. 2006); *United States v. Robinson*, 505 F.3d 1208, 1221 (11th Cir. 2007); *United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009) (“[W]e join the First Circuit in holding that the Corps has jurisdiction over wetlands that satisfy either the plurality or Justice Kennedy’s test.”) (citing *United States v. Johnson*, 467 F.3d 56, 66 (1st Cir. 2006)); *Northern California River Watch v. City of Healdsburg*, 496 F.3d 993, 999–1000 (9th Cir. 2007); see also *United States v. Robertson*, 875 F.3d 1281, 1292 (9th Cir. 2017) (ruling *City of Healdsburg* to still be good law).

76. *Orchard Hill Bldg. Co. v. U.S. Army Corps of Eng’rs*, 893 F.3d 1017, 1021 (7th Cir. 2018) (citing *Gerhke Excavating*, 464 F.3d at 724–25; *City of Healdsburg*, 496 F.3d at 999–1000; *Robinson*, 505 F.3d at 1221).

77. 566 U.S. 120 (2012).

78. *Id.* at 131.

79. *Id.* at 123.

80. Pollack, *supra* note 56, at 253–54 (noting the Sacketts were experienced in construction and had six months of warning before the compliance order).

81. *Sackett*, 566 U.S. at 132 (Alito, J., concurring).

Four years later, PLF ginned up another CWA controversy in *Hawkes v. U.S. Army Corps of Engineers*.⁸² Again, the Court ruled on something other than the reach of the CWA—this time, holding that an “approved jurisdictional determination” by the Army Corps constituted a final agency action.⁸³ Chief Justice Roberts, writing for the Court, observed that “[i]t is often difficult to determine whether a particular piece of property contains waters of the United States, but there are important consequences if it does,” including both potential civil and criminal penalties.⁸⁴ This case considered 530 acres of potential peat mines, including wetlands, that could provide the source material for creating golf greens.⁸⁵ The peat mining companies applied for a 404 permit, asking whether or not the wetlands were jurisdictional, and learned it could cost them upwards of \$100,000 to perform the necessary analysis.⁸⁶ The Army Corps issued an “approved [jurisdictional determination] stating that the property contained ‘water of the United States’ because its wetlands had a ‘significant nexus’ to the Red River of the North, located some 120 miles away.”⁸⁷ Although the Court ruled that the developers could challenge that determination, they again declined to engage with the question of whether or not the CWA’s jurisdiction reached that far. Again, a concurring opinion—this time written by Justice Kennedy and joined by Justices Thomas and Alito—raised the issue that the CWA’s jurisdiction “remain[ed] a cause for concern.”⁸⁸

B. *Clean Water Act Jurisdictional Regulations*

While lower courts attempted to sift through the morass of the *Rapanos* opinions and the Supreme Court ruled on tangential issues, the executive branch also worked to resolve the CWA’s jurisdictional reach. In *Rapanos*, the Chief Justice reflected in a concurrence that it was “unfortunate that no opinion commands a majority of the Court on precisely how to read Congress’ limits on the reach of the Clean Water Act.”⁸⁹ He even chided the Army Corps over a proposed “rulemaking [that] went nowhere” after the earlier *SWANCC* decision, arguing the agency instead “chose to adhere to its essentially boundless view of the scope of its power.”⁹⁰ Taking that scolding to heart, the federal agencies charged with CWA implementation—the Army Corps and EPA—took center stage on defining the jurisdictional scope by issuing guidance documents and rulemakings that ping-ponged across three successive presidential administrations.

82. 136 S. Ct. 1807 (2016).

83. *Id.* at 1811.

84. *Id.* at 1812.

85. *Id.* at 1812–13.

86. *Id.* at 1813.

87. *Id.*

88. *Id.* at 1816 (Kennedy, J., concurring).

89. *Rapanos v. United States*, 547 U.S. 715, 758 (2006).

90. *Id.*

The George W. Bush administration offered the first effort at an administrative solution to *Rapanos* when it published the 2008 *Rapanos* Guidance.⁹¹ The lame duck Bush administration rushed to use a memo issued by EPA and the Army Corps to categorize regulable waters, non-regulable waters, and waters that may be subject to case-by-case regulation. It also outlined a way to conduct a “significant nexus” analysis for case-by-case determinations that included “consideration of hydrologic and ecologic factors.”⁹² The Bush *Rapanos* guidance memo embraced the view that “regulatory jurisdiction under the CWA exists over a water body if *either* the plurality’s or Justice Kennedy’s standard is satisfied,”⁹³ an approach that avoided resolving the tension between the Scalia and Kennedy opinions by allowing for a logical disjunction for jurisdiction by either test.

The Obama administration worked to develop a pro-environment regulatory agenda, although it spent much of its time and political capital focused on climate change rather than water issues. In the seventh year of the administration, EPA and the Army Corps fully embraced Kennedy’s significant nexus standard when they promulgated the “Clean Water Rule.”⁹⁴ According to the rule’s preamble, the “interpretation of the CWA’s scope . . . [was] guided by the best available peer-reviewed science—particularly as that science informs the determinations as to which waters have a ‘significant nexus’ with traditional navigable waters, interstate waters, or the territorial seas.”⁹⁵ The referenced supporting science included a synthesis of over 1,200 peer-reviewed scientific publications.⁹⁶ The review found the “evidence unequivocally demonstrates that the stream channels and riparian/floodplain wetlands or open waters that together form river networks are clearly connected to downstream waters in ways that profoundly influence downstream water integrity.”⁹⁷ The connection of that science to the CWA’s purpose of protecting the “chemical, physical, and biological integrity” of waters, as well as the confidence of writing in Justice Kennedy’s swing vote, formed the foundation for that rule.⁹⁸

91. See *Rapanos* Guidance, *supra* note 8.

92. *Id.* at 1.

93. *Id.* at 3 (emphasis added).

94. Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,053 (Aug. 28, 2015).

95. *Id.* at 37,057.

96. EPA, CONNECTIVITY OF STREAMS & WETLANDS TO DOWNSTREAM WATERS: A REVIEW & SYNTHESIS OF SCIENTIFIC EVIDENCE ES-2 (2015).

97. *Id.* at ES-7.

98. In the four-vote dissent, Justice Stevens wrote on behalf of four Justices that “in these and future cases the United States may elect to prove jurisdiction under either [the Scalia or the Kennedy] test.” *Rapanos v. United States*, 547 U.S. 715, 810 n.14 (2006) (Stevens, J., dissenting). The Obama Administration could therefore rely on the pivotal fifth vote from Kennedy if they wrote to his test.

Environmentalists celebrated the Obama administration's rule as a history-making achievement.⁹⁹ In response, some raised their eyebrows at the seeming coordination of this reaction; even the Government Accountability Office—Congress's nonpartisan watchdog—found EPA engaged in “covert propaganda” to support the rollout of that and other environmental rules using social media tools such as the ominously named “Thunderclap.”¹⁰⁰ Meanwhile, opposition to the rule from regulated parties included a catchy Farm Bureau parody of the hit song “Let It Go” from the animated movie *Frozen*, featuring a farming family pretending to play in the water in a dry ditch.¹⁰¹

More important than the initial reactions was the flood of lawsuits challenging the regulation from industry groups, states, and even environmental organizations.¹⁰² The complex array of lawsuits included actions in the Sixth Circuit, the District of North Dakota, the Southern District of Georgia, the District of South Carolina, and the Southern District of Texas.¹⁰³ What made these lawsuits stand out compared to a typical regulatory challenge was the number of conflicting rulings from different federal courts that created regulatory chaos. By the end of 2018, three lower courts had blocked the rule in a patchwork of decisions affecting fourteen, eleven, and three states, with the rule therefore only going into effect in twenty-two states.¹⁰⁴ Eventually, the Supreme Court waded into the mess to clarify which court should hear the lawsuits, but again failed to clarify the scope of the CWA.¹⁰⁵ Jurisdictional uncertainty continued.

The shift under the Trump administration came quickly as the Clean Water Rule became caught in a storm of deregulatory zeal that occurred not long after President Trump took office.¹⁰⁶ In February 2017, President Trump issued an executive order mandating that EPA and the Army Corps “shall consider interpreting the term ‘navigable waters,’ as defined in 33 U.S.C. [§] 1362(7), in a manner consistent with the opinion of Justice Antonin Scalia in *Rapanos*.”¹⁰⁷ Subsequently, EPA and the Army Corps began a two-part process: first, issuing

99. For instance, Environment America's executive director hailed the rule as “the biggest victory for clean water in a decade.” Coral Davenport, *Obama Announces New Rule Limiting Water Pollution*, N.Y. TIMES (May 27, 2015), <https://perma.cc/S9JS-RCAS> (quoting Margie Alt).

100. See Eric Lipton & Michael D. Shear, *E.P.A. Broke Law With Social Media Push For Water Rule, Auditor Finds*, N.Y. TIMES (Dec. 14, 2015), <https://perma.cc/V7EQ-9PS6>.

101. *Ditch the Rule*, AM. FARM BUREAU, <https://www.fb.org/videos/ditch-the-rule>.

102. CONG. RESEARCH SERV., “WATERS OF THE UNITED STATES” (WOTUS): CURRENT STATUS OF THE 2015 CLEAN WATER RULE 7 (2018) (describing lawsuits).

103. See *id.* at CRS-8 (2018) (providing a useful chart).

104. See *id.* at 6 (showing map with the rule's status by state as of December 12, 2018).

105. See *Nat'l Ass'n of Mfrs. v. Dep't of Def.*, 138 S. Ct. 617, 624 (2018) (holding that district courts were the proper forum for a CWA challenge).

106. As part of a stunt to show the administration's disdain for the regulatory state, President Trump cut a literal red tape attached to a printed out set of regulations during a White House event in his first year in office. See Justin Sink & Adam Levin, *Trump Boasts of Bringing a 'Screaching' Halt to Growth of Regulations*, BLOOMBERG (Dec. 17, 2017), <https://perma.cc/GE8J-74BC>.

107. Presidential Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the “Waters of the United States” Rule, 82 Fed. Reg. 12,497, 12,497 (Mar. 3 2017).

a rule to scrap the 2015 Clean Water Rule; and second, promulgating a new definition.¹⁰⁸

The Trump administration ultimately dubbed their new definition the “Navigable Waters Protection Rule.”¹⁰⁹ This rule largely, although not completely, followed the Scalia opinion in *Rapanos*. It excluded ephemeral tributaries from CWA jurisdiction and limited the definition of adjacent wetlands to only those with a “direct hydrologic surface connection” to other covered waters.¹¹⁰ This rule would leave over half of all wetlands and at least a fifth of all stream miles outside of the CWA’s jurisdiction.¹¹¹ EPA’s own Science Advisory Board roundly opposed this new regulation, noting that it “lack[ed] a scientific justification, while potentially introducing new risks to human and environmental health.”¹¹² Not long after EPA and the Army Corps finalized the Navigable Waters Protection Rule, groups filed eight different lawsuits challenging it as either overly restrictive or not restrictive enough.¹¹³

Supreme Court Justices called on EPA and the Army Corps to clarify the jurisdictional scope of the CWA through regulation,¹¹⁴ and those agencies did—not once, but *three times*. Despite wild swings in interpretations from one administration to another, the regulatory process was playing out as designed. Agencies, responding to a Supreme Court decision, were interpreting the law, and those that opposed it sought judicial relief. If the Supreme Court wanted to weigh in, it could wait for one of those cases to crop up. But the Supreme Court seemed impatient, at least after June 27, 2018.

C. *The Road to Maui*

As the split opinion in *Rapanos* lingered over the years, several Supreme Court Justices started to push for the Court to address the CWA’s jurisdictional scope again, presumably with the goal of limiting the reach of federal jurisdiction.¹¹⁵ But these concurring opinions never mustered more than three votes¹¹⁶—one shy of the number required for the Supreme Court to grant

108. See *Navigable Waters Protection Rule Rulemaking Process*, EPA, <https://perma.cc/SQ7Q-T9M2>.

109. See *The Navigable Waters Protection Rule: Definition of “Waters of the United States,”* 85 Fed. Reg. 22,250 (Apr. 21, 2020).

110. See *id.* at 22,251, 22,307.

111. E-mail and attachments from Stacey M. Jenson, Army Corps Regulatory Program Manager, to John Gooden, EPA Office of Wetlands, Oceans, and Watersheds Director, (Sept. 5, 2017, 1:00 PM), available at <https://perma.cc/W6GW-JMTC>.

112. Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act, Letter, Dr. Michael Honeycutt, Chair, Science Advisory Board, to Andrew R. Wheeler, EPA Administrator, at 4 (Feb. 27, 2020), <https://perma.cc/LT4J-AH6E>.

113. See Ellen M. Gilmer & Amena H. Saiyid, *Trump’s Water Jurisdiction Rule What’s All the Fighting About?*, BLOOMBERG (May 18, 2020), <https://perma.cc/RCP6-5RVX>.

114. See *supra* Section I.A.

115. See *Sackett v. EPA*, 566 U.S. 120, 132 (2012) (Alito, J., concurring); *Hawkes v. U.S. Army Corps of Eng’rs*, 136 S. Ct. 1807, 1816 (2016) (Kennedy, J., concurring).

116. See *Hawkes*, 136 S. Ct. at 1816 (Kennedy, J., concurring).

certiorari.¹¹⁷ With Justice Kennedy's swing vote solidly stuck, there was no reason to take a case on the matter. Time and time again, the Supreme Court denied certiorari.¹¹⁸ That all changed once Justice Kennedy announced his retirement on June 27, 2018.¹¹⁹

Court watchers immediately pointed out that Justice Kennedy's retirement would alter the course of CWA litigation.¹²⁰ University of Vermont Law Professor Pat Parenteau declared, "The balance has shifted. The moderate voice, the swing vote, is gone, and [then-EPA Administrator] Scott Pruitt is a very, very happy man."¹²¹ With a new CWA jurisdictional case all but inevitable, the next question would be, what case?

An ideal vehicle for the Justices hoping to rein in federal jurisdiction emerged almost immediately. Two weeks after Justice Kennedy announced his retirement, the Ninth Circuit denied rehearing in *Robertson v. United States*.¹²² The case involved the filling of ponds with material excavated for mining.¹²³ Joseph David Robertson "discharged dredged and fill material into the surrounding wetlands and an adjacent tributary, which flows to Cataract Creek. Cataract Creek is a tributary of the Boulder River, which in turn is a tributary of the Jefferson River—a traditionally navigable water of the United States."¹²⁴ After Robertson declined to obtain a permit as EPA advised, he was sued and found guilty of criminal violations of the CWA.¹²⁵ The split *Rapanos* opinion was "[c]entral to this appeal."¹²⁶ Robertson "argue[d] that Justice Kennedy's test

117. See *Supreme Court Procedures*, U.S. COURTS, <https://perma.cc/5BWN-Z975>.

118. See *Donovan v. United States*, 566 U.S. 990 (2012) (denial of cert); *Cundiff v. United States*, 558 U.S. 818 (2009) (denial of cert); *United States v. McWane, Inc.*, 555 U.S. 1045 (2008) (denial of cert); *Lucas v. United States*, 555 U.S. 822 (2008) (denial of cert); *City of Healdsburg, Cal. v. N. Cal. River Watch*, 552 U.S. 1180 (2008) (denial of cert); *Johnson v. United States*, 552 U.S. 948 (2007) (denial of cert); *Gerhke Excavating, Inc., v. United States*, 552 U.S. 810 (2007) (denial of cert).

119. See Michael D. Shear, *Supreme Court Justice Anthony Kennedy Will Retire*, N.Y. TIMES (June 27, 2018), <https://perma.cc/2XN5-9R7G>.

120. See Ariel Wittenberg, *With Kennedy's Exit, Tide Turns on Clean Water Rule*, E&E NEWS (June 28, 2018), <https://perma.cc/3MMK-6G4J>; Brad Plumer, *Kennedy's Retirement Could Clear Path for Trump's Environmental Rollbacks*, N.Y. TIMES (June 28, 2018), <https://perma.cc/KN5G-N2L2>; Robinson Meyer, *Justice Kennedy's Retirement Could Reshape the Environment*, THE ATLANTIC (June 27, 2018), <https://perma.cc/47DE-62FE>.

121. Wittenberg, *supra* note 120 (quoting Professor Parenteau). Scott Pruitt would not last long enough in the administration to see this rulemaking through, though. He resigned not long after Justice Kennedy's retirement under a cloud of scandals, including leveraging his official position in an effort to get his wife a Chick-fil-A franchise and his family a discount condominium rental rate, official expenditures for the purchase of "tactical pants" and "tactical polo shirts," and the installation of a \$43,000 soundproof phone in his official office. See Brady Dennis & Juliet Eilperin, *Scott Pruitt steps down as EPA head after ethics, management scandals*, WASH. POST (July 5, 2018), <https://perma.cc/A63G-ZD7U>; Dylan Scott, *Scott Pruitt's "tactical pants" scandal, very briefly explained*, VOX (June 21, 2018), <https://www.vox.com/policy-and-politics/2018/6/21/17488454/scott-pruitt-tactical-pants-scandal>.

122. 875 F.3d 1281 (2017); Supreme Court docket, *Robertson v. United States* (No. 18-609), <https://perma.cc/5TCZ-JLQY>.

123. *Robertson*, 875 F.3d at 1286–87.

124. *Id.* at 1286.

125. *Id.*

126. *Id.* at 1287.

from *Rapanos* is not the controlling test for determining CWA jurisdiction, and that the trial Court erred by basing the jury instructions on Justice Kennedy's test."¹²⁷ The Ninth Circuit disagreed, holding that there was no error when "jurisdiction was determined" using the significant nexus test.¹²⁸

When the Ninth Circuit denied rehearing in *Robertson*, Justice Kennedy (still on the Court after he announced his retirement) granted an extension of the time to file a petition for a writ of certiorari.¹²⁹ PLF, representing Robertson, told the story in their petition for writ of certiorari of "an elderly Navy veteran who ran a fire-fighting support truck business deep in the Montana woods."¹³⁰ They argued that *Rapanos* left the Court with "unfinished business" and that this case presented "an immediate opportunity to clearly and authoritatively interpret the Act" with "proper direction to the agencies in their ongoing (and seemingly perpetual) rulemaking efforts."¹³¹ The United States opposed granting certiorari, arguing that "revisiting *Rapanos* would be premature at this juncture" because EPA and Army Corps' "process of revising the regulatory definition of 'waters of the United States' [was] still ongoing."¹³²

Something unexpected happened before the petition could be distributed for conference—Robertson died.¹³³ PLF looked to carry on his fight, asking to substitute his widow as the petitioner.¹³⁴ The Supreme Court acquiesced, to an extent: granting the motion, granting certiorari, vacating the judgment, and remanding the case to determine if it was moot.¹³⁵ Once the case returned to the District of Montana, Senior District Judge Donald W. Molloy described this decision as "perplexing" and counter to the Court's "practice of dismissing petitions in such circumstances."¹³⁶ Perhaps the story of the Navy veteran in the woods was simply too much for conservative justices on the Supreme Court to give up, and they hoped this case would return with a sympathetic set of facts rather than a facial challenge to a complex regulation. A PLF attorney in the case even published an opinion piece in the *Wall Street Journal* after Robertson died declaring that "Joe Robertson was haunted by waters of a different kind—the

127. *Id.* at 1290.

128. *Id.* at 1292.

129. Supreme Court docket, *Robertson v. United States* (No. 18-609), <https://perma.cc/8WXV-586M>.

130. Petition for Writ of Certiorari at i, *Robertson v. United States*, No. 18-609 (U.S. Nov. 7, 2018).

131. *Id.*

132. Brief for the United States in Opposition at 20–21, *Robertson v. United States*, No. 18-609 (U.S. Mar. 11, 2019).

133. Motion to Substitute Carri Robertson as Authorized Representative for Petitioner Joseph David Robertson under Supreme Court Rule 35.1, *Robertson v. United States*, No. 18-609 (U.S. Mar. 27, 2019).

134. *Id.*

135. *Robertson v. United States*, 139 S.Ct. 1543 (2019).

136. *United States v. Robertson*, 410 F. Supp. 3d 1114, 1115 (D. Mont. 2019), *appeal docketed* No. 19-30237 (9th Cir. Oct. 21, 2019). For an Article III case or controversy, "an actual controversy must be extant at all stages of review, not merely at the time the complaint is filed." *Arizonans for Official English v. Arizona*, 520 U.S. 43, 67 (1997) (quoting *Preiser v. Newkirk*, 422 U.S. 395, 401 (1975)). A case is otherwise moot.

kind that can land someone in federal prison without warning.”¹³⁷ With that case no longer a possibility for the Court’s docket, it seemed as if the Justices hoping to find a way to limit federal jurisdiction in the CWA had missed their chance to provide that answer in its first post-Kennedy term.

But hopes of answering this perennial question were not lost. Soon after, the Supreme Court found another CWA case: *County of Maui v. Hawaii Wildlife Fund*. Compared to the other petitions that fall, *Maui* presented a seemingly neat question: “Whether the CWA requires a permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source, such as groundwater.”¹³⁸ The *Maui* petition argued that the lower court decision “runs headlong into the concerns this Court has expressed about the reach and scope of the CWA. As Justice Kennedy wrote in *U.S. Army Corps of Engineers v. Hawkes Co.*, “the reach and systemic consequences of the Clean Water Act remain a cause for concern.”¹³⁹ Petitioners also argued that the lower court’s “confusion about *Rapanos* underscores the need for review here, as it is not alone in its misapprehension of Justice Scalia’s opinion.”¹⁴⁰

Amici in support of the *Maui* petition also emphasized both the confusion over the *Rapanos* decision and some of the concerns from past CWA jurisdictional cases over the reach of federal power. PLF touted their role representing petitioners in four prior Supreme Court CWA cases, including the petitioner in *Rapanos*.¹⁴¹ They argued review was necessary because, in their words, “lower courts’ continuing expansion of the CWA augurs intolerable burdens for landowners throughout the country,” echoing petitioner’s argument about the potential regulation of septic tanks as an example.¹⁴² PLF spent almost their entire amicus brief arguing that Justice Scalia’s plurality sought to limit CWA jurisdiction, but that lower courts were not following that limiting command. Complementing this argument, a group of twenty states argued the Supreme Court should step in to stop a “sprawling jurisdictional creep [that] has no grounding in either the statute or this Court’s precedent,” emphasizing the federalism concerns in *Rapanos* and *SWANCC*.¹⁴³ Collectively, these amicus briefs gave the impression that *Maui* would allow conservative justices to limit the CWA’s jurisdictional reach by turning the Scalia *Rapanos* plurality into majority.

137. Ethan Blevins, Opinion, *A Navy Veteran Went to Prison for Digging Ponds in the Mountains*, WALL STREET J. (Apr. 26, 2019), <https://perma.cc/ZD4A-8QJW>.

138. Petition for Writ of Certiorari at 23, 31–36, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018).

139. *Id.* at 30 (quoting 136 S. Ct. 1807, 1816 (2016) (Kennedy, J., concurring)).

140. *Id.* at 22–23.

141. Brief of Amicus Curiae Pacific Legal Foundation in Support of Petitioner, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260, at 1 (U.S. Oct. 1, 2018).

142. *Id.* at 3.

143. Brief of Amici Curiae State of West Virginia, 17 Other States, and the Governors of Kentucky and Mississippi in Support of Petitioner, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260, at 11 (U.S. Oct. 1, 2018).

The Justices of the Supreme Court presumably wanted to resolve the unfinished business of *Rapanos* after Kennedy left the Court, with the new conservative majority of the Roberts Court likely thinking it could carry the day. It certainly seems like the conservative Justices thought *Maui* was their chance to do so, but that confidence may have been misplaced. The Supreme Court has long struggled to understand water as a resource. One area that baffles them is the way water gets from one place to another.¹⁴⁴ Another is the connection between groundwater and surface water.¹⁴⁵ From the outside looking in, it seems like they wanted to resolve the questions left from *Rapanos* about the necessary route from pollution to a navigable water for CWA jurisdiction.

Maui, however, was more about the connection between groundwater and surface water than what constitutes waters of the United States. That last phrase of the question presented, “such as groundwater,” made it seem like that medium was an afterthought when in fact it was front and center to the merits. If the reason the Justices voted to grant certiorari was to resolve *Rapanos*, then picking this case was a mistake because it dealt not with the definition of “waters of the United States” but with the meaning of “discharge of a pollutant.” Despite—or more accurately because of—that difference, *Maui* would end up completely altering the CWA’s jurisdictional scope, although not in the way that the opponents of federal regulation might have hoped. And just how this particular case percolated up to the Supreme Court, ultimately finding itself in the right place at the right time, is its own fascinating story.

II. COUNTY OF MAUI

The coast of West Maui has long stretches of beautiful white sand beaches with calm, clear water ideal for snorkeling. Over the years, much of the coast has been developed with high-end resorts and golf courses. Just to the north of a particularly dense resort area lies Kahekili Beach Park, also known as Airport Beach. This publicly managed beach was named to honor the last king of Maui before the unification of the Kingdom of Hawai‘i by Kamehameha I. The park

144. See, e.g., Daniel L. McLaughlin et al., *A significant nexus Geographically isolated wetlands influence landscape hydrology*, 50 WATER RES. RSCH. 7153, 7153 (2014) (noting that Supreme Court arguments over wetlands do not match the science of landscape-scale hydrology). The Los Angeles River provides another example of this confusion. In *Rapanos*, Justice Kennedy used the Los Angeles River as an example of a water that has very little water in it most of the time but that has a tremendous flow, and consequently a major impact on water quality, when it does flow. See *Rapanos v. United States*, 547 U.S. 715, 769–70 (2006) (Kennedy, J., concurring in the judgment). Justice Kennedy provided this river as an example of one that might not fall within Justice Scalia’s test. After the opinion, EPA used the 2008 *Rapanos* guidance to determine that the Los Angeles River was actually a traditionally navigable water. See EPA, SPECIAL CASE EVALUATION REGARDING STATUS OF THE LOS ANGELES RIVER, CALIFORNIA, AS A TRADITIONAL NAVIGABLE WATER 4–5 (2010). Although Justice Kennedy used the river as an example of a marginal case in *Rapanos*, and therefore one that might require a significant-nexus determination, the agency implementing and interpreting that decision found that it was actually at the core of CWA jurisdiction.

145. See, e.g., *Cappaert v. United States*, 426 U.S. 128, 142–43 (1976) (avoiding grappling with the difference between groundwater and surface water).

contains some of the most publicly accessible beaches and snorkeling on West Maui because it does not contain the significant resort development that defines the rest of the coast. A large coral reef lies just offshore, supporting a vibrant community of fish including trigger fish, yellow tang, and varieties of butterfly fish. It is a popular snorkeling spot to view endangered green sea turtles, as well as watch for pods of whales and dolphins offshore. Occasionally, monk seals sun themselves on the sands.

In recent decades, scientists began to study notable reef die-offs at Kahekili Beach Park.¹⁴⁶ Scientists studying the waters found increased nitrogen and phosphorus, lower salinity, as well as substantially lower pH levels and oxygen concentration.¹⁴⁷ Kahekili Beach Park developed a pattern of macro-algal blooms as a result of the higher nutrient input.¹⁴⁸ Algal blooms occur when algae grow out of control, producing toxic effects, depleting oxygen, and otherwise altering the nutrient makeup of the aquatic environment.¹⁴⁹ Algae can smother reefs by growing in dense clumps that block coral photosynthesis and impede the growth of new corals by preventing settlement of coral larvae on the reef.¹⁵⁰ Algae can also serve as hosts to harmful microbial pathogens that cause coral illness and death.¹⁵¹ Algal blooms are a growing threat to people, fish, shellfish, marine mammals, and birds alike around the world, and are often the result of anthropogenic causes such as water pollution and climate change.¹⁵²

Local environmental organizations and scientists worked to identify the source of nutrient imbalances in the waters of Kahekili Beach Park. The groups set their sights on the Lahaina Wastewater Reclamation Facility (LWRF)

146. See, e.g., Jennifer E. Smith, John W. Runcie & Celia M. Smith, *Characterization of a large-scale ephemeral bloom of the green alga *Cladophora sericea* on the coral reefs of West Maui, Hawaii*, 302 MARINE ECOLOGY PROGRESS SERIES 77, 77–91 (2005); Dailer Study, *supra* note 14; Charles D. Hunt, Jr. & Sarah N. Rosa, *A Multitracer Approach to Detecting Wastewater Plumes from Municipal Injection Wells in Nearshore Marine Waters at Kihei and Lahaina, Maui, Hawaii* at 3, U.S. Geological Survey Scientific Investigations Report 2009-5253 [hereinafter USGS Study]; Craig R. Glenn et al., *Lahaina Groundwater Tracer Study, Lahaina, Maui, Hawaii* at 1–16, University of Hawaii at Manoa (June 2013); Emily Kelly, Megan Ross & Jennifer Smith, *Wastewater detrimental to coral reefs off Kahekili*, THE MAUI NEWS (Aug. 31, 2019), <https://perma.cc/8DA8-M4N6>.

147. *Haw. Wildlife Fund v. Cnty. of Maui*, 24 F.Supp.3d 980, 985 (citing Declaration of Jennifer E. Smith ¶¶ 13–38, ECF No. 72–2).

148. Smith et al., *supra* note 146, at 77–91.

149. See *id.*

150. See Robert H. Richmond, Kaho H. Tisthammer & Narissa P. Spies, *The Effects of Anthropogenic Stressors on Reproduction and Recruitment of Corals and Reef Organisms*, 5 FRONTIERS IN MARINE SCI. 226 (July 2, 2018). Nutrient imbalances and the resultant algal blooms harm coral reefs, fish, and other wildlife. The imbalances cause reef-building corals and coralline algae to dissolve and die, and corals suffocate from the low oxygen. These once-vibrant corals appear as bone white—a result of the so-called ‘bleaching’ process where the coral expels its algae in a last-ditch attempt to survive as an organism. The coral reef die-offs can cascade through the ecosystem through habitat and food loss, killing fish and creating dead zones devoid of aquatic life. See HAWAII DIVISION OF AQUATIC RESOURCES, MAUI AND LANAI MONITORING REPORT 28–31 (2015) (describing dead zones at Kahekili Beach Park).

151. See Richmond et al., *supra* note 150.

152. See generally *id.*; NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, HARMFUL ALGAL BLOOMS, <https://perma.cc/AYU6-ET89> (last visited July 31, 2020).

operating just inland of the beach as a potential source of pollution. The Maui County Department of Environmental Management owns and operates LWRF, where wastewater is collected from the surrounding area for a series of treatments. Treated or “reclaimed” water is piped to golf courses, parks, schools, and other water users for reuse as landscape irrigation.¹⁵³ Any remaining unused effluent is disposed of through injection wells—long pipes that extend 200 feet underground into the groundwater.¹⁵⁴ LWRF uses four injection wells to dispose of wastewater and other pollutants, discharging three to five million gallons of effluent each day.¹⁵⁵ The county has pumped wastewater into injection wells continuously since at least 1985.¹⁵⁶

Studies of LWRF discharges into groundwater conclusively showed that wastewater reached the ocean at Kahekili Beach Park.¹⁵⁷ In fact, internal records reveal that the county was aware that effluent from LWRF would reach the ocean from the moment the facility was built. When the proposal for the construction of the LWRF underwent environmental review in February 1973, the county’s environmental consultant stated effluent would reach the Pacific Ocean.¹⁵⁸ The county again confirmed discharges would reach the ocean in its reassessment of the facility’s environmental impacts in 1991.¹⁵⁹ Scientists in the 2000s further studied the hydrological linkage between the LWRF and the Pacific Ocean as well as the impact of effluent on the ecosystem. Several such studies directly linked the wastewater discharges to the algal blooms.¹⁶⁰ For example, a 2010 study shows macroalgal blooms “only occur in areas of substantial anthropogenic nutrient input” from the LWRF.¹⁶¹ In 2011, EPA conducted a tracer dye study on the injection wells and found that “64% of the treated

153. See USGS Study, *supra* note 146, at 3.

154. *Id.*

155. See Craig R. Glenn et al, *supra* note 146, at 1–16.

156. Amended Complaint at 16, Haw. Wildlife Fund v. Cnty. of Maui, Case 1:12-cv-00198-SOM-BMK (Aug. 9, 2012).

157. See text and accompanying note, *supra* note 146.

158. HAWAII OFFICE OF ENVIRONMENTAL QUALITY COUNCIL, FINAL ENVIRONMENTAL IMPACT STATEMENT FOR CONSTRUCTION OF SEWAGE COLLECTION SYSTEM AND WASTE WATER RECLAMATION PLANT LAHAINA, MAUI, HAWAII 91 (Mar. 27, 1973) (describing that discharges would “eventually reach the ocean some distance from the shore.”).

159. DEP’T OF PUBLIC WORKS, COUNTY OF MAUI, LAHAINA WASTEWATER RECLAMATION FACILITY STAGE 1 DESIGN ENVIRONMENTAL ASSESSMENT AND NEGATIVE DECLARATION 6-2-6-3 (prepared by Brown and Caldwell Consultants) (Sept. 1991) (“Effluent from the [LWRF] currently is discharged via injection wells to fractures in the underlying basalt. This effluent, via gravity and the pressure from up-gradient groundwater, flows toward the ocean. Treatment plant effluent contributes various constituents, including but not limited to, suspended solids, dissolved oxygen, and nutrients such as nitrogen and phosphorous to the ocean.”).

160. See Dailer Study, *supra* note 146, at 655–71 (finding elevated nutrient levels in the algae and algal blooms in ocean areas adjacent to the LWRF); USGS Study, *supra* note 146 (finding significantly higher levels of nutrients in algae suspended in the injected wastewater plume than in other algae in surrounding water and concluding that these nutrients originated at the LWRF).

161. See Dailer Study, *supra* note 14, at 655–71.

wastewater injected into [the] wells currently discharges from the submarine spring areas” and into the ocean.¹⁶²

With this growing scientific consensus over the causes of the harms to coral reefs at Kahekili Beach Park, local environmental organizations strategized over how to best mitigate damage caused by LWRF. One strategy involved its operating permit, which expired in 2005. The county had obtained an Underground Injection Control (UIC) permit under the Safe Drinking Water Act in order to operate the injection wells.¹⁶³ UIC permits are generally meant to ensure the injection wells do not affect drinking water resources, but the permitting process generally does not involve the study or mitigation of any impact on ocean water quality. Permit renewal provided an opportunity to address discharges that reached the ocean.

Advocates and regulators alike began to question whether the pollutants reaching navigable waters could implicate the CWA’s prohibition against discharges of pollutants into navigable waters. If so, the next round of operating permits would require the county to obtain a NPDES permit along with its new UIC permit. Internal EPA emails show years of internal discussions about NPDES applicability to the LWRF wells.¹⁶⁴ EPA held a hearing on November 6, 2008 on the county’s UIC permit application.¹⁶⁵ Attendees raised the issue of discharges reaching the ocean, harm to reefs and other marine life, and whether LWRF must obtain a NPDES permit in order to lawfully continue its operations.¹⁶⁶

On March 10, 2010, EPA requested in a letter that the county secure a water quality certification from the State of Hawai’i because the effluent “may . . . discharge into navigable waters.”¹⁶⁷ The water quality certification would be an early step in determining whether the county required a NPDES permit because of LWRF effects on water quality. The county applied for certification in May 2010, however it was not clear how quickly the state would act on the permit.¹⁶⁸ Internal communications from state and federal regulators showed reticence to take a firm stance on NPDES application to the injection wells.¹⁶⁹ This was

162. See Craig R. Glenn et al., *supra* note 146, at ES-2, ES-3.

163. See 42 U.S.C. § 300h *et seq.* (2014).

164. Second Supplemental Chronology in Support of Defendant County of Maui’s Motion for Summary Judgment Based on Lack of Fair Notice at 6–7, *Haw. Wildlife Fund v. Cnty. of Maui*, Case 1:12-cv-00198-SOM-BMK (Apr. 21, 2015) (describing multiple internal email exchanges from 2007–2009 at EPA discussing potential NPDES application to LWRF).

165. Public Hearing Concerning the Draft Underground Injection Control (UIC) Permit for the Lahaina Wastewater Reclamation Facility, Lahaina Civic Center (Nov. 6, 2008, 6:15 PM), <https://perma.cc/YDX6-ZUJV>.

166. See *id.* at 33, 42–43.

167. Wendy Osher, *Maui County Issues Response to Injection Well Claims*, MAUI NOW (June 29, 2011) (describing the letter), <https://perma.cc/6RPQ-34Y8>.

168. See *id.*

169. See Second Supplemental Chronology in Support of Defendant County of Maui’s Motion for Summary Judgment Based on Lack of Fair Notice at 9–13, *Haw. Wildlife Fund v. Cnty. of Maui*, Case 1:12-cv-00198-SOM-BMK (Apr. 21, 2015).

almost certainly in part because of the lack of clarity on jurisdiction in *Rapanos* as well as the applicability of the CWA to discharges traveling through groundwater.

With such an uncertain permitting timeline, growing scientific consensus regarding the environmental impact of discharges and the ongoing operation of the injection wells, a group of local and national environmental organizations decided to sue the county alleging violations of the CWA.¹⁷⁰ The groups, represented by Earthjustice attorneys, filed suit in the U.S. District Court for the District of Hawai'i on April 16, 2012.¹⁷¹

The county, meanwhile, sought representation from Hunton & Williams, LLP—a firm that was well known for its zealous representation of industry, including coal, petroleum, and railroad companies.¹⁷² Many of these interests would also presumably have an interest in the litigation, particularly with its implications for pipeline leaks, coal ash ponds, and other sources of pollution leaching through groundwater. In fact, many such cases were already percolating through other circuits.¹⁷³

A. Federal District Court, District of Hawai'i

Once in federal court, attorneys for the county and the environmental organizations stipulated to a record that isolated and focused the legal issue. Traditionally under the CWA, a party must obtain a NPDES permit when it: (1) discharges (2) a pollutant (3) to navigable waters (4) from a point source.¹⁷⁴ The parties stipulated that the county discharged pollutants from a point source, and that the pollutants reached the navigable waters of the Pacific Ocean. This centered the dispute on the status of the groundwater itself. In other words, was the groundwater a navigable water? A point source? An intermediate conveyance that does not require classification under the CWA? Or did the groundwater somehow vitiate responsibility under the CWA?

With the facts set, both parties filed competing motions for summary judgment.¹⁷⁵ The county meanwhile applied for a NPDES permit along with a water quality certification after litigation began, although it maintained that a

170. The plaintiffs consisted of Hawai'i Wildlife Fund, Sierra Club Maui Group, Surfrider Foundation, and West Maui Preservation Association.

171. Complaint, *Haw. Wildlife Fund v. Cnty. of Maui*, Case 1:12-cv-00198-SOM-BMK (Apr. 16, 2012).

172. See generally ANNE FREEMAN, *THE STYLE OF A LAW FIRM: EIGHT GENTLEMEN FROM VIRGINIA* (1989) (describing the history of Hunton & Williams); Hunton & Williams, LLP, *VAULT* (describing the firm's history and particularly noting its work for Standard Oil and other energy companies), <https://perma.cc/L6TM-V3Z2> (last visited Feb 28, 2018).

173. See *infra* Section. II.C (describing some of those other cases).

174. See *Haw. Wildlife Fund v. Cnty. of Maui*, 24 F.Supp.3d 980, 988–89 (D. Haw. 2014).

175. See *id.* at 983.

NPDES permit was not required.¹⁷⁶ The county further moved for a stay or dismissal in light of its permit applications.¹⁷⁷

Chief Judge Susan Oki Mollway granted the environmental organizations' motion for summary judgment.¹⁷⁸ The court noted it was "undisputed" that the county discharged pollutants at the LWRF injection wells that migrated to the ocean.¹⁷⁹ The court rejected arguments to stay or dismiss the case because there was no "firm date" when the county would obtain such a permit.¹⁸⁰ The court emphatically noted that it would "make a mockery" of the CWA regulatory scheme to not cover "groundwater flowing directly into the ocean."¹⁸¹

The bulk of the opinion centered on how exactly to analyze discharges through groundwater.¹⁸² The court noted a distinct "lack of clarity" on how to deal with groundwater in CWA jurisdiction.¹⁸³ To overcome this lack of clarity, the court presented two possible CWA jurisdictional tests, both reliant on *Rapanos*—but on different opinions. The court found either test would establish CWA liability.

The first test, based on Justice Kennedy's concurrence, framed the groundwater itself as a "navigable water" due to its hydrological connection to traditional navigable waters. Citing Ninth Circuit precedent, the court asserted that "Justice Kennedy's concurrence . . . [provides] the controlling rule."¹⁸⁴ In that case, the Ninth Circuit had elaborated a two-part test to clarify jurisdictional boundaries under the Kennedy test: (1) show that a hydrological connection exists; and (2) provide evidence of significant physical, chemical, and biological impacts as a result of connection.¹⁸⁵ This test would make the "aquifer under the LWRF *itself* 'navigable water' under the Act."¹⁸⁶ Although the court found liability under this test due to the weight of scientific evidence, the court derided this test as unfit "when groundwater is involved."¹⁸⁷

The second—and preferred test—was one of the court's own invention.¹⁸⁸ This new "functional equivalent" test would treat the groundwater as a point source conveying discharged pollutants into the ocean from the LWRF—just like

176. *See id.* at 985.

177. *See id.*

178. *See id.* at 983.

179. *See id.* at 1000.

180. *Id.*

181. *Id.* at 995.

182. The opinion also briefly addressed some evidentiary issues, and whether the court had competence to address the NPDES issue while a permit application was pending. The court found that it held such competence. *See id.* at 987–92.

183. *Id.* at 996.

184. *Id.* at 994 (citing *N. Cal. v. Healdsburg*, 496 F.3d 993, 999–1000 (9th Cir. 2007)).

185. *See id.*

186. *Id.*

187. *Id.*

188. *See id.* at 996 (noting that no appellate cases expressly endorsed this new test).

a pipe releasing pollutants directly into the ocean.¹⁸⁹ The court relied heavily on Justice Scalia's *Rapanos* plurality to justify this new test. In particular, the court pointed to Justice Scalia's note that the prohibition against discharge in the CWA is not limited to "the addition of any pollutant *directly* to navigable waters from any point source," but rather applies to "the addition of any pollutant *to* navigable waters."¹⁹⁰ Under this textualist reading, the language of the CWA does not require a direct discharge into the navigable water. If the pollutant must first go through another conveyance, such as groundwater flowing directly into the ocean, then the CWA would still apply to those discharges. As a result, the court found that the CWA would apply if "the discharge into the groundwater below the LWRF is *functionally equivalent* to a discharge into the ocean itself."¹⁹¹ The court similarly found liability under this test from the weight of scientific evidence.

B. *The United States Court of Appeals, Ninth Circuit*

The County of Maui appealed the district court's decision to the Ninth Circuit Court of Appeals. It was at this point that the case took on an increased profile of federal interest. The case transformed from a local dispute over a beach into a new front in the jurisdictional water wars. The United States filed an amicus brief in favor of the environmental organizations, arguing that "[i]t has been EPA's longstanding position that discharges moving through groundwater to a jurisdictional surface water are subject to CWA permitting requirements if there is a 'direct hydrological connection' between the groundwater and the surface water."¹⁹² This became (arguably) the first and most definitive statement EPA had made on the issue of discharges through groundwater.¹⁹³ Meanwhile, a number of industry associations and conservative ideological organizations also filed amici in the case, representing railroads, fertilizer, agriculture, chemical companies, fossil fuel and mineral extraction, and other such interests.¹⁹⁴

189. This test may have formed the basis of Justice Breyer's eventual test adopted by the U.S. Supreme Court in *Maui* described in detail *infra* Subpart II.E. Justice Breyer did not, however, elaborate on the District Court of Hawai'i's formulation of the test. Instead, Justice Breyer perhaps relied on the district court's "functional equivalent" finding to determine the eventual outcome of the case on remand.

190. *See id.* at 995 (quoting *Rapanos*, 547 U.S. at 743 (emphasis in original) (internal quotation marks omitted)).

191. *Id.* at 994 (emphasis added).

192. Brief for the United States as Amicus Curiae in Support of Plaintiffs-Appellees at 12, *Haw. Wildlife Fund v. Cnty. of Maui*, No. 15-17447 (May 31, 2016).

193. Although the agency as a whole did not release a standalone stance on the application of the CWA to discharges through groundwater, a wide range of permits, permitting manuals, and other regulatory actions show that EPA historically treated discharges through groundwater as falling within the gambit of the CWA. *See generally* Brief of Amici Curiae Former EPA Officials in Support of Respondents, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260.

194. Amici included the Association of American Railroads, American Farm Bureau Federation, American Iron and Steel Institute, American Petroleum Institute, National Association of Manufacturers,

The Ninth Circuit reviewed the District Court of Hawai'i decision *de novo*.¹⁹⁵ The circuit panel unanimously ruled for the environmental organizations once again, however it applied a substantially different test from the two used by the district court. The Ninth Circuit proposed a “traceability” test: (1) pollutants are discharged from a point source; (2) the pollutants are fairly traceable from the point source to a navigable water such that the discharge is the functional equivalent of a discharge into the navigable water; and (3) the pollutant levels reaching navigable water are not *de minimis*.¹⁹⁶ The panel’s emphasis on traceability was intended to differentiate indirect discharges from point sources from discharges from nonpoint sources.¹⁹⁷

Although the Ninth Circuit pulled its reasoning primarily from *Rapanos*, it explicitly noted that it did not apply Justice Kennedy’s concurrence.¹⁹⁸ Rather, the Ninth Circuit drew inspiration from Justice Scalia’s plurality for its “persuasive value.”¹⁹⁹ In parallel with the district court below, the Ninth Circuit noted Justice Scalia’s textualist reading that the CWA does not forbid the “addition of any pollutant *directly* to navigable waters from any point source,” but rather the “addition of any pollutant *to* navigable waters.”²⁰⁰ In that way, the Ninth Circuit inferred the CWA would apply to both direct as well as indirect discharges to navigable waters.²⁰¹ After all, the case was “about preventing the County from doing indirectly that which it cannot do directly”—failure to do so would make a “mockery” of the CWA.²⁰²

C. A Circuit Split Emerges

The Ninth Circuit was not alone in considering CWA applicability to discharges through groundwater. The Fourth and Sixth Circuits also considered the issue but applied entirely different tests. The resulting Circuit split made a Supreme Court battle all but inevitable, but it was not clear which case would reach the Justices.²⁰³ *Maui* would win the day, in part because of its stipulated and clear facts, and in part because of the enticing framing by the county’s advocates. The county’s attorneys from Hunton & Williams framed the decision

National Mining Association, the Fertilizer Institute, and the Utility Water Act Group. The conservative think tank and serial CWA litigant Pacific Legal Foundation would file an amicus supporting rehearing *en banc* following the Ninth Circuit decision.

195. Haw. Wildlife Fund v. Cnty. of Maui, 886 F.3d 737, 744 (9th Cir. 2018). Senior Circuit Judge D.W. Nelson wrote for the Circuit.

196. *See id.* at 749. Although this test articulation includes the functional equivalent language, the vast majority of this opinion emphasized the traceability issue.

197. *See id.* at 744–46.

198. *Id.* at 748 (noting that the case was about wetlands as navigable waters, not groundwater as a conveyance).

199. *Id.* at 748–49.

200. *Id.* (quoting *Rapanos*, 547 U.S. at 743 (2006) (Scalia, J., plurality) (emphasis in original) (quoting §§ 1311(a), 1362(12)(A))).

201. *See id.* at 752.

202. *Id.*

203. *See Gilmer, supra* note 20.

below as a frightening expansion of federal permitting authority under the CWA (invoking the ‘elephants in mouseholes’ argument)²⁰⁴, as well as an opportunity to “resolve the confusion” relating to *Rapanos*.²⁰⁵ That angle proved enticing to the Supreme Court, and when compared with the other circuit cases, the stipulated facts of *Maui* provided the cleanest fact pattern to hear the issue.

The Fourth Circuit’s case centered on an underground pipeline that ruptured and spilled 369,000 gallons of gasoline in Anderson County, South Carolina.²⁰⁶ Despite many repair and cleanup attempts, gasoline eventually seeped through soil and groundwater into wetlands as well as into two nearby tributaries of the Savannah River, a traditional navigable water.²⁰⁷ Due to the hydrology of the area, the plume of pollutants slowly and continuously seeped into the waterways over the course of multiple years after the spill and repairs concluded.²⁰⁸ Two environmental organizations brought a citizen suit alleging that the pipeline owner had unlawfully discharged pollutants without a NPDES permit in violation of the CWA.²⁰⁹

In this case, *Upstate Forever v. Kinder Morgan Energy Partners*,²¹⁰ the Fourth Circuit held that discharges of a pollutant that “has migrated and is migrating through ground water to navigable waters” constitutes an “indirect discharge” requiring a NPDES permit under the CWA.²¹¹ The Fourth Circuit did, however, limit its holding to discharges through groundwater that are “sufficiently connected to navigable waters.”²¹² It relied on Justice Scalia’s *Rapanos* opinion, previous EPA practice, as well as the Ninth Circuit *Maui* reasoning in its decision.²¹³ Kinder Morgan petitioned for certiorari to contest the ruling.²¹⁴ The complicated hydrological characteristics of the pipeline spill as well as the time delay from spill to discharge to navigable waters made *Upstate Forever* a potentially challenging case for the Supreme Court to use as a vehicle to design a clear CWA test.

In *Sierra Club v. Virginia Electric & Power Company*,²¹⁵ a different panel of Fourth Circuit Judges determined that arsenic discharged from a coal ash pond

204. *Whitman v. Am. Trucking Assns., Inc.*, 531 U.S. 457, 468 (2001) (“Congress, we have held, does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions — it does not, one might say, hide elephants in mouseholes.”). This approach has reached the status of a canon of statutory interpretation. *See Bostock v. Clayton Cnty.*, 140 S. Ct. 1731, 1752-53 (2020) (“the no-elephants-in-mouseholes canon”).

205. *Petition for Writ of Certiorari, Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018).

206. *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637, 643 (4th Cir. 2018).

207. *See id.* at 644.

208. *See id.* at 643-45.

209. *See id.* at 644.

210. *Id.*

211. *Id.* at 651.

212. *See id.*

213. *See id.* at 649-53.

214. *Petition for Writ of Certiorari, Kinder Morgan Energy Partners, L.P. v. Upstate Forever*, No. 18-268 (Aug. 28, 2018).

215. 903 F.3d 403 (4th Cir. 2018).

through groundwater to navigable waters did not fall within the scope of the CWA. The Fourth Circuit panel determined that the landfill and settling ponds did not constitute “point sources” under the CWA.²¹⁶ The court’s holding left unaddressed whether the CWA would otherwise cover discharges through groundwater.²¹⁷

The Sixth Circuit considered two cases involving coal ash pond discharges through groundwater. In both *Kentucky Waterways Alliance v. Kentucky Utilities Company*²¹⁸ and *Tennessee Clean Water Network v. Tennessee Valley Authority*,²¹⁹ the same Sixth Circuit panel denied CWA application to coal ash ponds discharging contaminants through groundwater into navigable waters. The court found that groundwater was not a “point source” subject to CWA regulation because it is a “diffuse medium that seeps in all directions.”²²⁰ Further, the circuit rejected the “hydrological connection” theory of CWA liability for discharges through hydrologically connected groundwater, and any theories of liability endorsed by the Fourth and Ninth Circuits.²²¹ The conflicting treatment of coal ash ponds between the Sixth Circuit and the Fourth Circuit complicated this case as a potential vehicle for the Supreme Court. The litigants in these Sixth Circuit cases did not ultimately petition for cert.

The County of Maui petitioned for certiorari on August 27, 2018.²²² The county’s advocates—now the newly merged Hunton, Andrews, Kurth, LLP—centered the petition on two compelling and ideological arguments: (1) the threat of massive expansion of federal regulation; and (2) the opportunity to address *Rapanos*.

First, rather than introduce their argument through the CWA directly, the attorneys began their petition with the threat of expanded federal regulation posed in the Clean Air Act case *Utility Air Regulatory Group v. EPA (UARG)*.²²³ In that case, the Court held that the term “air pollutant” held different meanings in different parts of the Clean Air Act.²²⁴ As a result, the Court avoided application of the Clean Air Act’s complex permitting provisions to millions of small greenhouse gas emitters. The County’s counsel argued that the Ninth Circuit impermissibly expanded CWA applicability over potentially millions of nonpoint sources. The clear zero-discharge baseline language of the CWA made a similar *UARG* sidestep impossible. In making their argument, the petition invoked a now-famous argument introduced by Justice Antonin Scalia: That Congress must speak clearly when it intends to regulate items of great economic

216. *See id.* at 406.

217. *See id.*

218. 905 F.3d 925 (6th Cir. 2018).

219. 905 F.3d 436 (6th Cir. 2018).

220. *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 933 (6th Cir. 2018).

221. *See id.* at 934–38.

222. *Petition for Writ of Certiorari, Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018).

223. 573 U.S. 302 (2014).

224. *See id.* at 320.

or political significance.²²⁵ This conservative presumption is intended to prevent sudden expansions of federal power from long-extant statutes. Congress cannot hide so-called elephants in mouse holes.

Second, the county's attorneys introduced the case as an opportunity to "resolve the confusion" relating to *Rapanos*.²²⁶ The attorneys argued that it "is a stretch to suggest, as the Ninth Circuit did, that Justice Scalia endorsed the notion" that the CWA would apply to discharges through groundwater.²²⁷ The county's advocates further asserted that the Ninth Circuit "is not alone in its misapprehension of Justice Scalia's opinion," noting in particular the Fourth Circuit's *Kinder Morgan* decision and a number of district court groundwater opinions percolating across the country.²²⁸ With two new justices on the Court, commentators had already been speculating about when the Supreme Court would again consider the CWA's jurisdictional scope. The county's advocates cleverly put the spotlight on the Ninth Circuit opinion as just such an opportunity.

It was also in this petition that the county took its most aggressive stance on the CWA yet. The county's advocates first argued that the CWA requires discharges of pollutants to travel through an unbroken chain of point sources in order to fall under NPDES. Next, the county's advocates argued that groundwater was a nonpoint source, thereby breaking the chain and exempting those discharges from NPDES regulation altogether. It is worth noting that the county's reading would blow a series of holes in the CWA, allowing any polluter to avoid permitting and mitigation costs by directing pollution toward groundwater or any other alleged nonpoint source.

The Supreme Court quickly indicated its interest in the matter. The Court requested the Solicitor General file a brief to express the view of the United States on whether the Court should grant certiorari, and if so, whether to grant in *Maui* or *Upstate Forever*.²²⁹ The Solicitor argued that the Court should grant certiorari in *Maui* because of the conflicting Fourth, Sixth, and Ninth Circuit Court opinions. The Solicitor's preference for *Maui* could also be explained by the factual complications of *Upstate Forever* such as the complicated hydrology and the delayed discharge.

The Solicitor's brief reflected a broader change in the executive branch following the election of Donald J. Trump. EPA previously argued in support of

225. See *id.* at 323–24; *Whitman v. Am. Trucking Ass'ns.*, 531 U.S. 457, 468 (2001); see also *FDA v. Brown & Williamson Tobacco*, 529 U.S. 120, 159 (2000). This concept was recently announced as a canon of construction in *Bostock v. Clayton Cnty.*, 140 S. Ct. 1731, 1753 (2020) ("the weighty implications of the employers' argument from expectations also reveal why they cannot hide behind the no-elephants-in-mouseholes canon.").

226. Petition for Writ of Certiorari at 17–24, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018).

227. *Id.* at 22.

228. *Id.* at 22–23.

229. Brief for the United States as Amicus Curiae, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Jan. 3, 2019).

CWA application in *Maui*.²³⁰ The Solicitor did not take a position or express a view on the Ninth Circuit result in their brief. The Solicitor's omission may reflect EPA's eventual shift in position. Before the County of Maui filed its petition for certiorari, EPA put out a request for comment on the applicability of the CWA to discharges to navigable waters that pass through groundwater.²³¹ This action presaged EPA's decision to switch sides in the litigation. In fact, record requests show that EPA political appointees had already met with the County's attorneys before the petition for certiorari was filed.²³² The federal government eventually switched sides and argued against CWA application in *Maui* at the briefing stage.²³³

The Supreme Court granted Maui's certiorari petition in 2019.²³⁴ Commentators worried for the environmental organizations' prospects because the Supreme Court tends to reverse the Ninth Circuit and tends to disfavor environmental interests.²³⁵ *Maui* seemed like an opportunity for the Court to significantly limit CWA applicability. With the stakes of the case on full display, the County of Maui began to entertain settlement discussions. Maui officials grew concerned that if they should win at the Supreme Court, then they would be held responsible for the gutting of the CWA.²³⁶ With that fear in mind, the county and the plaintiff environmental organizations negotiated and agreed to a draft settlement.²³⁷ The Maui County Council voted to approve the settlement agreement mere weeks before scheduled oral arguments.²³⁸

The County Council's vote opened a rift with it on one side and the County Mayor Michael P. Victorino—supported by the legal team at Hunton Andrews Kurth, LLP—on the other side. The council directed the county's attorneys at

230. See *supra* Subpart II.B.

231. Clean Water Act Coverage of "Discharges of Pollutants" via a Direct Hydrologic Connection to Surface Water, 83 Fed Reg 7126 (Feb. 20, 2018).

232. Ariel Wittenberg & Ellen M. Gilmer, *EPA Officials Met with Law Firm in Groundwater Case*, E&E NEWS (May 14, 2019), <https://perma.cc/XNP3-7PSQ>.

233. See *infra* Subpart II.D.

234. *Cnty. of Maui v. Haw. Wildlife Fund*, 139 S. Ct. 1164 (2019).

235. See, e.g., Ryan Finnerty, *Supreme Court Case Could Reshape A Significant Environmental Law*, NPR (Nov. 6, 2019, 5:02 AM), <https://perma.cc/NYJ5-Z7UV>; Pamela King, *5 Things to Know About Tomorrow's Supreme Court Face-Off*, E&E NEWS, (Nov. 5, 2019), <https://perma.cc/DG44-DA5K>; Randy Showstack, *Clean Water Act in the Balance?*, EOS (Jan. 27, 2020), <https://perma.cc/4XFR-VKN4>; Alex Lubben, *This Supreme Court Case Could Blow a Huge Hole in the Clean Water Act*, VICE NEWS (Nov. 24, 2019), <https://perma.cc/BS6M-JFLZ>; Cale Jaffe, *The Clean Water Act Might Just Survive This Latest Attack*, REGUL. REV. (Nov. 25, 2019), <https://perma.cc/2GEZ-GBGQ>.

236. For example, Maui County Council Chair Kelly King noted in an interview that "This would be a huge stain on the reputation of Maui." See Nathan Eagle, *Maui Is Taking This Clean Water Legal Fight All The Way — Some Say Too Far*, HONOLULU CIVIL BEAT (Aug. 6, 2019), <https://perma.cc/SDP6-DHKL>.

237. See *id.*

238. County of Maui, Res. 19-158 (Sept. 20, 2019). See also Colleen Uechi, *Council Votes to Settle the Injection Wells Case*, MAUI NEWS (Sept. 21, 2019), <https://perma.cc/PGY3-SVG4>; Report from Michael J. Molina, Chair of Council of the County of Maui Governance, Ethics, and Transparency Committee to Council of the County of Maui, at 7 (Sept. 20, 2019), <https://perma.cc/NV49-5E9Z>.

Hunton Andrews Kurth to accept the settlement offer.²³⁹ However, the mayor publicly rejected the settlement and asserted that the council did not have the authority to approve such a settlement.²⁴⁰ Hunton Andrews Kurth attorneys concurred with the mayor.²⁴¹ Mayor Victorino asserted that Maui has been a longtime environmental steward,²⁴² but that he opposed settlement so that the issue of CWA liability could be “clarified once and for all.”²⁴³ He further justified his decision to reject the settlement by arguing that the settlement could cost the county \$800 million—a massive figure disputed by the parties involved in the settlement negotiations who said the settlement would cost \$2.4 million.²⁴⁴ To cap these unusual events, Earthjustice,²⁴⁵ Hunton Andrews Kurth,²⁴⁶ the County Council,²⁴⁷ and the County Corporation Council²⁴⁸ each authored and submitted letters to the Clerk of the Supreme Court arguing about whether the case was moot. The dispute culminated in a lawsuit (later dismissed) in state court relating to the disputed powers of the various county officials.²⁴⁹

The Court remained above these messy disputes and ignored the letters. Oral arguments proceeded as scheduled.

D. Supreme Court Argument

The Supreme Court held oral argument on November 6, 2019, hearing the county, the federal government, and the environmental organizations present

239. Letter from Kelly King, Maui County Council Chair to Elbert Lin, Partner, Hunton Andres Kurth, LLP (Oct. 8, 2019), <https://perma.cc/GNW8-HZFZ>.

240. Circle of Blue, *Maui Mayor Rejects Clean Water Act Settlement, Aims for Supreme Court Hearing*, ECOWATCH (Oct. 25, 2019), <https://perma.cc/GY3Y-AJ9G>. County Corporation Counsel released a series of memos supporting the Mayor’s reading of the County Charter. Memorandum from Peter A. Hanano, Deputy Corporation Counsel, Cnty. of Maui, to Kelly King, Chair, Maui Cnty. Counsel, at 15 (Oct. 3, 2019), <https://perma.cc/GJ9Y-FN7B>; Memorandum from Peter A. Hanano, Deputy Corporation Counsel, Cnty. of Maui, to Alice L. Lee, Councilmember, Cnty. of Maui, at 7 (Sept. 16, 2019), <https://perma.cc/VB7L-7XBD>.

241. Letter from Elbert Lin, Counsel of Record for Petitioners, to The Honorable Scott S. Harris, Clerk of Court, Sup. Ct. of the U.S. (Oct. 4, 2019), <https://perma.cc/X6CS-ZTL8> (“This case has not settled.”).

242. Interestingly, later that month the County of Maui filed a climate lawsuit (perhaps in part as an effort to rehabilitate the County’s image). See Ellen M. Gilmer, *Maui to File Climate Case Against Fossil Fuel Producers*, BLOOMBERG ENV’T (Oct. 29, 2019), <https://perma.cc/GC3N-RP2C>.

243. Statement of Michael P. Victorino, Mayor, County of Maui (Oct. 18, 2019), <https://perma.cc/QHB5-DLBC>.

244. Lee Imada, *Mayor Injection well settlement could cost county \$800 million*, MAUI NEWS (Sept. 20, 2019), <https://perma.cc/ZWS7-SHVQ>.

245. Letter from David Lane Henkin, Counsel of Record for Respondents, to The Honorable Scott S. Harris, Clerk of Court, Sup. Ct. of the U.S. (Oct. 3, 2019), <https://perma.cc/M22V-47S7>.

246. Letter from Elbert Lin, *supra* note 241.

247. Letter from Kelly T. King, Council Chair, Maui County to The Honorable Scott S. Harris, Clerk of Court, Sup. Ct. of the U.S. (Oct. 9, 2019), <https://perma.cc/5BWU-5TSG>.

248. Letter from Moana M. Lutey, Corporation Counsel, County of Maui, to The Honorable Scott S. Harris, Clerk of Court, Sup. Ct. of the U.S. (Oct. 9, 2019), <https://perma.cc/LC6Z-7RU2> (apologizing for the County Council letter).

249. Complaint for Declaratory and Injunctive Relief, McKelvey v. Victorino, Case No. 2CCV-19-0001012 (Haw. Cir. Ct., Mar. 10, 2020) (case dismissed).

three distinct interpretations of the CWA. The arguments centered on the language of the CWA and its definition of “discharge of any pollutant”: “any addition of any pollutant to navigable waters from any point source.”²⁵⁰ Much time was spent on the meaning of the word “from.”²⁵¹ Does “from” require a direct discharge of pollutants from a point source? And would such an interpretation create unintended loopholes in the CWA? Or could “from” include a broader set of indirect discharges that reach navigable waters? And if so, what limiting principle should EPA, the Army Corps, and courts use in assessing indirect discharges?

The County of Maui argued for a narrow reading of the CWA that would require discharges of pollutants to travel through an *unbroken* series of point sources in order to fall under NPDES. The county went on to describe this as the “one permissible reading of the statute.”²⁵² Under their theory, groundwater should be considered a nonpoint source. As a result, discharges that travel through groundwater would break the chain of liability and exempt those discharges from NPDES regulation altogether. This extremely narrow view would even exempt discharges over short distances of land, an exemption that would allow any polluter to avoid permitting by ending a discharge pipe a short distance from navigable water.

Meanwhile, the federal government argued for a separate narrow reading of the CWA that would completely exempt discharges through groundwater from the NPDES program. This narrow interpretation of the CWA was a sharp reversal from the federal government’s previous stance at the Ninth Circuit where EPA supported CWA coverage of discharges through groundwater.²⁵³ The government relied in part on EPA’s April 2019 “interpretive statement” asserting that the CWA “is best read as excluding all releases of pollutants from a point source to groundwater” from regulation under the NPDES permit program.²⁵⁴ EPA insisted that this was the “best, if not the only” reading of the CWA, and applied “even where pollutants are conveyed to jurisdictional surface waters via groundwater.”²⁵⁵

250. 33 U.S.C. § 1362(12) (2018).

251. Pamela King & Ariel Wittenberg, *Whiskey in punch? Justices Probe Clean Water Act’s Limits*, E&E NEWS (Nov. 6, 2019), <https://perma.cc/3TDN-ZN66>. The advocates proposed a series of analogies relating to whiskey, such as where the whiskey is “from” if it is poured from a flask into a bowl of punch: a barrel, a bottle, the flask. *See id.*

252. Brief for Petitioner at 27, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260) (May 9, 2019).

253. *See* Brief for the United States as Amicus Curiae in Support of Plaintiffs-Appellees at 12, *Haw. Wildlife Fund v. Cnty. of Maui*, No. 15-17447 (May 31, 2016) (“EPA’s longstanding position [has been] that discharges moving through groundwater to a jurisdictional surface water are subject to CWA permitting requirements if there is a ‘direct hydrological connection’ between the groundwater and the surface water.”)

254. Interpretive Statement on Application of the Clean Water Act National Pollutant Discharge Elimination System Program to Releases of Pollutants From a Point Source to Groundwater, 84 Fed. Reg. 16,810, 16,811 (April 23, 2019).

255. *See id.*

The environmental organizations continued to argue for liability under the CWA for discharges traveling through groundwater so long as they can be fairly traceable to a particular point source, and that the discharging party proximately caused those discharges reaching a navigable water.²⁵⁶ These common-law-based limiting principles were intended to prevent over-extension of liability.

During argument, Justice Stephen Breyer proposed his own standard for application of the CWA. He described that the CWA should cover discharges through groundwater that are “the functional equivalent of a direct discharge.”²⁵⁷ This reading of the Act would provide “a lot of room for the EPA to write regulations, [and] to decide what is the functional equivalent of a direct discharge.”²⁵⁸ The federal government rejected this standard, while the environmental organizations conceded that they “could certainly embrace functional equivalent.”²⁵⁹ Chief Justice Roberts appeared skeptical about what he described as a “vague” functional equivalent standard that could cover “anything that gets to a jurisdictional water.”²⁶⁰ Justice Breyer seemed to respond directly, telling the environmental advocate “[d]on’t worry,” he and Chief Justice Roberts would discuss the meaning of his proposed functional equivalent test.²⁶¹ This exchange foretold the outcome.

E. Supreme Court Decision

The Supreme Court released its decision on April 23, 2020. Speaking through Justice Breyer, in a 6–3 decision²⁶² the Court held that the CWA applies to discharges that are the “functional equivalent” of a direct discharge to navigable waters.²⁶³ It appears Justice Breyer’s entreaties to the Chief Justice were successful. To determine the functional equivalence of a direct discharge, the Court provided a variety of nonexclusive factors to consider, including transit time, distance traveled, the material through which the pollutant travels, the extent to which the pollutant is diluted or chemically changed as it travels, the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, and the manner by or area in which the pollutant enters the navigable water.²⁶⁴

256. See Brief for Respondents, *Maui*, 140 S. Ct. 1462 (No. 18-260) (July 12, 2019); see also *supra* Subpart II.B.

257. Transcript of Oral Argument at 31, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260). Interestingly, this is the same test name used by the District Court, however, Breyer did not make reference to that test in his own proposal.

258. *Id.* at 31.

259. *Id.* at 47.

260. *Id.* at 50.

261. *Id.* at 48–51.

262. With Justice Breyer joined by Chief Justice Roberts, Justice Ginsburg, Justice Sotomayor, Justice Kagan, and Justice Kavanaugh.

263. See *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1468 (2020).

264. See *id.* at 1476–77.

In justifying this new test, Justice Breyer relied on a combination of statutory text, purpose, and common sense. He asked the reader to “[c]onsider a pipe that spews pollution directly into coastal waters.”²⁶⁵ If discharges that go through groundwater were exempt from regulation, then “why could not the pipe’s owner, seeking to avoid the permit requirement, simply move the pipe back, perhaps only a few yards, so that the pollution must travel through at least some groundwater before reaching the sea?”²⁶⁶ Justice Breyer argued that Congress could not have intended to create such an obvious and large loophole in the CWA.²⁶⁷ So long as the discharges meet the textual requirements of “from a point source” and reaching a “navigable water,” any indirect discharge that is the functional equivalent of a direct discharge would be covered by the CWA.

The *Maui* test is particularly powerful because it incorporates lessons from hydrology and balances those lessons with the realities of regulatory administration. As Justice Breyer noted during oral argument, “water does run downhill,” so pollutants from a variety of sources potentially near and far can migrate and intermix in a navigable water body.²⁶⁸

Regulators previously struggled to apply the CWA to some pollution sources because they traveled through non-traditional media such as groundwater. CWA enforcement in these cases proved difficult for regulators because it was not clear what limiting principle should apply. Regulators feared such a broad interpretation of the CWA may capture *de minimis* and remote discharges such as those from remote cabin septic tanks or a miner who “gets up and every morning . . . throws his shaving water outside the house.”²⁶⁹ Although the plain text of the CWA creates a zero-discharge norm without a permit, such an interpretation of the Act would raise the specter of permits for remote sources of pollution. The Court’s challenge was then to craft a test in *Maui* that would cover a pipe cut a few feet short of the navigable water or pointed into groundwater, but that would not threaten to create millions of newly required permits for remote discharges.

In response to this challenge, Justice Breyer deftly fashioned a test that incorporates and relies on the specialized lessons of hydrology. The “functional

265. *Id.* at 1473.

266. *Id.*

267. *See id.*

268. Transcript of Oral Argument at 44, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260). Although Justice Breyer’s description of gravity is generally sound, this observation may elicit a chuckle from anyone familiar with water disputes in the American West. As Marc Reisner observed in *Cadillac Desert*:

In the West, it is said, water flows uphill towards money. And it literally does, as it leaps three thousand feet across the Tehachapi Mountains in gigantic siphons to slake the thirst of Los Angeles, as it is shoved a thousand feet out of Colorado River canyons to water Phoenix and Palm Springs and the irrigated lands around them.

MARC REISNER, *CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER* (REVISED AND UPDATED) 22 (2017).

269. Transcript of Oral Argument at 44, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260).

equivalent” test will require experts and courts to use a number of factors in order to determine whether an indirect discharge is the functional equivalent of a direct discharge into navigable waters. The list of factors is quite broad.²⁷⁰ By virtue of this comprehensive list, each indirect discharge NPDES permit decision will be a highly technical, scientific determination based on the facts of that particular case.

There are two points worth highlighting in this opinion beyond the test itself. First, Justice Breyer only briefly noted *Rapanos* once in his eighteen-page opinion. He mentioned Justice Scalia’s plurality to support the point that the “the statute here does not say ‘directly’ from or ‘immediately’ from.”²⁷¹ In this way, applying NPDES to discharges that travel through other mediums before reaching navigable waters has a textual foundation. As noted earlier, this case could have been the chance for the Court to clarify or even narrow the scope of “navigable waters” covered by the CWA. Justice Breyer declined to take up the issue, and instead created a new test for CWA application that does not engage with navigable waters beyond the eventual destination of the discharge.

Second, Justice Breyer’s opinion did not rely on discharges traveling through groundwater specifically. Although both the United States and the county each centered their arguments on the issue of groundwater specifically, Justice Breyer’s opinion treats the issue of groundwater as a red herring. Rather than create a test only intended to address the issue of discharges through groundwater, Justice Breyer’s test rightfully orients the scope of the CWA on the realities of water flow, and the way that water interconnectivity can move pollutants over land, through subterranean waters, or from wetlands to a water body. So long as the discharges come from a point source, reach a navigable water, and are the functional equivalent of a direct discharge, the intermediate passage makes no difference. The medium-agnostic *Maui* test therefore holds the potential for broad application.

As we will further describe below, these two aspects to the opinion ignored the traditional jurisdictional battles of the CWA and created an entirely new test for CWA applicability—a test that could render *Rapanos* and the issue of jurisdictional waters entirely obsolete.²⁷²

Justice Kavanaugh, who joined the majority opinion, also authored a short, lone concurrence to primarily emphasize that the Court’s reasoning “adheres to the interpretation set forth in Justice Scalia’s plurality opinion” in *Rapanos*.²⁷³ Specifically, Justice Kavanaugh pointed to the same language emphasized previously in the litigation, that the CWA does not “forbid the ‘addition of any pollutant *directly* to navigable waters from any point source.’”²⁷⁴ His decision to emphasize this plurality opinion dicta seems intended to emphasize his bona

270. See *Maui*, 140 S. Ct. at 1476–77.

271. *Id.* at 1475 (citing *Rapanos v. United States*, 547 U. S. 715, 743 (2006)).

272. See *infra* Subpart III.B.

273. *Maui*, 140 S. Ct. at 1478 (Kavanaugh, J., concurring).

274. *Id.*

fides as a conservative “Scalia replacement” on the Court. However, by signing the majority opinion, he may have endorsed a test that could expand CWA jurisdiction and entirely overshadow the battle over defining navigable waters in *Rapanos*.

Justice Thomas authored a dissent joined by Justice Gorsuch in which he argued that NPDES would only apply to the single point source that discharges directly into navigable waters.²⁷⁵ Justice Alito authored a separate dissent to similarly endorse a direct discharge test for NPDES regulation, however he sought to clarify that NPDES would apply to a discharge made through a series of point sources that reach navigable waters.²⁷⁶

Although commentators viewed *Maui* as the next contest over the scope of the CWA in the lineage of *SWANCC*, *Riverside Bayview*, and *Rapanos*, the majority opinion seems to ignore that line of cases entirely. This may have disappointed court-watchers who wanted to finally settle the navigable waters issue. Advocates could view *Maui* as an outlier reliant on groundwater, but the sweeping language of the decision counsels a different interpretation. Rather than continue the dispute over “navigable waters” to determine CWA jurisdiction, the majority seems to change the battlefield entirely, re-centering CWA applicability on issues of hydrology and the movement of pollutants. This could create astounding opportunities for citizen suits and regulatory action beyond what has been possible in the navigable waters disputes. In the next Part, we explore the narrow and broad implications of *Maui*.

III. THE IMPACT OF *MAUI*

Although *Maui* did not become another step in the navigable waters conflict, it may prove more important. In fact, we believe the opinion could eclipse the navigable waters conflict entirely. In this Part, we present some of the narrow and broad impacts of the Supreme Court’s decision.

In a narrow sense, *Maui* represents a clear win for the environment on the shores of Kahekili Beach Park. *Maui* also represents a victory for the environment in other places similarly affected by pollution discharged through groundwater, such as from coal ash ponds, pipelines, mining tailing basins, concentrated animal feeding operations, and sewage treatment operations. Even that narrow CWA application to discharges through groundwater can have important environmental justice implications. *Maui* also represents a failure of entrenched conservative ideological and economic interests that seek to use disputes like *Maui* for anti-regulatory aims.

More broadly, this case disrupts the status quo of the CWA’s jurisdictional reach. The functional equivalent test has two major consequences. First, it clearly establishes that the CWA reaches beyond the banks of waters of the United States

275. The dissent centered its opinion on the word “addition” rather than “from” in the CWA. *See id.* at 1479–80 (Thomas, J., dissenting).

276. *See id.* at 1483 (Alito, J., dissenting).

to the source of discharges into those waters—no matter the medium of conveyance. Second, it renders Justice Scalia’s opinion in *Rapanos* obsolete by undermining the foundation of its two-part test for delimiting waters of the United States. The functional equivalent test even holds the potential to supplant Justice Kennedy’s significant nexus test.

A. *Narrow Impact: Clean Water Wins*

This case was a clear short-term win for the environment and environmental interests. At a basic level, the plaintiff environmental organizations won at the highest court in the land, and are set for a clear win on further proceedings below. Justice Breyer boxed in Maui County when he explicitly noted the District Court of Hawai‘i’s finding that “because the ‘path to the ocean is clearly ascertainable,’ the discharge from Maui’s wells into the nearby groundwater was ‘functionally one into navigable water.’”²⁷⁷ In other words, the district court already found liability under the new *Maui* “functional equivalent” test.

This finding has created significant pressure for the county’s mayor to accept a settlement.²⁷⁸ It also incentivizes the environmental organizations to continue pursuing the case to establish useful precedent on how to apply the functional equivalent test with straightforward facts.²⁷⁹ Whether the case resolves through settlement or final disposition on the merits, the county will almost certainly have to acquire a NPDES permit, install pollution-control technology, and pay fines or cleanup costs. This resolution will have a direct and positive effect on the marine life at Kahekili Beach Park where restored nutrient balance could support the slow re-growth of coral reefs.

Beyond the shores of Kahekili Beach, this case has two narrow but important implications for environmental law. First, *Maui* established the functional equivalent test, which has the potential to harness the power of the CWA to cover a variety of discharges through groundwater. This could have a massive impact on environmentally harmful activities including coal ash ponds, pipelines, mining tailing basins, concentrated animal feeding operations, and sewage treatment operations. Because these activities tend to disproportionately impact communities of color, indigenous communities, and other marginalized groups, *Maui* has the potential to promote environmental justice.²⁸⁰ Second,

277. *Id.* at 1469 (quoting *Haw. Wildlife Fund v. Cnty. of Maui*, 24 F. Supp. 3d 980, 998 (Haw. 2014)).

278. See Lee Imada, *Molina Leads a Renewed Effort to Settle Injection Well with Plaintiffs*, MAUI NEWS (Aug. 6, 2020), <https://perma.cc/7CC7-TJ6V> (describing efforts to city council to persuade mayor to settle).

279. The case is currently on remand to the District of Hawai‘i. See Melissa Tanji, *Court to Decide How Injection Wells Decision Impacts County*, MAUI NEWS (Dec. 9, 2020), <https://perma.cc/HQU5-JFEL>.

280. See, e.g., Amy Vanderwarker, *Water and Environmental Justice in A TWENTY-FIRST CENTURY U.S. WATER POLICY* (2012) (describing the disparate impact of groundwater pollution from sources such as agriculture and industrial discharge); KRISTI PULLEN FEDINICK, NAT. RES. DEF. COUNCIL, STEVE TAYLOR, COMING CLEAN & MICHELE ROBERTS, ENV’T JUST. HEALTH ALL., WATERED DOWN JUSTICE

Maui represents a failure of entrenched conservative ideological and economic interests to limit the jurisdictional scope of the CWA. Groups like PLF and developers have long used strategic litigation to limit the scope of the CWA.²⁸¹ This case was no exception—it involved a number of conservative and industry-affiliated amici along with the county’s industry-tied counsel. In *Maui*, those interests sought to create massive loopholes in the CWA for pollutants discharged through groundwater or that traveled through any “non-point source.”²⁸² *Maui* dismissed such legal arguments entirely and cut off that avenue for future litigation. We explore each of these implications in detail below.

1. The Maui Test is a Win for the Environment

The *Maui* functional equivalent test equips environmental advocates and regulators with a new, powerful tool to combat sources of environmental pollution.

With this new test, advocates can argue for NPDES program application to a variety of new situations—but, most confidently, to discharges that reach navigable waters through groundwater. As the *Maui* case itself shows, groundwater is a highly transmissible medium that can quickly and efficiently move discharges of pollutants into navigable waters. The test (and even the threat of the test) will provide environmental advocates with a new tool to take on a variety of environmentally damaging practices that tend to discharge pollutants through groundwater such as coal ash ponds, pipelines, mining tailing basins, and sewage treatment facilities like LWRP.

The effects of *Maui* are already spreading. The litigants in a case involving a sewage treatment plant on Cape Cod recently settled out of court, presumably motivated by the threat of the new *Maui* test.²⁸³ Other cases involving coal ash pond and pipeline rupture have cited the functional equivalent test.²⁸⁴ In *Upstate Forever*,²⁸⁵ described above, the case was remanded in light of *Maui*. The parties settled the case in October 2020 rather than continue litigating.²⁸⁶

Maui could also spur a new round of litigation relating to coal ash ponds. Coal ash ponds hold a variety of the toxic byproducts of electricity generation at

(2019) (describing the disproportionate burdens of water pollution and the resulting challenges of drinking water access).

281. See generally Pollack, *supra* note 56.

282. See *supra* Subpart II.D.

283. Ellen M. Gilmer, *Supreme Court Ruling Spurs Deal in Cape Cod Pollution Case*, BLOOMBERG L. (May 29, 2020), <https://perma.cc/BE85-D3FR>.

284. Ellen M. Gilmer, *SCOTUS Maui Ruling Ripples Through Pipeline, Power Plant Cases*, BLOOMBERG L. (July 2, 2020), <https://perma.cc/Q4GH-257Z>.

285. *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637 (4th Cir. 2018).

286. Mike Ellis, *Kinder Morgan Gas Pipeline Spill Settlement to Provide \$1.5 Million to Upstate SC*, GREENVILLE NEWS (Oct. 23, 2020), <https://perma.cc/W8QD-24PT> (describing the settlement and creation of a fund to further clean the watershed).

coal-fired power plants.²⁸⁷ These byproducts can leach through groundwater into nearby navigable waters, harming plants, wildlife, and communities that rely on those waters.²⁸⁸ Bringing these toxic ponds within the CWA's scope would protect those waters and interlinked communities, but at the same time, it would potentially add significant pollution control and remediation technology costs for coal-fired power plants. These costs could permanently close these major sources of pollution and greenhouse gas emissions.²⁸⁹ Environmental advocates have already used the *Maui* test to argue for liability at the Seventh Circuit in a case originating from Illinois.²⁹⁰ This new round of litigation could create yet another circuit split because the Fourth Circuit determined that coal ash ponds do not qualify as a point source.²⁹¹ Such a circuit split would demand yet more attention from the Supreme Court, but until then, could spur NPDES regulation of coal-fired power plants in certain circuits. Even limited, regional CWA liability for coal ash ponds could have major impacts on human health and greenhouse gas emissions.

Maui also holds great promise for promoting environmental justice because it opens new avenues for coal ash litigation. Studies show that coal-fired power plants and coal ash storage sites are disproportionately located in low-income communities, indigenous communities, and communities of color.²⁹² These communities also disproportionately bear the health burdens of coal.²⁹³ In these

287. See Christopher Mele, *What Is Coal Ash and Why Is It Dangerous?*, N.Y. TIMES (Sept. 21, 2018), <https://perma.cc/Z3M6-WJDF>.

288. See generally ENVIRONMENTAL INTEGRITY PROJECT, COAL'S POISONOUS LEGACY: GROUNDWATER CONTAMINATED BY COAL ASH ACROSS THE U.S. (Mar. 4, 2019), <https://perma.cc/GC4T-WURS>.

289. See, e.g., PUBLIC JUSTICE, COAL ASH LITIGATION PROJECT, <https://perma.cc/ZM48-RLPK> (describing a broad litigation strategy to internalize the cost of coal through coal ash litigation and highlighting one example of litigation that closed a coal plant); *id.* (describing the costs associated with coal ash cleanup that can lead to coal plant closure).

290. See *Prairie Rivers Network v. Dynegy Midwest Generation, LLC*, 976 F.3d 761 (7th Cir. 2020). The case involves discharges from coal ash ponds through groundwater into a river. The Central District of Illinois court initially dismissed the case after it determined that the CWA does not apply to discharges through groundwater, but the Seventh Circuit has now heard oral arguments on whether to reverse that decision based on *Maui*. See Gilmer, *supra* note 284.

291. See *Sierra Club v. Va. Elec. & Power Co.*, 903 F.3d 403 (4th Cir. 2018).

292. See, e.g., Phil McKenna, *EPA Environmental Justice Adviser Slams Pruitt's Plan to Weaken Coal Ash Rules*, INSIDE CLIMATE NEWS (Mar. 15, 2018), <https://perma.cc/98SV-ZPW6>; Hilda Lloréns, *In Puerto Rico, Environmental Injustice and Racism Inflammate Protests Over Coal Ash*, CONVERSATION (Dec. 8, 2016), <https://perma.cc/6G47-PA3X> (describing efforts to end coal ash storage in Puerto Rico); Keith Rushing, *Coal Ash Dump in Alabama's Black Belt Another Symbol of Racism's Staying Power*, EARTHJUSTICE (Feb. 17, 2016), <https://perma.cc/CGH9-HMFR>; ADRIAN WILSON ET AL., COAL BLOODED: PUTTING PROFITS BEFORE PEOPLE (2016) (analyzing the impact of the coal energy cycle on low-income communities and communities of color); cf. Jonathan Thompson, *Environmental Victories Don't Guarantee Economic Justice*, HIGH COUNTRY NEWS (Feb. 14, 2019), <https://perma.cc/ZVP6-7UGG> (noting the need for investment along with closure of harmful activities to promote economic justice).

293. See, e.g., Brian Bienkowski, *Toxic Coal Ash Hits Poor and Minority Communities Hardest*, SCI. AM. (Jan. 14, 2016), <https://www.scientificamerican.com/article/toxic-coal-ash-hits-poor-and-minority->

ways, the burdens of coal echo the origins of the environmental justice movement centered on toxic landfills.²⁹⁴ Coal plants and their associated waste represent a contemporary fight for environmental justice, and *Maui* provides advocates with a new tool in their arsenal. Environmental justice advocates can use the *Maui* test to target groundwater pollution from coal ash ponds to clean drinking water, provide fishable rivers, and even alleviate air pollution as coal plants shut down.

The *Maui* test brings with it other opportunities for creative litigation. The clearest application of *Maui* will be on similar kinds of pollution that travel through groundwater to navigable waters. While we will cover broader applications of the test below that go well beyond the groundwater context,²⁹⁵ even limited to that subset of water pollution, *Maui* has incredible potential to protect the environment.

2. Conservative Ideological Interests Failed in Maui

Maui on its face involved a dispute about the application of the CWA on discharges from LWRF, but an ideological motive brewed just below the surface. Ideological and powerful economic interests have launched a decades-long battle to limit the application of the CWA. These interests, including ideological non-profit organizations, conservative members of the judiciary, and corporate interests, targeted *Maui* as the next battleground over CWA jurisdiction.²⁹⁶ Close examination of the lawyers representing the County, the arguments those lawyers made, and the amici involved in the case helps shed light on the ideological underpinnings at play. Such a close examination may also provide an understanding of what arguments are no longer available to those conservative interests after their failure in *Maui*.

Although the county began this dispute with their own lawyers, the county quickly replaced that team with Hunton & Williams, LLP.²⁹⁷ Hunton & Williams, LLP remains a firm well known for its zealous representation of industry, including coal, petroleum, and railroad companies.²⁹⁸ The county's new representation came with a change in both strategy and tone. For example, the county's May 2012 motion to dismiss authored by in-house attorneys did not

communities-hardest/; ANDREW CARIGNAN ET AL., U.N.C. CHAPEL HILL, ENVIRONMENTAL JUSTICE CONCERNS ASSOCIATED WITH POTENTIAL COAL ASH SITES IN NORTH CAROLINA (Dec. 13, 2016).

294. See, e.g., COMM'N FOR RACIAL JUST., TOXIC WASTES AND RACE IN THE UNITED STATES: A NATIONAL REPORT ON THE RACIAL AND SOCIO-ECONOMIC CHARACTERISTICS OF COMMUNITIES WITH HAZARDOUS WASTE SITES (1987); ROBERT D. BULLARD, DUMPING IN DIXIE (1990); Renee Skelton & Vernice Miller, *The Environmental Justice Movement*, NAT. RES. DEF. COUNCIL (Mar. 17, 2016), <https://www.nrdc.org/stories/environmental-justice-movement> (providing a brief summary of the history of the environmental justice movement).

295. See *infra* Subpart III.B.

296. See *supra* Subpart I.C.

297. County of Maui, Authorizing the Employment of Special Counsel Hunton & Williams, LLP in *Haw. Wildlife Fund v. Cnty. of Maui*, Civil No. 12-00198 SOM BMK, Res. 12-127 (Dec. 12, 2012) (authorizing the county to hire Hunton & Williams, LLP for a flat fee of \$250,000).

298. See generally FREEMAN, *supra* note 172; Vault, Hunton & Williams LLP, *supra* note 172.

argue for CWA inapplicability to LWRF or groundwater at all.²⁹⁹ Rather, it centered on factual disagreement over whether discharges from LWRF reached navigable waters.³⁰⁰

In comparison, Hunton & Williams filed an opposition to motion for summary judgment in April 2014 arguing that groundwater was not a navigable water and therefore not subject to CWA.³⁰¹ They went on to argue that even if discharges passing through groundwater were regulable, there remained a factual dispute about whether pollutants actually reached the Pacific Ocean.³⁰² Until that filing, the county had not offered an argument that would gut the CWA, but suddenly such an argument took center stage while the factual dispute became a secondary issue. With the parties later stipulating to facts that the pollutants did reach the Pacific Ocean, the county's counsel ditched the factual argument altogether, leaving the argument for CWA inapplicability *as the only option available to the county*.

On appeal, the attorneys' arguments only became more extreme. At the Ninth Circuit, the lawyers argued against classifying groundwater as either a navigable water or a point source, implying that the last conveyance before the navigable water must itself constitute a point source.³⁰³ At the Supreme Court, they added that every link in the conveyance chain needed to be a point source to fall under NPDES, and that groundwater broke that chain.³⁰⁴ Such a reading would blow a hole in the CWA, allowing polluters to circumvent liability by simply channeling their pollution through groundwater or any other alleged nonpoint source.

Given these maximalist arguments, it seems that the county's advocates may have had other motivations to push for such arguments. One explanation is that politically motivated interests identified the dispute as a vehicle to strategically transform the broader landscape of environmental liability. It is not clear how Hunton & Williams became involved in this case—this dispute

299. *See generally* Memorandum in Support of Defendant County of Maui's Motion to Dismiss Complaint Filed April 16, 2012, Haw. Wildlife Fund v. Cnty. of Maui, Case 1:12-cv-00198-SOM-BMK (May 9, 2012).

300. *See id.* at 5–6 (“Until ongoing scientific studies are concluded, the necessary factual record will not be complete enough to allow this Court to determine whether [there is a CWA violation].”). The filing also raised arguments over subject matter jurisdiction, agency jurisdiction, failure to join parties, and failure to state a claim. *See id.* at 10–20. The only focus on NPDES related to a technical argument of whether there was a private right of action for failure to apply for an NPDES permit. *See id.* at 20–22. None of these arguments come close to the maximal arguments raised by counsel later.

301. *See* Defendant County of Maui's Opposition to Plaintiff's Motion for Partial Summary Judgment at 1, 3–5, Haw. Wildlife Fund v. Cnty. of Maui, Case 1:12-cv-00198-SOM-BMK (Apr. 21, 2014).

302. *See id.* at 5–11, 15–22.

303. *See* County of Maui's Opening Brief on Appeal at 21–29, Haw. Wildlife Fund v. Cnty. of Maui, 886 F.3d 737 (9th Cir. 2018) (No. 15-17447).

304. *See* Petition for Writ of Certiorari at 31–36, Cnty. of Maui v. Haw. Wildlife Fund, No. 18-260 (Aug. 27, 2018).

appears to be the first time the county hired this Virginia-based firm.³⁰⁵ Hunton & Williams remains historically well-known for zealously representing clients from the coal, petroleum, and railroad industries.³⁰⁶ Many of these clients would have an interest in *Maui*, with the case's implications for pipeline leaks, coal ash ponds, and other sources of pollution leaching through groundwater. For instance, one of Hunton's partners, William Wehrum, left the firm for a top position in the Trump administration EPA.³⁰⁷ Wehrum represented a number of oil and coal corporations at Hunton, and when asked at confirmation hearings about the effects of climate change, he responded that it was a mere "allegation."³⁰⁸ But Wehrum's appointment was not the only connection the Trump administration had with Hunton attorneys. Record requests show that EPA political appointees met with Hunton attorneys before the County filed a petition for certiorari.³⁰⁹

Hunton & Williams, along with its successor Hunton Andrews Kurth, seem at least in part motivated by economic and ideological interests in the case. The client county could have disagreed with such tactics. It attempted to do just that when the County Council voted to accept a settlement offer rather than gut the CWA.³¹⁰ Despite the council's wishes, Maui County Mayor Michael Victorino announced that he rejected the settlement and that the council did not have authority to approve such a settlement.³¹¹ Mayor Victorino stated that he opposed the settlement so that the issue of CWA liability could be "clarified once and for all."³¹² He further alleged that compliance would cost \$800 million, while parties to the settlement negotiation argued it would cost only \$2.4 million.³¹³ Mayor Victorino's statements are not exactly convincing, particularly because the settlement would have ended the legal uncertainty at LWRF. His position was especially difficult to square with statements by the previous county mayor in 2009 that the county's goal was to phase out the injection wells and "use all of the water that's produced by our treatment plants."³¹⁴

305. All authorizations for representation by outside counsel must be approved by a vote of the County Council. The authors conducted an in-depth review of all resolutions approving outside counsel within the county's electronic records database. Any error is the result of database search limitations.

306. See generally FREEMAN, *supra* note 172; Vault, Hunton & Williams LLP, *supra* note 172.

307. Eric Lipton, *As Trump Dismantles Clean Air Rules, an Industry Lawyer Delivers for Ex-Clients*, N.Y. TIMES (Aug. 19, 2018), <https://perma.cc/V6XL-JT5F>.

308. See *id.*

309. See Wittenberg & Gilmer, *supra* note 232.

310. See Ryan Finnerty, *Maui Council Approves Water Pollution Settlement but Mayor May Have Final Word*, HAW. PUB. RADIO (Sept. 20, 2019), <https://perma.cc/DGC3-TRFR>.

311. Circle of Blue, *Maui Mayor Rejects Clean Water Act Settlement, Aims for Supreme Court Hearing*, ECOWATCH (Oct. 25, 2019), <https://perma.cc/GY3Y-AJ9G>.

312. Statement of Michael P. Victorino, *supra* note 243.

313. See Imada, *supra* note 244.

314. Letter from Paul H. Achitoff, Att'y for the Cmty. Grps., to Maui County Officials (June 28, 2011), <https://perma.cc/RM8H-849Q> (providing notice of intent to bring civil suit for violations of the CWA).

Of course, other motives remain possible. Contributions to Mayor Victorino's campaign reflect a number of people and companies with a potential interest in the outcome of *Maui*, such as: a wastewater treatment company (Waste Resource Technologies, Inc.); resort developers who would face increased costs from water (ARDA-ROC PAC);³¹⁵ a number of real estate developers; and golf course developers who would also face increased water costs (Goodfellow Bros).³¹⁶ While these donations may not be a direct causal explanation of his stance, they may provide some context for the desire to continue litigation that could favor such interests.

A number of conservative and industry organizations filed amici in the case. PLF has long held an ideological interest in limiting the CWA. The organization represented John Rapanos in *Rapanos v. United States*. Various trade associations also filed amici briefs in *Maui*.³¹⁷ Trade groups may seek to limit the ambit of the CWA to limit potential exposure to citizen suits, reduce cleanup costs arising from leaks or spills, eliminate permitting or technological upgrade cost to address discharges, and to limit CWA applicability to valuable wetland or riparian properties. The CWA presents real cost to these industries.

Altogether, these amici focused significant energy trying to convince the Supreme Court to address *Rapanos*. For example, PLF opposed the Ninth Circuit's "misguided and property-threatening interpretation" of Justice Scalia's plurality which was intended "to limit—not expand—the CWA's reach."³¹⁸ This coordinated emphasis from amici meant that the ideological potential for *Maui* as a case that would settle *Rapanos* was hard to miss. And amici weren't the only ones to make such arguments: The county's attorneys at Hunton argued that the Ninth Circuit's "confusion about *Rapanos* underscores the need for review here, as it is not alone in its misapprehension of Justice Scalia's opinion."³¹⁹

With all these filings and invocations of the jurisdictional battles in *Rapanos*, the groups aligning with the County clearly saw this case was an ideological opportunity. But they lost. *Maui* conclusively answers the question of whether the CWA covers groundwater. And although the Court did cite certain portions of Scalia's plurality opinion from *Rapanos*, those citations do not endorse the full plurality as controlling. Those portions are only dicta of a plurality. *Maui* itself is a majority opinion.

315. The American Resort Development Association – Resort Owners' Coalition.

316. CAMPAIGN SPENDING COMM'N, STATE OF HAW., CAMPAIGN CONTRIBUTIONS RECEIVED DATABASE (download full dataset, and search for all donations for Michael Victorino), available at: <http://ags.hawaii.gov/campaign/cc/view-searchable-data/campaign-contributions-received/>.

317. Amici included National Association of Homebuilders, National Federation of Independent Business Small Business Legal Center, Edison Electric Institute, American Fuel & Petrochemical Manufacturers, American Iron and Steel Institute, American Petroleum Institute, and Chamber of Commerce of the United States of America.

318. Brief Amicus Curiae of Pacific Legal Foundation in Support of Petitioner at 1–2, Cnty. of Maui v. Haw. Wildlife Fund, No. 18-260 (May 16, 2019).

319. Petition for Writ of Certiorari at 22–23, Cnty. of Maui v. Haw. Wildlife Fund, No. 18-260 (Aug. 27, 2018).

Maui was not the first high-profile and ideological water case at the Supreme Court, and it will not be the last. A high-profile loss like *Maui* will not dissuade future attempts to cabin CWA jurisdiction, but it is worth highlighting this most recent phase of the conservative ideological effort. *Maui* cuts off future attempts to limit application of the CWA to discharges through a particular medium. The case also cuts off arguments that the CWA only covers discharges that travel through a connected series of point sources.

Maui presents perhaps a greater loss for conservative interests. Even if advocates do find the next *Rapanos*, the *Maui* “functional equivalent” test may make their potential success in such a case beside the point. The next *Rapanos* would limit what qualifies as navigable waters—but *Maui* crucially shifts the jurisdictional debate away from where the discharges are initially deposited. As described in the following sub-section, *Maui* could overshadow *Rapanos* entirely.

*B. Broad Impact: Significant Nexus is Dead,
Long Live Functional Equivalent*

In the wake of the Supreme Court’s *Rapanos* decision, two words became the heart of the analysis for CWA jurisdiction: *significant nexus*. But after *Maui*, these words are almost certainly destined to be supplanted by *functional equivalent*. None of the opinions in *Maui* so much as cite Justice Kennedy’s *Rapanos* opinion, much less embrace it. But it would be a mistake to say that the Supreme Court fully embraced Justice Scalia’s *Rapanos* opinion as controlling. If anything, the Supreme Court in *Maui* may have actually *expanded* the CWA’s potential jurisdiction by elevating the Justice Scalia’s dicta into a holding. So despite the Court’s conservative composition, it may have ultimately created a far more sweeping test for applying the CWA than ever anticipated.

What makes the functional equivalent test the basis for such a sweeping CWA jurisdiction is that it is medium agnostic. The Supreme Court did not base its ruling on the fact that the pollutant traveled to waters of the United States through groundwater, thereby rejecting EPA’s argument.³²⁰ It similarly rejected the County’s argument that the intervening conduits for the pollutant had to be “conveyances,” thereby making them point sources themselves, to maintain jurisdiction.³²¹ The path from point source to waters of the United States could be through groundwater, over land, or through the air—to interpret the CWA otherwise would be an “absurdity.”³²² So why not an ephemeral tributary? Or

320. See *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1470 (2020).

321. See Brief for Petitioner at 32, *Cnty. of Maui v. Haw. Wildlife Fund*, S. Ct. 1462 (2020) (No. 18-260) (May 9, 2019); see also *id.* at 1487 n.5 (Alito, J., dissenting) (arguing that the key factor should be whether or not the route between a point source and the WOTUS must be a “conveyance” and thereby a point source itself for a direct discharge, a position the majority did not embrace).

322. See *Maui*, 140 S. Ct. at 1475–76.

the floodplain connection of a wetland? Or a subsurface connection between a wetland and a navigable water? Or some combination of these?

After Justice Kennedy's retirement, any hope of a five-vote opinion embracing his significant nexus test evaporated.³²³ The failure of any of the various *Maui* opinions to cite to Kennedy dried up the last of that well. But by embracing Justice Scalia's dicta, and enhancing it through a new "functional equivalent" test, Justice Breyer cleverly protected the CWA's jurisdiction not only for the case of indirect discharges in the NPDES program but across the board. Significant nexus may well be dead—all that remains is for the Supreme Court to write its obituary.³²⁴ But in its place, functional equivalence promises to reach the same results, all while portending to limit the CWA's authority through the voice its one-time antagonist, the late Justice Scalia.

1. Reframing the Jurisdictional Question

The key to understanding the broader implications of *Maui* for the CWA's jurisdiction, whether for individual permitting and jurisdictional determinations, citizen suits, or rulemaking, is to realize that it changed the framing of just what the jurisdiction of the CWA is. Anyone following the *Riverside Bayview*, *SWANCC*, and *Rapanos* line of cases—and the accompanying *Rapanos* Guidance, Clean Water Rule, and Navigable Waters Protection Rule saga—would be forgiven to think that the jurisdictional reach of the CWA is the same as the reach of the definition of "waters of the United States." But the CWA doesn't regulate waters—it regulates *discharges* into waters.³²⁵ By attempting to avoid a ruling that would create a loophole for polluters, the Supreme Court instead disrupted the status quo of CWA jurisdiction in an entirely new way.

By contrast, the issue and ruling in *Maui* do not directly address what is and is not within the ambit of the "waters of the United States." The receiving water in the case was a territorial sea, the often forgotten statutorily defined subset of "waters of the United States"³²⁶ that is itself clearly defined.³²⁷ If the Supreme Court wanted to use *Maui* to clear up what constituted navigable waters, they made a mistake. What *Maui* does speak to is a different question, the definition of "discharge of a pollutant."³²⁸ That question ultimately determines whether or not an activity falls within the "regulatory procedures in the Act." And that answer extends beyond the point source pollution at stake in *Maui*.

323. See *supra* Subpart I.A.

324. Until that time, it of course remains the law of the land. See *supra* text accompanying notes 74-75.

325. See 33 U.S.C. § 1311(a) (2018).

326. 33 U.S.C. § 1362(7) (2018).

327. *Id.* § 1362(8) ("The term 'territorial seas' means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles.").

328. *Id.* § 1362(12). In the CWA, the term "discharge" typically means the same thing as "discharge of a pollutant." *Id.* § 1362(16).

After refocusing on the question of “discharge of a pollutant,” the jurisdictional reach of the CWA after *Maui* is much clearer. The Act reaches all discharges that are the functional equivalent of a direct discharge into the waters of the United States. How the discharge reaches the receiving water matters only in terms of evaluating the factors in the new functional equivalent test.³²⁹ But this test works no matter the medium. If a pollutant reaches the waters of the United States, it is potentially covered by this test.³³⁰ The path can be through groundwater, but that is not the only possible application. The path could be through a series of connected Rube-Goldberg-like point sources.³³¹ Or, and more importantly, the path could be through tributaries—regardless of their flow. There is no reason why an ephemeral tributary, even one that flows only one day a year, could not meet the factors of the functional equivalence test. The following sections, on how the functional equivalence test could apply to dredge-and-fill permits and comparing the test to the significant nexus test, demonstrate why this medium agnosticism is so significant.

2. *From Point Sources to Dredge and Fill*

Reframing the jurisdictional question also leads to the potential to shift the sections of the CWA at issue. One important way the facts of *Maui* differ from the *Riverside Bayview*, *SWANCC*, and *Rapanos* cases is the section of the CWA that could permit the discharge of the pollution that was at issue. *Maui* involved point source pollution, which EPA issues permits for through NPDES.³³² *Rapanos* and the preceding cases, in contrast, involved what’s known as a “dredge-and-fill” or “404” permit, which is permitted by the Army Corps (subject to EPA veto) through section 404 of the Act.³³³ These two permitting programs effectuate and give meaning to the same provision in the CWA that prohibits discharge and the Act’s overall objective that “the discharge of pollutants into the navigable waters be eliminated.”³³⁴ This zero discharge goal and the common provision prohibiting these pollutants means that the two programs must work in tandem, and they should cover the same jurisdictional ground. As a result, the functional equivalent test not only should, but must transfer from point source to 404 permits. In doing so, the *Maui* decision will eventually swallow *Rapanos* whole.

329. *See* *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1476–77 (2020).

330. The potential coverage distinguishes this test from the “fairly traceable” test announced by the Ninth Circuit, *Haw. Wildlife Fund v. Cnty. of Maui*, 886 F.3d 737, 749 (9th Cir.2018), which would have automatically covered a discharge so long as it reached the waters of the United States.

331. For an example of a Rube Goldberg machine, see OK Go, *This Too Shall Pass – Rube Goldberg Machine – Official Video*, YOUTUBE (Mar. 2, 2010), <https://www.youtube.com/watch?v=qybUFnY7Y8w>.

332. *See* 33 U.S.C. § 1342 (2018).

333. *See id.* § 1344.

334. *Id.* §§ 1251(a)(1), 1311.

Although there are two major federal programs permitting discharges—implemented by two federal agencies, EPA and the Army Corps—they ultimately share the same jurisdictional scope. Allowing two different federal agencies to interpret the jurisdictional scope of one federal law differently would be untenable.³³⁵ So at the end of the day, who decides where the waters end?

In 1979, Attorney General Benjamin Civiletti issued an opinion on this precise point.³³⁶ The Secretary of the Army asked whether he, through the Army Corps, had “ultimate administrative authority to determine the reach of the term ‘navigable waters’ for purposes of § 404” of the CWA or if the EPA administrator did.³³⁷ Noting that the “term ‘navigable waters’ . . . is a linchpin of the Act,” the Attorney General explained that it related not only to 404 permits but also to point source discharges and other provisions.³³⁸ He reasoned it was therefore logical to conclude that Congress intended that there be only a single judgment as to whether—and to what extent—any particular water body comes within the jurisdictional reach of the Federal Government’s pollution control authority. We find no support either in the statute or its legislative history for a conclusion that a water body would have one set of boundaries for purposes of dredged and fill permits under section 404 and a different set for purposes of the other pollution control measures in the Act.³³⁹

Attorney General Civiletti based this conclusion on the argument that “the structure and intent of the Act support an interpretation of § 404 that gives the [EPA] Administrator the final administrative responsibility for construing the term ‘navigable waters.’”³⁴⁰

335. The Supreme Court has indicated that it will not afford *Chevron* deference, for instance, to an agency interpretation when federal agencies disagree and the executive branch is instead “of two minds.” *Epic Sys. Corp. v. Lewis*, 138 S. Ct. 1612, 1630 (2018) (“And whatever argument might be mustered for deferring to the Executive on grounds of political accountability, surely it becomes a garble when the Executive speaks from both sides of its mouth, articulating no single position on which it might be held accountable.”). Although courts do not grant *Chevron* deference to agency interpretations of broad statutes that apply across the government such as the Freedom of Information Act or the Federal Advisory Committee Act, there is at least no general rule against applying *Chevron* where Congress has delegated authority to more than one agency so long as they agree. See Jody Freeman & Jim Rossi, *Agency Coordination in Shared Regulatory Space*, 125 HARV. L. REV. 1131, 1208–09 (citing *Collins v. Nat’l Transp. Safety Bd.*, 351 F.3d 1246, 1252–53 (D.C. Cir. 2003)). The CWA is not a general application statute, but rather requires a particular agency expertise that is shared by two agencies. It therefore makes sense for courts to apply typical administrative law principles to CWA regulations when EPA and the Army Corps agree. See Freeman & Rossi, *supra*, at 1204 (discussing Supreme Court review of joint EPA-Army Corps defining fill for CWA in *Coeur Alaska, Inc. v. Southeast Alaska Conservation Council*, 129 S. Ct. 2458, 2464 (2009)).

336. 43 U.S. Op. Atty. Gen. 197 (Sept. 5, 1979). This opinion known in water circles as the “Civiletti Memo,” after its author. See, e.g., 1979 “*Civiletti*” *Memorandum under CWA Section 404(f)*, EPA, <https://perma.cc/68QJ-JD9L>.

337. 43 U.S. Op. Atty. Gen. Civiletti Memo, *supra* note 336, at 197.

338. *Id.* at 201.

339. *Id.*

340. *Id.*

As a practical matter, this opinion, which is only considered binding by and on the executive branch,³⁴¹ mostly resolves an intramural dispute over which agency gets to decide an issue.³⁴² But Attorney General Opinion had a lasting impact. In fact, the National Association of Home Builders, a frequent opponent of CWA jurisdiction in litigation, recommended the Trump administration rescind or revise the opinion because it “allows EPA to delay, block, or second-guess the Corps’ expertise in managing the 404 program. This creates regulatory delay, inconsistency, and uncertainty.”³⁴³ Unwritten but clearly understood is the fact that EPA seeks to regulate the environment while the Army Corps has a long history of being pro-development.

More importantly, the 1979 Attorney General Opinion sets up the logic for why a ruling on the jurisdictional scope of one permitting program in the CWA—such as the point source discharge at issue in *Maui*—impacts the scope of other programs. The zero-discharge requirement of the CWA, found both in the statute’s declared objective³⁴⁴ and in the Section 1311 prohibition,³⁴⁵ is what makes this connection work. *Any* discharge qualifies under the jurisdictional scope of the CWA, not just for point source pollution but for *any* provision of the law. And because the CWA continues no *de minimis* exception, the amount of discharge is irrelevant for jurisdictional purposes.

The zero-discharge requirement also distinguishes the CWA from another important anti-pollution statute: the Clean Air Act (CAA). The Supreme Court has struggled to set a clear jurisdictional boundary for the Clean Air Act in recent years, particularly with regards to greenhouse gases. In *Massachusetts v. EPA*,³⁴⁶ the Court famously held “[t]he Clean Air Act’s sweeping definition of ‘air pollutant’ . . . embraces all airborne compounds of whatever stripe,” including greenhouse gases that “are without a doubt ‘physical [and] chemical . . . substance [s] which [are] emitted into . . . the ambient air.’ The statute is unambiguous.”³⁴⁷ But the Supreme Court later cabined that holding in *UARG*.³⁴⁸ In that case, the Court wrote that “*Massachusetts* does not strip EPA of authority

341. See Randolph D. Moss, *Executive Branch Legal Interpretation: A Perspective from the Office of Legal Counsel*, 52 ADMIN. L. REV. 1303, 1319–20 (2000).

342. A 1989 memorandum of agreement between EPA and the Army Corps on the process for Section 404 jurisdictional determinations provides a framework for avoiding such interagency disputes on these issues. See EPA & ARMY CORPS, MEMORANDUM OF AGREEMENT: DETERMINATION OF GEOGRAPHIC JURISDICTION OF THE SECTION 404 PROGRAM AND APPLICATION OF EXEMPTIONS UNDER CWA SECTION 404(F) (Jan. 19, 1989), available at <https://perma.cc/R9PS-9A92>. This memo cites the 1979 Attorney General Opinion that grants ultimate authority to the EPA and states that the memo is issued “[p]ursuant to this authority.” *Id.*

343. Letter from Owen McDonough, Nat’l Ass’n of Home Builders, to Mary Coulombe, Army Corps of Eng’rs (Oct. 18, 2017), <https://perma.cc/5VY4-BCGA> (providing recommendations to the Army Corps related to Executive Order 13777, “Enforcing the Regulatory Reform Agenda”).

344. 33 U.S.C. § 1251(a)(1).

345. *Id.* § 1311(a).

346. 549 U.S. 497 (2007).

347. *Id.* at 528–29 (emphasis and alterations in original).

348. *Util. Air Reg. Group v. EPA (UARG)*, 573 U.S. 302 (2014).

to exclude greenhouse gases from the class of regulable air pollutants *under other parts of the Act where their inclusion would be inconsistent with the statutory scheme.*³⁴⁹ In other words, “*Massachusetts* does not foreclose the Agency’s use of statutory context to infer that certain of the Act’s provisions use ‘air pollutant’ to denote not every conceivable airborne substance, but only those that may sensibly be encompassed within the particular regulatory program.”³⁵⁰ The Court therefore held that “there is no insuperable textual barrier to EPA’s interpreting ‘any air pollutant’ in the permitting triggers” for one Clean Air Act program where those particles—specifically, greenhouse gases—“are emitted in such vast quantities that their inclusion would radically transform those programs and render them unworkable as written” even while interpreting the Clean Air Act to capture those particles under the same definition in another program.³⁵¹

In *Maui*, petitioners welcomed the comparison to the Clean Air Act. Indeed, they opened their certiorari brief with a reference not to the Supreme Court’s case law on the CWA but to *UARG*.³⁵² The dissent picked up on this point and argued that *UARG* foreclosed the functional equivalent rule because the majority’s reading of the CWA would “offend[] the clear-statement rule recognized in *UARG* by expanding the authority of the EPA.”³⁵³ But the CWA and the Clean Air Act are distinct in two key respects.

First, unlike the Clean Air Act, the CWA has a zero-discharge rule. In *UARG*, the Court interpreted the CAA to require permits for “sources with the potential to emit more than 100 or 250 tons per year of a relevant pollutant.”³⁵⁴ In that case, EPA issued a “tailoring rule” to modify the tons-per-year restriction in the statute for greenhouse gases to a different numerical minimum to avoid a massive increase in the number of regulated sources.³⁵⁵ But the CWA has no such minimum threshold. Instead, the zero-discharge rule sets a minimum of, well, zero. Therefore, the CWA starts at an entirely different point because it does not have a similar set of thresholds for whether or not a source is captured.

Second, while *UARG* addressed a statute (the Clean Air Act) that used a common *definition* for two different *regulatory provisions* (major sources and mobile sources), the CWA has a common *prohibition* with two different *permitting programs*.³⁵⁶ The Clean Air Act is a complex statute with a variety of different regulations for a range of different types of pollutants, including criteria

349. *Id.* at 319.

350. *Id.*

351. *Id.*

352. Petition for Writ of Certiorari at 3, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260 (Aug. 27, 2018).

353. *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1490 (2020) (Alito, J., dissenting).

354. *Util. Air Reg. Group v. EPA*, 573 U.S. 302, 325 (2014).

355. See *id.* at 312 (citing *Action To Ensure Authority To Implement Title V Permitting Programs Under the Greenhouse Gas Tailoring Rule*, 75 Fed. Reg. 82,254 (Dec. 30, 2010)).

356. Compare 42 U.S.C. § 7491(g)(7) (2018) (defining “major stationary source” as having the potential to emit at least 250 tons per year), with 33 U.S.C. § 1311(a) (2018) (outlawing the “discharge of any pollutant”).

pollutants, hazardous air pollutants, and others. The CWA, in contrast, is a much simpler statute with different permitting schemes all built on a common prohibition in an individual provision³⁵⁷—Section 1311³⁵⁸—that must mean the same thing across the statute.³⁵⁹ Therefore, the reasoning of *UARG* applies neither to the *Maui* nor to a future attack on using the holding of *Maui* in the context of the 404 program.

3. *Superseding Rapanos*

The ability to shift the holding of *Maui* from point source pollution to dredge-and-fill pollution shows the potential breadth of this opinion's application. Even if the decision never explicitly did so, this case may have superseded *Rapanos*'s delineation of the reach of the CWA by undercutting the logic of Justice Scalia's proposed test from that case. Although the Supreme Court might have intended to cabin EPA's authority, as indicated by its rejection of the Ninth Circuit's test as overly broad,³⁶⁰ the multi-factor analysis it substituted could actually open the door to EPA adopting a newly broad reading of that authority.

A comparison between the Court's holding in *Maui* and Justice Scalia's opinion in *Rapanos* shows why *Maui* creates an expansive reading of CWA jurisdiction across permitting programs. Justice Kavanaugh's concurring opinion, which no other justice joined, provides a starting point to understand this comparison.³⁶¹ Justice Kavanaugh seems to have written this concurrence to point to a narrower reading of the CWA and to provide tea leaves for prognosticators of how he might vote on a future fact pattern that more closely resembles *Rapanos*. Most importantly, he explicitly emphasized that "the Court's interpretation of the Clean Water Act regarding pollution 'from' point sources adheres to the interpretation set forth in Justice Scalia's plurality opinion in *Rapanos*" as if to imply that the Court was using *Maui* to turn Justice Scalia's plurality into a majority.³⁶² But Justice Kavanaugh ignores a key point. Justice Breyer's majority opinion elevates dicta in the Scalia opinion, not what would have been his holding. And the logic of that dicta never made sense with his proposed holding in *Rapanos*. Which brings us to the holding of *Maui*.

Justice Breyer deftly used the words of Justice Scalia to expand the CWA's jurisdiction. In doing so, the *Maui* majority only briefly cited the Scalia opinion,

357. The CWA does have a variety of programs unrelated to the zero-discharge prohibition, *see, e.g.*, 33 U.S.C. § 1256 (2018) (grants to states); *id.* § 1329 (state-led nonpoint source pollution regulation), but for federal regulatory purposes, it is the core of the Act.

358. 33 U.S.C. § 1311.

359. This point restates the thesis of the 1979 Attorney General opinion and shows how the logic of that opinion serves as an effective rebuttal to a more direct *UARG* argument for the CWA.

360. *See* *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1473 (2020).

361. Justice Kavanaugh "join[ed] the Court's opinion in full" and "wr[ote] separately to emphasize three points." *Id.* at 1478 (Kavanaugh, J., concurring).

362. *Id.*

noting that “[a]s the plurality correctly noted in *Rapanos v. United States*, the statute here does not say ‘directly’ from or ‘immediately’ from.”³⁶³ But the majority left out what Scalia wrote immediately afterward, the potential limitation that only Justice Kavanaugh sought to highlight. Justice Kavanaugh quoted the *Rapanos* Scalia opinion further, noting that “from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates § 1311(a), even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.”³⁶⁴ It might not be immediately clear at first blush why this longer quote makes any difference. The distinction is in the fact that “conveyance” is in the CWA’s definition of “point source.”³⁶⁵ But the majority does not require a discharge to pass through linked conveyances—in other words, a chain of point sources—to determine if a discharge is covered. If it had, then Justice Alito, who described his preferred interpretation of the CWA as covering just those types of conveyances, might have joined the majority.³⁶⁶

The fact that the path between a point source and a receiving water can be subsurface or could be through an ephemeral tributary illustrates why it is fatal to Justice Scalia’s proposed test in *Rapanos*. Justice Scalia’s test would require a connection to traditionally navigable waters through either a relatively permanent flow for tributaries or by a continuous surface connection for wetlands.³⁶⁷ But under the functional equivalence test in *Maui*, neither of Justice Scalia’s criteria should matter. If a pollutant is discharged upstream of a receiving water and it reaches it by means of a subsurface connection—just like in *Maui*—or by means of an ephemeral stream, it can still be the functional equivalent of a direct discharge. This fact obliterates the Justice Scalia test in two ways. First, it opens up an alternate means of analysis for a case-by-case consideration, requiring someone performing a jurisdictional determination or bringing a citizen suit to conduct the type of tracer study done in *Maui*. If pollutants reach waters of the United States, then it is potentially covered, *whether or not the intervening waters are themselves jurisdictional*. Second, it exposes the absurd, hydrology-denying logic of Justice Scalia’s opinion. What matters for CWA jurisdiction is the actual connection between the source of pollution and the jurisdictional waters. And through the functional equivalent test, the Supreme Court elevated the hydrologic concerns of Justice Kennedy’s *Rapanos* opinion while citing instead to Justice Scalia’s words in the same case.

363. *Id.* at 1475 (quoting *Rapanos* 547 U.S. 715, 743 (2006)).

364. *Id.* at 1478 (Kavanaugh, J., concurring) (quoting *Rapanos*, 547 U.S. at 743).

365. 33 U.S.C. § 1362(14) (2018) (“The term ‘point source’ means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.”) (emphasis added).

366. *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1486–88 (2020).

367. *Rapanos*, 547 U.S. at 742 (Scalia, J., plurality).

The Court was almost certainly aware of the possibility that sourcing this Justice Scalia dicta for a holding could expand the jurisdictional boundaries of the CWA because the United States made that argument. In its amicus brief, the United States cited *Kentucky Waterways Alliance*,³⁶⁸ a Sixth Circuit case involving coal ash ponds.³⁶⁹ According to the brief's characterization, the Sixth Circuit "regarded the plurality opinion in *Rapanos* as inapposite, stating that the opinion 'answer[ed] an entirely different legal question' and addressed only the movement of pollutants via 'intermediary point sources.'"³⁷⁰ Indeed, in that case the Sixth Circuit argued that the plaintiffs took the Justice Scalia quote about indirect discharges "out of context in an effort to expand the scope of the CWA well beyond what the *Rapanos* Court envisioned."³⁷¹ Justice Breyer would do exactly what the Sixth Circuit accused plaintiffs of doing, and by removing the context emphasizing that the connections were point sources themselves, created a more expansive and powerful reading of the CWA's jurisdiction as a majority holding.

The Supreme Court noted that it was reading the CWA's jurisdiction more narrowly than the Ninth Circuit had.³⁷² But it also said that the reading was broader than what the United States suggested.³⁷³ Justice Breyer thereby framed the opinion as a "Goldilocks" approach.³⁷⁴ In actuality, however, the test was not somewhere in the middle between the two, but actually a potently broad reading for future citizen suits, jurisdictional determinations, and regulations.

4. *The Functional Equivalent of Significant Nexus*

The functional equivalent test—whether used for point source pollution or for dredge-and-fill permits—will ultimately get similar, if not the same, results as the significant nexus test. Both take hydrology into account when analyzing whether or not pollutants reach covered waters. And both involve similar questions in their application, with the functional equivalent test only listing factors that a significant nexus analysis might already consider.

368. *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925 (6th Cir. 2018).

369. Brief for the United States as Amicus Curiae, *Cnty. of Maui v. Haw. Wildlife Fund*, No. 18-260, at 10–11 (Jan. 3, 2019).

370. *Id.* at 11.

371. *Ky. Waterways*, 905 F.3d at 936. The Sixth Circuit added in a footnote that "Indeed, *Rapanos* itself limited the scope of the CWA by interpreting the phrase 'navigable waters' narrowly." *Id.* at 936 n.9 (citing *Rapanos*, 547 U.S. at 757).

372. *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1470 (2020).

373. *Id.*

374. See Jonathan A. Adler, *Supreme Court Upholds Broad Reading of Clean Water Act*, VOLOKH CONSPIRACY (Apr. 23, 2020, 2:05 PM), <https://perma.cc/CYB4-KKL5>; Tadhg A.J. Dooley & David Roth, *Supreme Court Update Romag Fasteners v. Fossil (No. 18-1233), County of Maui v. Hawaii Wildlife Fund (No. 18-260), Barton v. Barr (No. 18-725)*, NAT'L L. REV. (BLOG) (Apr. 28, 2020), <https://perma.cc/3Q38-ERMW>.

a. Comparing Factors for Navigable Waters Analysis

The functional equivalent test includes seven nonexclusive factors: (1) transit time, (2) distance traveled, (3) the nature of the material through which the pollutant travels, (4) the extent to which the pollutant is diluted or chemically changed as it travels, (5) the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, (6) the manner by or area in which the pollutant enters the navigable waters, (7) the degree to which the pollution (at that point) has maintained its specific identity.³⁷⁵

The Court was somewhat equivocal about the relative weight of these factors, declaring that “[t]ime and distance will be the most important factors in most cases, but not necessarily every case.”³⁷⁶ Regarding the outer limits of the factors, the Court only provided that “[i]f the pipe ends 50 miles from navigable waters and the pipe emits pollutants that travel with groundwater, mix with much other material, and end up in navigable waters only many years later, the permitting requirements likely do not apply.”³⁷⁷ Even in its own hypothetical, the Court both couched the situation as merely “likely” be outside CWA jurisdiction and also mixed several factors without indicating which one jurisdiction would turn on. Again, a comparison to *Rapanos* is illustrative. That case involved “11 to 20 miles” of connections to navigable waters,³⁷⁸ a distance that is less than half of what Justice Breyer suggests might be outside the line. Whether or not the tributaries at issue in *Rapanos* are considered waters of the United States, that case would very likely fall under CWA jurisdiction using the functional equivalent test.

These factors will also look familiar to anyone already implementing the *Rapanos* decision. Indeed, as the 2008 *Rapanos* guidelines explained, “[a]s the distance from the tributary to the navigable water increases, it will become increasingly important to document whether the tributary and its adjacent wetlands have a significant nexus rather than a speculative or insubstantial nexus with a traditional navigable water.”³⁷⁹ EPA and the Army Corps recognized in the 2015 Clean Water Rule’s preamble that “[s]cience demonstrates that distance is a factor in the connectivity and the strength of connectivity of wetlands and open waters to downstream waters.”³⁸⁰ For case-specific determinations for waters of the United States under that rule, the agencies said that “[d]istance is by no means the sole factor, and aquatic functions will play a prominent role in determining whether specific waters . . . have a significant nexus.”³⁸¹ The referenced aquatic functions, which include “[p]ollutant trapping,

375. *Maui*, 140 S. Ct. at 1476–77.

376. *Id.* at 1477.

377. *Id.* at 1476.

378. *Rapanos v. United States*, 547 U.S. 715, 720 (2006).

379. *Rapanos* Guidance, *supra* note 88, at 11.

380. Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,053, 37,086 (Aug. 28, 2015).

381. *Id.* at 37,090.

transformation, filtering, and transport,”³⁸² are strikingly similar to the “functional equivalent” factors relating to dilution, chemical change, amount, and material through which the pollutant travels.³⁸³ Implementing the functional equivalent test will therefore likely involve a remarkably similar analysis to the implementation of the significant nexus test.

b. Functional Equivalence of Wetlands

The concept of functional equivalence will be even more familiar to wetlands practitioners working in the 404 program. Going forward, when wetlands are filled under a 404 permit, the functional equivalent test will require the Army Corps to reverse the compensatory mitigation analysis that the agency already performs. This analysis again uses similar factors and relies on the concept that the replacement wetlands are the functional equivalent of those filled through a permit.

The functional equivalence analysis in current wetlands permitting arises whenever compensatory mitigation is required. EPA and the Army Corps protect wetlands during the permitting process using the “mitigation sequence.” Permit applicants are directed to follow a hierarchy: first, to “avoid” impacts, then, to “minimize” impacts that do occur, and, failing the first two steps, to “compensate” for any “unavoidable adverse impacts which remain” in a permitted project.³⁸⁴ As the hierarchy or sequence suggests, not all 404 permits will require compensatory mitigation, which acts as a backstop to the first two approaches and is often controversial in application.³⁸⁵ The approach provides a means to meet the government’s “longstanding national goal of ‘no net loss’ of wetland acreage and function.”³⁸⁶ And because the value of different wetlands

382. *Id.* at 37,106.

383. The Technical Support Document for the 2015 Clean Water Rule also rejects a “direct hydrological connection” approach in a similar fashion to how the Supreme Court in *Maui* rejected that test from the Ninth Circuit. “With respect to the comment that without quantifying ‘significant’ the agencies are asserting jurisdiction based on the presence of connections that are the equivalent of ‘any hydrologic connection,’ the agencies disagree with both the characterization of the science and the suggestion that the jurisdictional conclusions reflected in the rule are based on mere hydrologic connections.”

EPA & ARMY CORPS, TECHNICAL SUPPORT DOCUMENT FOR THE CLEAN WATER RULE: DEFINITION OF WATERS OF THE UNITED STATES 65 (2015).

384. EPA, EPA-843-F-08-002, WETLANDS COMPENSATORY MITIGATION 1.

385. See, e.g., Isabelle Ross, *In the Wake of Pebble Tapes, Scrutiny for State Involvement in Wetlands Mitigation Plan*, ALASKA PUB. MEDIA (Oct. 19, 2020), <https://perma.cc/CF5L-SZ9K> (describing controversy around compensatory mitigation plan for proposed Pebble Mine in Bristol Bay, Alaska).

386. Compensatory Mitigation for Losses of Aquatic Resources, 73 Fed. Reg. 19,594, 19,594 (Apr. 10, 2008) (to be codified at 33 C.F.R. pts. 325 & 332, 40 C.F.R. pt. 230). The “no net loss” goal dates to a 1988 campaign slogan for President George H.W. Bush and is an example of a shifting baseline problem tied to the amount of wetlands in 1990; thereby both obscuring the historical loss of wetlands and distracting from the need to restore additional wetlands. See J.B. Ruhl & James Salzman, *Gaming the Past: The Theory and Practice of Historic Baselines in the Administrative State*, 64 VANDERBILT L. REV. 1, 29–37 (2011) (providing history of program and its flaws).

vary, compensatory mitigation may require an acreage replacement ratio of greater than one-to-one. Indeed, agencies have long recognized that “where the impact is to a high-value resource, more than one-to-one replacement on an acreage basis may be necessary just to achieve *functional equivalence* between the impact and mitigation sites.”³⁸⁷ Since at least 1987, the Army Corps has evaluated, created, or restored wetlands for mitigation purposes based on this concept of “functional equivalence.”³⁸⁸ The scientific literature on wetlands also uses the term functional equivalence,³⁸⁹ as do other federal agency documents and National Research Council reports on ecological restoration.³⁹⁰ Clearly, the language of functional equivalence already exists in the regulatory program for wetlands.

But federal agencies are familiar with more than just the mere language of “functional equivalence” found in *Maui*, they also use a similar set of factors in performing replacement ratio analysis. These factors include: [1] differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, [2] temporal losses of aquatic resource functions, [3] the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or [4] the distance between the affected aquatic resource and the compensation site.³⁹¹

In particular, both the compensatory mitigation analysis and functional equivalent tests consider distance. The comparison of functions between impact and mitigation sites in the compensatory mitigation analysis captures the *Maui* factors on material that a pollutant flows through, chemical changes to a pollutant, and area where a pollutant enters navigable waters. And as with the significant nexus test, agencies often base the functional equivalence analysis on hydrogeomorphic factors.³⁹²

387. 73 Fed. Reg. 19,594, at 19,602 (emphasis added).

388. See ARMY CORPS OF ENG'RS, WETLANDS RES. PROGRAM, WETLAND EVALUATION TECHNIQUE (WET), VOL. II: METHODOLOGY 14 (1987), available at <https://perma.cc/X7DL-QXMY> (describing “functional equivalence” as an analysis of whether “the created or restored wetland performs the same functions to a similar degree”).

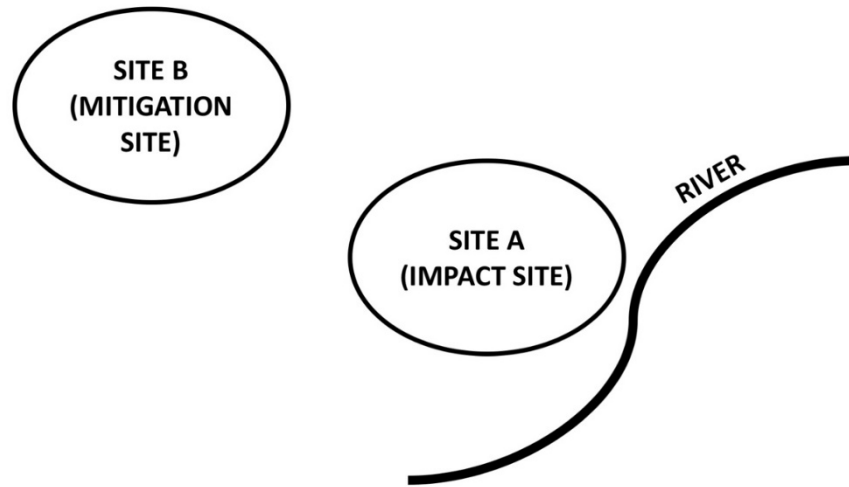
389. See, e.g., M. Siobhan Fennessy & Abby Rokosch Dresser, *No Net Loss Case Study: Structural and Functional Equivalence of Mitigation Wetlands*, in THE WETLANDS BOOK (C.M. Finlayson et al. (eds.)) (2006); Charles A. Simenstad & Ronald M. Thom, *Functional Equivalency Trajectories of the Restored Gog-Le-Hi-Te Estuarine Wetland*, 6 ECOLOGICAL APPLICATIONS 38 (1996).

390. See, e.g., NOAA, GUIDELINES FOR THE CONSERVATION AND RESTORATION OF SEAGRASSES IN THE UNITED STATES AND ADJACENT WATERS 46 (1998) (“What is ‘functional equivalency’? In a general sense, this means that a restored or mitigated system attains functions the same as those of an unimpacted system in a similar setting.”); Comm. on Mitigating Wetland Losses, Nat’l Research Council, *Compensating for Wetland Losses under the Clean Water Act* 6 (2001) (“Long-term management is especially important, because wetland restoration and creation sites seldom achieve functional equivalency with reference sites or comply with permit requirements within 5 years.”).

391. 40 C.F.R. § 230.93(f)(2) (2019).

392. See MICHAEL BEAN, REBECCA KIHSLINGER & JESSICA WILKINSON, ENV’T’ L. INST., DESIGN OF U.S. HABITAT BANKING SYSTEMS TO SUPPORT THE CONSERVATION OF WILDLIFE HABITAT AND AT-RISK SPECIES 44–46 (2008) (describing “functional equivalency measures”).

Figure 1



Implementing a functional equivalent test to answer the CWA jurisdictional question would require a reversal of the current compensatory mitigation analysis. Consider an example using Figure 1 where a permit applicant wants to fill ten acres of wetlands at Site A, which is close to a river. Under the compensatory mitigation policy's terms, Site A would be the "impact site." Now, imagine that the permit applicant wants to restore or replace wetlands at Site B, which would be called the "mitigation site." Site B is further from the river, and for the purposes of illustration, we can also imagine that the wetlands at Site B provide different ecosystem functions than those at Site A. Under the current compensatory mitigation program, the Army Corps might require a two-to-one replacement ratio of restored wetlands at Site B to destroyed wetlands at Site A to compensate for the factors of distance and differences in the ecosystem functions. As a result, the permit applicant would need to restore twenty, not ten, acres of wetlands at the mitigation site to balance out the required ratio. Applying a functional equivalent test to answer CWA jurisdiction would reverse that equation.

Now, imagine an opposite scenario where a developer wants to fill in twenty acres of wetlands at the *further* site, Site B. Rather than engaging in a time-consuming and expensive tracer study as was used in *Maui* to show a connection, the Army Corps could do a functional equivalence test that *flips* the current compensatory mitigation analysis. Looking at factors like distance and the differences in ecosystem functions, the Army Corps could determine that destroying those twenty acres of wetlands would be the equivalent of destroying half as many acres at Site A. The implications of these two examples are the same, because the Army Corps and EPA have *already decided* under the compensatory mitigation program that those two sets of wetlands at the right ratio are functional equivalents for the purposes of the CWA. Like switching from addition to subtraction in a math equation, the agencies would only have to

reverse the analysis and balance the equation.³⁹³ In doing so, the functional equivalence test could form the foundation of a new analysis for 404 permits.

This expansion of CWA jurisdiction over wetlands brings with it incredible promise for the promotion of environmental justice. Wetland filling poses disproportionate risk to low-income communities and communities of color that face increased risk of flooding that comes with development.³⁹⁴ The *Maui* test may therefore provide advocates and a new presidential administration with new tools to promote environmental justice through wetland protection, mitigation, and restoration.

c. The Relative Importance of the *Maui* Factors in Implementation

Although the Supreme Court in *Maui* suggested that the time and distance factors would generally carry the most significance, the relative weight of the factors may vary depending on the factual circumstances and institutions that weigh the factors. From a judicial standpoint, time and distance will allow courts to create a quasi-common-law approach to CWA jurisdiction. On a case-by-case basis, courts can determine what distance is too far and what time-lag is too long for pollution to travel before it falls outside the CWA's jurisdiction. Although this approach may not be the most efficient or scientifically valid, it would track with the sentiment expressed by Justice Kagan at oral argument that the situation in *Maui* is just "tort law."³⁹⁵

For the doubters who fear the CWA creeping into areas like septic tanks, the dilution, chemical change, and change in identity factors will be important in limiting the Act's scope.³⁹⁶ As EPA explains, a septic tank works when "wastewater percolates into the soil, naturally removing harmful coliform

393. This point is not to say that the analysis would be easy. Indeed, there is a high variability in how the Army Corps implements regulatory programs, such as for jurisdictional determinations and compensatory mitigation requirements, across its highly decentralized districts. See Dave Owen, *Regional Federal Administration*, 63 UCLA L. REV. 58, 92–105 (2016).

394. See, e.g., Broken Ground Podcast, *Progress for Who?*, S. ENV'T L. CTR. (Aug. 12, 2020) (describing the impact of highway development on communities of color outside Charleston, South Carolina); Blan Holman, *Now More Than Ever, South Carolinians Must Fight Hard to Protect the Clean Water Act*, THE STATE (Feb. 20, 2020), <https://www.thestate.com/opinion/article240464401.html> ("Our Carolina Bays are famous as mysterious bodies of water that insect-eating plants like the Venus flytrap — and many wood ducks — call home. And down on the coast, where flooding seems to get worse every year, wetlands destruction means more pain and misery."); J.B. Ruhl & James Salzman, *The Effects of Wetland Mitigation Banking on People*, 28 NAT'L WETLANDS NEWSLETTER 8 (2006) (noting the wetland mitigation banking program often translates to development that destroys wetlands in urban areas and replaces them with wetlands in rural areas, therefore raising environmental justice concerns); Vanderwarker, *supra* note 280 (describing the impact of development, land-use planning, and water policies on flooding in low-income communities and communities of color); Alice Kaswan, *Environmental Justice Bridging the Gap Between Environmental Laws and "Justice"*, 47 AM. U. L. REV. 221, 243–78 (describing distribution of harms from wetland filling among other distributional environmental justice issues).

395. Transcript of Oral Argument at 55, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260).

396. *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1489 (2020).

bacteria, viruses and nutrients.”³⁹⁷ The soil in a septic tank removes bacteria, viruses, and nutrients through dilution, chemical change, and change in identity of the wastewater. The University of Hawai’i’s “Teaching Science as Inquiry” program offers an experiment that challenges grade school students to evaluate whether or not “dilution is the solution to pollution.”³⁹⁸ While most students writing lab reports will realize that dilution can only go so far for water quality, the Supreme Court has given the green light for lower courts to embrace this rhyming mantra when cabining the CWA. Dilution and the related factors of chemical and identity change can resolve the problem the dissenting justices insist still exists. The regulated agencies or a court hearing a CWA citizen suit can rely on dilution, chemical change, and identity change of pollutants to outline a category of small, diluted, and filtered sources, such as septic tanks, that do not need a CWA permit to operate. The diluted and soil-filtered discharges from septic tanks to jurisdictional waters might have been covered under the proposed hydrological connection test, which would more faithfully track the Act’s zero-discharge prohibition where *any* amount could trigger jurisdiction. But in the functional equivalent test that the Supreme Court ultimately adopted, using factors around dilution and filtration creates a judicial gloss on the statutory language and avoids the pitfalls that the dissent argued against.

For EPA and the Army Corps staff actually implementing the functional equivalent test on the ground, the factor addressing the quantity of a pollutant at a source compared to the size of the sink will likely be the most relevant. The quantity factor could be used to determine whether a permit is in the public interest, set a maximum allowable discharge, or determine liability. If a point source discharging 100 gallons per day falls to only five gallons per day by the time it reaches navigable waters, agencies could evaluate a permit application based on the five-gallon discharge instead of the 100-gallon discharge. One benefit of a quantity-based approach would be its simplicity compared to some of the other *Maui* factors that might require chemical analyses. A quantity-based approach would also be similar to the ratios already used in wetlands mitigation, which would also provide the means to implement the functional equivalent test in the 404 program.

A case from over a hundred years ago illustrates why the relative weight of the factors might vary based on context. In *Missouri v. Illinois*,³⁹⁹ the Supreme Court held that Chicago was not liable in a public nuisance case for downstream cases of bacteria-caused typhoid in St. Louis.⁴⁰⁰ Two experiments were used to determine whether Chicago was the source of bacteria: one measured the length of time it took for barrels to travel on the Mississippi River from Chicago to St.

397. *How Your Septic Tank Works*, EPA, <https://perma.cc/Z79X-M8CX> (last visited July 31, 2020).

398. *Activity Concentration and Dilution*, UNIV. OF HAWAI’I: EXPLORING OUR FLUID EARTH, <https://perma.cc/KG3Q-ZVDL> (last visited July 31, 2020).

399. 200 U.S. 496 (1906).

400. *See id.* at 526.

Louis, and the other measured the duration of the bacteria's life.⁴⁰¹ These tests seem almost comically antiquated compared to the sophisticated methods for the tracer study used in *Maui*.

Now, imagine *Missouri v. Illinois* in a slightly different context. Think of Chicago as a point source into the Mississippi River as it flows past St. Louis as a receiving water covered by the CWA and the Illinois River as the medium by which pollution travelled between the two. The distance between the source and the receiving water is easily known, but the transit time for a pollutant and any changes to the pollutant during that time might be disputed. In the original case, the parties disagreed over the length of time the bacteria might survive, varying from three to four days according to the defendants to over twenty-five days according to the plaintiffs⁴⁰²—a factual dispute that more modern methods could resolve.⁴⁰³ In *Missouri v. Illinois*, the interaction of distance, time, and pollutant transformation would determine if Chicago was liable for a nuisance. If you imagine Chicago as point source, the Mississippi River as receiving water, and the Illinois River as the medium where the pollution travels; then those three factors—each of which is used in *Maui*—could determine CWA jurisdiction.

As that illustration and the likely varying emphases of different institutions show, the most important *Maui* factors will vary by context. Additionally, by declaring the list to be non-exhaustive, the Supreme Court also opened the door for additional factors. These could be added through a quasi-common-law approach by courts, but a more scientifically sound approach would be for the agencies tasked with the implementation of the CWA to establish what the relevant factors and their relationships should be through policy making, including categorical rules for similar situations where possible.

5. Rulemaking Opportunities

The functional equivalence test creates new rule-making opportunities to protect or expand federal jurisdiction over water pollution. These processes can either work in conjunction with the definition of waters of the United States or through a standalone rule.

First, the functional equivalent test could play an important role to protect waters in tandem with the definition of waters of the United States. Justice Scalia's test in *Rapanos* and the Navigable Waters Protection Rule, for instance, both require a continuous surface connection between jurisdictional waters.⁴⁰⁴

401. *Id.* at 518. *See also id.* at 524–26 (describing the experiments).

402. *See id.* at 523–25. Based on the conflicting evidence, and because of the other sources of bacteria in St. Louis, the Supreme Court ruled that Illinois was not liable. *Id.* at 526.

403. The Supreme Court in *Missouri v. Illinois* looked to future advancements to resolve the factual uncertainties in the case. *See id.* at 526 (“What the future may develop, of course we cannot tell.”).

404. *See Rapanos v. United States*, 547 U.S. 715, 742 (2006) (Scalia, J., plurality); The Navigable Waters Protection Rule: Definition of “Waters of the United States,” 85 Fed. Reg. 22,250, 22,309 (Apr. 21, 2020) (“Wetlands that abut another jurisdictional water have a continuous surface or physical

But that requirement makes no sense if the jurisdictional reach of the CWA extends to subsurface connections for pollutants. Whether or not the definition of “waters of the United States” captures those connections or not, pollution traveling through those routes falls within federal jurisdiction under *Maui*. However, the jurisdictional test becomes increasingly fact specific under a narrow waters of the United States definition, as citizen plaintiffs or regulators would have to daisy-chain tributaries with traceable pollutants. A robust definition of waters of the United States would decrease the regulatory burden on individual permit applicants by more clearly stating the CWA’s reach. Citizen plaintiffs and regulators would also gain clarity over the connection between pollution sources and receiving waters. Under *Maui*, each permit could be open to a challenge for a tracer study that would show if a discharge that goes below ground is a functional equivalent of a direct one or not. The holding of *Maui* blows a hole in that prong of Scalia’s test for all practical purposes, but it does not make on-the-ground regulatory decisions any easier.

Additionally, the undefined distance factor in *Maui* could still prove problematic. The Supreme Court in *Maui* suggested fifty miles as an example for an outer bound for distance. That distance could expand CWA jurisdiction fifty miles upstream from any other jurisdictional stream, even under a narrow “waters of the United States” definition like that in the Trump administration’s Navigable Waters Protection Rule. The fifty-mile extension would allow many ephemeral streams to serve as a necessary connection for CWA jurisdiction. But that distance would still be a challenge to show in states like Arizona, California, or Colorado with ephemeral tributaries stretching beyond that length.⁴⁰⁵ The ruling in *Maui* also provides no guidance on interstate waters, which were removed from the Navigable Waters Protection Rule.⁴⁰⁶ If interstate waters are included in the definition of “waters of the United States,” the functional equivalence test could help broaden jurisdiction in Southwestern states because waters that cross reservation boundaries could be protected as interstate waters.⁴⁰⁷ The failure to protect those waters creates an environmental justice

connection to those waters and are therefore inseparably bound up with them.” (citing *Rapanos*, 547 U.S. at 740 (Scalia, J., plurality)).

405. See *The Clean Water Act is Being Unraveled*, TROUT UNLIMITED, <https://standup.tu.org/stand-up-for-clean-water/> (maps of intermittent and ephemeral streams by state).

406. 85 Fed. Reg. 22,284 (2020) (“By eliminating a separate category for interstate waters . . . those interstate waters that would satisfy the definitions in this final rule are jurisdictional; interstate waters without any surface water connection to traditional navigable waters or the territorial seas are not within the agencies’ authority under the CWA and are more appropriately regulated by the States and Tribes under their sovereign authorities.”).

407. See *id.* at 22,283 (describing comments on the proposed definition of “waters of the United States” opposing the elimination of the interstate waters category because of waters crossing tribal reservation boundaries would have been protected under that category); EPA & ARMY CORPS, FINAL SUMMARY OF TRIBAL CONSULTATION FOR THE CLEAN WATER RULE: DEFINITION OF “WATERS OF THE UNITED STATES” UNDER THE CLEAN WATER ACT; FINAL RULE 6 (2015) (reporting support for including tribal boundaries in the definition of interstate waters). By one estimate, including waters crossing tribal boundaries under the interstate waters category in Arizona would cover approximately 3,500 streams. See

problem that the Trump administration failed to address. EPA committed in an environmental justice policy to work with federally recognized American Indian tribes in environmental permitting and to avoid disproportionate impacts, and protecting waters that cross reservation boundaries the same way as waters that cross state boundaries would work toward the achievement of that policy.⁴⁰⁸

Second, a standalone functional equivalent regulation based on the *Maui* factors could itself provide well supported and robust protections for water. As Justice Breyer suggested at oral argument, the test leaves “a lot of room for the EPA to write regulations, to decide what is the functional equivalent of a direct discharge.”⁴⁰⁹ In a last ditch effort to lock in their views, the Trump administration issued a draft guidance document on *Maui* during its lame duck period.⁴¹⁰ The draft guidance oddly relitigates losing positions from EPA’s *Maui* argument, such as incorrectly limiting the functional equivalent test to only groundwater.⁴¹¹ The guidance also introduces a new factor—design and performance—that is irrelevant to the type of analysis in the functional equivalent test.⁴¹² The *Maui* factors all speak to hydrogeology and the impact of pollution discharge, but this newly proposed factor looks instead to the pollution source itself and any technological fixes. The “design and performance” factor appears to be a naked attempt to circumvent the exact type of analysis that the Supreme Court requires in *Maui*.

Fortunately, this draft guidance will be easily revoked by the new administration.⁴¹³ In fact, EPA has already indicated in the Unified Regulatory

EPA & ARMY CORPS, THE NAVIGABLE WATERS PROTECTION RULE – PUBLIC COMMENT SUMMARY DOCUMENT 3 – INTERSTATE WATERS, at 11 (2020).

408. See EPA, EPA POLICY ON ENVIRONMENTAL JUSTICE FOR WORKING WITH FEDERALLY RECOGNIZED TRIBES AND INDIGENOUS PEOPLES 1–2 (2014). Native nations can apply for treatment as a state under the CWA to regulate waters within reservation boundaries. See Robert T. Anderson, *Water Rights, Water Quality, and Regulatory Jurisdiction in Indian Country*, 34 STAN. ENV’T L.J. 195, 226 (2015). A robust CWA jurisdiction for streams crossing reservation boundaries would invest Native nations with significant authority under the treatment as a state program.

409. Transcript of Oral Argument at 31, *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020) (No. 18-260). Breyer’s comments at oral argument in *Maui* that the agency should craft a regulation to implement the decision echoed his dissenting opinion in *Rapanos* where he suggested the same thing. *Rapanos*, 547 U.S. at 811 (Breyer, J., dissenting) (citing *Chevron v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984)).

410. See David P. Ross, Assistant Adm’r, EPA, *Draft Guidance Memorandum Applying the Supreme Court’s County of Maui v. Hawaii Wildlife Fund Decision in the Clean Water Act Section 402 National Pollutant Discharge Elimination System Permit Program* (Dec. 4, 2020), <https://perma.cc/539P-JPLG>; *Applying the Supreme Court’s County of Maui v. Hawaii Wildlife Fund Decision in the Clean Water Act Section 402 National Pollutant Discharge Elimination System Permit Program*, 85 Fed. Reg. 238 (Dec. 10, 2020).

411. See *Draft Guidance Memorandum*, *supra* note 410, at 1 n.2.

412. See *id.* at 7–8.

413. On President Biden’s first day in office, he took his first step toward undoing the Trump administration’s damage to the CWA’s jurisdiction. Biden issued an executive order revoking Trump’s order that directed EPA and the Army Corps to issue a “waters of the United States” rule based on the Justice Scalia opinion in *Rapanos*. See *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, 86 Fed. Reg. 7037, 7041 (Jan. 25, 2021).

Agenda that the agency intends to publish an advanced notice of proposed rulemaking on the functional equivalent test and its application to the NPDES program this coming summer.⁴¹⁴ When the Biden administration crafts this rule, EPA and the Army Corps should use for factors like time and distance and that indicates what analysis will determine the other factors. Like the 2015 Clean Water Rule, it could create categories that are covered based on similar situations and a method for evaluating other settings on a case-by-case basis. Additionally, the administration should consider using this or additional rulemaking to expand the functional equivalent test to dredge-and-fill permits as well. This new rule would work in tandem with a waters of the United States definition to create a two-layer analysis for CWA jurisdiction, insulating individual decisions from judicial and administrative challenges.

CONCLUSION

Since its passage in 1972, the CWA has spurred an extraordinary decline in water pollution in our waterways. Comprehensive studies show large declines in most pollutants targeted by the CWA, and more waters become swimmable and fishable each year.⁴¹⁵ Still, we have not achieved the “national goal that the discharge of pollutants into the navigable waters be eliminated.”⁴¹⁶ In fact, more than half of U.S. stream and river miles still violate water quality standards.⁴¹⁷ In the words of former EPA Administrator William Ruckelshaus, “even if all of our waters are not swimmable or fishable, at least they are not flammable.”⁴¹⁸ But Congress sought to achieve a far more ambitious goal than “not flammable” when it passed the CWA. It sought a complete elimination of pollutant discharges into our waterways.

Nearly fifty years after the passage of the CWA, we still have not realized the full ambitions of the Act. Opponents of environmental regulation have worked to limit the reach of the CWA through continuous battles over the jurisdictional scope of the Act—primarily through litigation over what is or is not within the definition of “navigable waters.”⁴¹⁹ Over the last few decades, the “navigable waters” jurisdictional war has played out in the courts and regulatory state alike. It included a number of Supreme Court cases and regulatory actions in Democratic and Republican administrations alike.⁴²⁰ No matter the context,

414. See *Discharges That are Functionally Equivalent to a Direct Discharge and Thus Subject to NPDES Permitting Under Section 402 of the Clean Water Act*, RIN 2040-AG05, OFF. OF INFO. & REGUL. AFFS., <https://perma.cc/JD4Q-QX7S>.

415. David A. Keiser & Joseph S. Shapiro, *Consequences of the Clean Water Act and the Demand for Water Quality* 20–22 (Nat’l Bureau of Econ. Rsch., Working Paper No. 23070, Jan. 2017).

416. 33 U.S.C. § 1251(a)(1) (2018).

417. Keiser & Shapiro, *supra* note 415, at 1.

418. G. Tracy Mehan, III, *A Symphonic Approach to Water Management: The Quest for New Models of Watershed Governance*, 26 J. LAND USE & ENV’T L. 1, 10 (2010).

419. 33 U.S.C. § 1362(7).

420. See *supra* Part I.

however, the focus remained on the scope of waters encompassed in the “navigable waters” term.

With the retirement of Justice Kennedy, the new conservative Supreme Court majority appeared poised to settle the “navigable waters” question. Many commentators and advocates alike thought that *Maui* would be the delivery mechanism, but instead the Court adopted a new test that appears on its face to settle a side question: whether the CWA applies to discharges through groundwater that reach navigable waters. This was no side question. In fact, the Court may have rendered the “navigable waters” debate obsolete.⁴²¹

The *Maui* “functional equivalent” test is powerful because it is medium agnostic and draws from the lessons of hydrology. According to the Court, the path from point source to a navigable water could be through groundwater, over land, or through the air—to interpret the CWA otherwise would defeat the Act’s purpose. Unspoken by the Court, however, is that the same logic could equally apply to an ephemeral tributary, a wetland, or a combination of debatably “navigable waters”—so long as those discharges *eventually* reach a navigable water as the functional equivalent of a direct discharge. The functional equivalent test opens the door to the kind of fact-specific hydrological analysis that could realize the full scope of the CWA as it was originally envisioned.

Clean water advocates and the new Biden administration could use this new test to expand the range of discharges covered by the CWA and accomplish the ambitious goal set by Congress to *restore our Nation’s waters*.⁴²² True restoration requires an acknowledgement that our water resources are not mere commodities to be filled for development or ruined with pollutants.⁴²³ Rather, they are shared resources for the benefit of all: people, plants, and wildlife. We believe that *Maui*’s reorientation of the CWA could provide advocates with the legal tools needed to rebuild coral reefs at Kahekili Beach Park, preserve wetlands in central Michigan, and restore rivers in South Carolina. With the “navigable waters” issue sidelined, advocates and regulators alike can implement the CWA in earnest to restore our waters.

421. See *supra* Subpart III.B.3.

422. See 33 U.S.C. § 1251(a) (2018).

423. See ALDO LEOPOLD, A SAND COUNTY ALMANAC viii (1966) (“We abuse land because we see it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.”).

We welcome responses to this Article. If you are interested in submitting a response for our online journal, *Ecology Law Currents*, please contact cse.elq@law.berkeley.edu. Responses to articles may be viewed at our website, <http://www.ecologylawquarterly.org>.

