

CLEAN WATER ACT JURISDICTION OVER GROUNDWATER DISCHARGES AFTER *COUNTY OF MAUI V. HAWAII WILDLIFE FUND*

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The Clean Water Act is the principal federal law aimed at controlling pollution of the nation’s water resources, yet it does not provide comprehensive oversight of pollutants entering groundwater, the subsurface water that often feeds into rivers, lakes, and oceans. This Note examines a recent Supreme Court decision, County of Maui v. Hawaii Wildlife Fund, which appeared to endorse a theory of federal regulation of groundwater discharges under the Clean Water Act. County of Maui established a “functional equivalent” standard, under which a discharge through groundwater is subject to the Clean Water Act’s permitting requirements if it is the functional equivalent of a direct discharge into jurisdictional surface waters. While the Court outlined several factors for courts to consider in making a functional equivalent determination, the decision offers limited guidance for lower courts applying the test. Moreover, it leaves an important regulatory question unanswered. This Note aims to address some of the persisting uncertainties by proposing that Justice Kennedy’s “significant nexus” standard from his Rapanos v. United States concurrence can be illuminating. This Note argues that overlaying the significant nexus standard on the functional equivalent test offers a practical strategy for lower courts applying the test in difficult cases.

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INTRODUCTION

It is well established that surface waters—including rivers, lakes, and oceans—are often hydrologically connected to groundwater.¹ Groundwater is the subsurface water that saturates pores or cracks in permeable geologic formations called aquifers² and is replenished by precipitation.³ It has been shown to contribute 52 percent of annual streamflow across the country,⁴ and it serves as a major source of fresh water for agriculture and public supplies.⁵ Consequently, groundwater contamination can have significant consequences for surface water quality and water supply.⁶

1. See THOMAS C. WINTER ET AL., U.S. GEOLOGICAL SURV., CIRCULAR 1139, GROUND WATER AND SURFACE WATER: A SINGLE RESOURCE 1 (1999), <https://pubs.usgs.gov/circ/1998/1139/report.pdf> [<https://perma.cc/TJZ7-8APM>]; see also Brewster Conant Jr. et al., *A Framework for Conceptualizing Groundwater-Surface Water Interactions and Identifying Potential Impacts on Water Quality, Water Quantity, and Ecosystems*, 574 J. HYDROLOGY 609, 609 (2019).

2. See *Groundwater Basics*, U.S. GEOLOGICAL SURV., https://www.usgs.gov/mission-areas/water-resources/science/groundwater-basics?qt-science_center_objects=0#qt-science_center_objects [<https://perma.cc/SG78-U5LP>] (last visited Apr. 14, 2021).

3. See *id.*

4. See WINTER ET AL., *supra* note 1, at 12.

5. See *Groundwater Use in the United States*, U.S. GEOLOGICAL SURV., https://www.usgs.gov/special-topic/water-science-school/science/groundwater-use-united-states?qt-science_center_objects=0#qt-science_center_objects [<https://perma.cc/B36W-ESG4>] (last visited Apr. 14, 2021).

6. See WINTER ET AL., *supra* note 1, at 1.

However, no federal statute—including the Clean Water Act⁷ (CWA), the principal federal law governing water pollution⁸—comprehensively regulates discharges to tributary groundwater.⁹ The CWA’s success at reducing releases of pollutants into surface waters over the last few decades¹⁰ can be attributed in large part to § 301(a) of the Act.¹¹ This provision essentially provides that all discharges from point sources—for example, pipes or wells—into “waters of the United States” are unlawful unless specifically authorized by permit.¹² Permits contain technology-based limitations on the quantity and type of pollutants that can be released and—paired with the statute’s citizen suit provision¹³ and civil, criminal, and administrative enforcement provisions—create an effective enforcement mechanism.¹⁴ The CWA’s implementing agencies, the EPA and U.S. Army Corps of Engineers (“the Corps”), have explicitly defined “waters of the United States” to exclude all groundwater.¹⁵ Nevertheless, a few theories for CWA regulation of discharges into tributary groundwater have found support in the courts, legal scholarship, and agency practice, including the “navigable waters theory” and the “conduit theory.”¹⁶

On April 23, 2020, the U.S. Supreme Court handed down a decision that appeared to agree with the conduit theory. The 6-3 decision in *County of Maui v. Hawaii Wildlife Fund*¹⁷ addressed the following question: does § 301(a) of the CWA cover discharges that travel from a point source through groundwater before being conveyed to surface waters? The Court’s answer: sometimes. The majority set forth a new “functional equivalent” test, which requires a discharger to obtain a CWA permit “if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from

7. 33 U.S.C. §§ 1251–1388.

8. CLAUDIA COPELAND, CONG. RSCH. SERV., RL30030, CLEAN WATER ACT: A SUMMARY OF THE LAW I (2016).

9. See Michael C. Blumm & Steven M. Thiel, *(Ground)waters of the United States: Unlawfully Excluding Tributary Groundwater from Clean Water Act Jurisdiction*, 46 ENV’T L. 333, 334 (2016); Mary Christina Wood, *Regulating Discharges into Groundwater: The Crucial Link in Pollution Control Under the Clean Water Act*, 12 HARV. ENV’T L. REV. 569, 570 (1988).

10. William L. Andreen, *Success and Backlash: The Remarkable (Continuing) Story of the Clean Water Act*, 4 GEO. WASH. J. ENERGY & ENV’T L. 25, 28 (2013).

11. 33 U.S.C. § 1311(a).

12. See *id.* (prohibiting “the discharge of any pollutant by any person” unless authorized by permit). The statute defines “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12). “Navigable waters” is defined as “the waters of the United States, including the territorial seas.” *Id.* § 1362(7).

13. The CWA contains a citizen suit provision, allowing concerned citizens to sue and enforce the Act’s protections against violators of the statute. *Id.* § 1365. Citizen groups may not bring suit under this provision if a discharge falls outside the scope of CWA jurisdiction.

14. See COPELAND, *supra* note 8, at 3–7.

15. See Navigable Waters Protection Rule: Definition of “Waters of the United States,” 85 Fed. Reg. 22,250, 22,251 (Apr. 21, 2020) (to be codified at 33 C.F.R. pt. 328 and 40 C.F.R. pts. 110, 112, 116, 117, 120, 122, 232, 300, 302, and 401); see also 33 C.F.R. § 328.3(b)(5) (2020); 40 C.F.R. § 122.2(2)(v) (2020).

16. See *infra* Part I.B.

17. 140 S. Ct. 1462 (2020).

the point source into navigable waters.”¹⁸ The Court also supplied a list of seven “potentially relevant factors” for lower courts to consider when making such a determination.¹⁹

The *County of Maui* decision represented a significant win for environmental interests, since a categorical “no” from the Court would have opened the door for polluting entities to avoid CWA enforcement by discharging into groundwater rather than surface waters.²⁰ However, it was also met with criticism that the functional equivalent test provided inadequate guidance for lower courts, permitting agencies, and the regulated community.²¹ Further, the way that some practitioners have characterized the decision suggests a degree of ambiguity regarding whether the Court left the door open to a theory that “waters of the United States” includes groundwater.²²

Given the fact-specific nature of the functional equivalent standard and the underlying uncertainty about what the decision means for the “waters of the United States” debate, lower courts will play an important role in shaping the test. The range of scenarios that are found to satisfy the test will have practical consequences for regulated entities seeking to understand when they should apply for a permit and what liability they might be subject to, as well as for citizen groups interested in bringing enforcement actions.²³ At the same time, lower courts may need to adjust and respond as agency guidance on the relationship between groundwater and “waters of the United States” develops.

Part I of this Note locates the *County of Maui* decision in a decades-long political story, marked more by uncertainty than certainty, concerning the scope of the CWA. This story is essential to understanding the significance of the Court’s functional equivalent test and the questions the test raises about the Act’s relationship to groundwater and Congress’s legislative goals. Part I also explains the regulatory context in which *County of Maui* was decided and examines the Court’s new standard for determining whether a permit is required where discharged pollutants travel through groundwater before reaching surface waters. Part II illuminates the obvious and latent problems posed by the functional equivalent test and what these mean for stakeholders on the ground. Finally, Part III suggests a “significant nexus” overlay framework for lower courts to understand and apply the *County of Maui* standard in difficult cases. Part III argues that such an approach is both practical and protective of the nation’s water resources.

18. *Id.* at 1468.

19. *See id.* at 1476–77.

20. *See* Adam Liptak, *Clean Water Act Covers Groundwater Discharges*, *Supreme Court Rules*, N.Y. TIMES (Apr. 23, 2020), <https://www.nytimes.com/2020/04/23/us/supreme-court-clean-water-act-hawaii.html> [<https://perma.cc/K2BU-QHDV>].

21. *See, e.g., County of Maui*, 140 S. Ct. at 1483 (Alito, J., dissenting); Ellen M. Gilmer & Amena H. Saiyid, *SCOTUS Clean Water Act Test ‘Devastating’ for Industry*, BLOOMBERG L. (Apr. 23, 2020, 5:13PM), <https://www.bloomberglaw.com/product/blaw/document/X3FE893G000000> [<https://perma.cc/Y8QV-WFHM>].

22. *See infra* Part II.B.

23. *See infra* Part II.A.

I. THE ROAD TO FEDERAL REGULATION OF GROUNDWATER DISCHARGES UNDER THE CWA

Congress's first comprehensive attempt to control water pollution was the passage of the 1948 Federal Water Pollution Control Act.²⁴ After multiple amendments to the law during the 1950s and 1960s, the Federal Water Pollution Control Act Amendments of 1972²⁵ finally established the basic structure of the CWA as it is known today.²⁶ Part I.A provides an overview of the CWA and its two permitting programs. Part I.B introduces two theories of CWA jurisdiction over groundwater discharges and dives into the related case law and regulatory history. Finally, Part I.C explains the *County of Maui* decision.

A. The CWA

The CWA's objective is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."²⁷ To this end, § 301(a) of the Act sets forth a broad prohibition against "the discharge of any pollutant by any person" unless the discharge is specifically authorized by permit.²⁸ This statutory scheme aims to manage pollution to surface waters by requiring individual dischargers to obtain permits containing enforceable technology-based limitations.²⁹ The CWA also states Congress's intent to "recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution" and to "plan the development and use . . . of land and water resources."³⁰

The Act establishes two permitting programs that form the regulatory framework for federal water pollution control. Section 402 of the CWA authorizes the National Pollutant Discharge Elimination System (NPDES)

24. Pub. L. No. 80-845, 62 Stat. 1155 (1948) (codified as amended at 33 U.S.C. §§ 1251–1388); see also William L. Andreen, *Beyond Words of Exhortation: The Congressional Prescription for Vigorous Federal Enforcement of the Clean Water Act*, 55 GEO. WASH. L. REV. 202, 210 (1987).

25. Pub. L. No. 92-500, 86 Stat. 816 (codified as amended in scattered sections of the U.S.C.).

26. See Andreen, *supra* note 24, at 212–16.

27. 33 U.S.C. § 1251(a). The U.S. House of Representatives' report on the CWA stated that "[t]he word 'integrity' . . . refers to a condition in which the natural structure and function of ecosystems [are] maintained." H.R. REP. NO. 92-911, at 76 (1972).

28. 33 U.S.C. § 1311(a); see also COPELAND, *supra* note 8, at 5.

29. See William L. Andreen, *The Evolution of Water Pollution Control in the United States—State, Local, and Federal Efforts, 1789–1972* (pt.2), 22 STAN. ENV'T L.J. 215, 286 (2003); Vanessa Ramirez, *An Attempt at Clearing the Muddied Waters of the United States*, 34 J. ENV'T L. & LITIG. 161, 164 (2019).

30. 33 U.S.C. § 1251(b). This cooperative federalism framework has been described as one where "federal and state governments work together in structured, overlapping, and synergistic ways to achieve . . . improved water quality nationwide." Robin Kundis Craig, *Adapting Water Federalism to Climate Change Impacts: Energy Policy, Food Security, and the Allocation of Water Resources*, 5 ENV'T & ENERGY L. & POL'Y J. 183, 202 (2010). However, it has also been characterized as a federal-state partnership that is "heavily federal." Oliver A. Houck, *Cooperative Federalism, Nutrients, and the Clean Water Act: Three Cases Revisited*, 44 ENV'T L. REP. 10,426, 10,426 (2014).

permit program,³¹ which serves as the Act's main enforcement mechanism³² and applies to discharges of most "pollutants" into jurisdictional waters.³³ NPDES permits are administered by the EPA³⁴ and contain limitations on the quantity of pollutants that can be discharged, as well as water monitoring and reporting requirements.³⁵ Under § 404 of the CWA, the Corps administers a second permit program³⁶ specifically for discharges of dredged or fill material³⁷ to jurisdictional waters, including wetlands.³⁸ Activities subject to § 404 permitting typically include filling wetlands for development, infrastructure and water resource projects, and mining projects.³⁹

The scope of federal regulatory authority under the NPDES and § 404 programs lies in the meaning of "discharge of a pollutant," which the CWA defines as "any addition of any pollutant to navigable waters from any point source."⁴⁰ This language suggests that not *all* pollutant discharges are subject to the Act's permitting requirements.⁴¹ First, the discharge must enter "navigable waters," which are defined as "the waters of the United States, including the territorial seas," a phrase that is not further explained in the statute.⁴² Second, covered discharges must come from a "point source," defined as "any discernible, confined and discrete conveyance . . . from

31. See 33 U.S.C. § 1342.

32. See COPELAND, *supra* note 8, at 6.

33. See 33 U.S.C. § 1342(a). The CWA defines "pollutant" broadly to include dredged spoil, solid waste, chemical wastes, biological materials, heat, rock, sand, and other materials discharged into water. *Id.* § 1362(6).

34. See *id.* § 1342(a). While this Note describes NPDES permitting as carried out by the EPA, the CWA allows the EPA to authorize states to administer the program. *Id.* § 1342(b). All but a few states have received authorization. See *NPDES State Program Authority*, EPA, <https://www.epa.gov/npdes/npdes-state-program-authority> [<https://perma.cc/R9NW-PNCB>] (last visited Apr. 14, 2021).

35. 33 U.S.C. § 1342(a); see also *NPDES Permit Basics*, EPA, <https://www.epa.gov/npdes/npdes-permit-basics> [<https://perma.cc/3RH5-KGDN>] (last visited Apr. 14, 2021).

36. See 33 U.S.C. § 1344(a), (d). The CWA also allows for states to administer the § 404 program upon EPA authorization. *Id.* § 1344(g)–1344(h). However, only three states are authorized. *U.S. Interactive Map of State and Tribal Assumption Under CWA Section 404*, EPA, <https://www.epa.gov/cwa404g/us-interactive-map-state-and-tribal-assumption-under-cwa-section-404> [<https://perma.cc/H3NF-BEFR>] (last visited Apr. 14, 2021).

37. Dredged material includes material that is excavated or dredged from jurisdictional waters. 40 C.F.R. § 232.2 (2020). Fill material includes material placed in jurisdictional waters that has the effect of replacing some portion of the water with dry land or changing the bottom elevation of the jurisdictional water. *Id.*

38. 33 U.S.C. § 1344(a); *Permit Program Under CWA Section 404*, EPA, <https://www.epa.gov/cwa-404/permit-program-under-cwa-section-404> [<https://perma.cc/CTS7-GBKN>] (last visited Apr. 14, 2021). Wetlands are generally characterized as areas where water covers the land or is present at or near the surface of the soil for at least some periods of time during the year, such that conditions support the growth of aquatic plants. *What Is a Wetland?*, EPA, <https://www.epa.gov/wetlands/what-wetland> [<https://perma.cc/H3ND-6JPC>] (last visited Apr. 14, 2021).

39. *Permit Program Under CWA Section 404*, *supra* note 38.

40. 33 U.S.C. § 1362(12). For the statutory definition of "pollutant," see *supra* note 33.

41. ROBERT V. PERCIVAL ET AL., *ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY* 697 (8th ed. 2018).

42. See 33 U.S.C. § 1362(7).

which pollutants are or may be discharged,” such as a “pipe, ditch, channel . . . [or] well.”⁴³

B. Theories of CWA Jurisdiction over Groundwater Discharges

Among the theories of CWA jurisdiction over discharges to groundwater that have arisen under these statutory requirements,⁴⁴ two are most relevant to the discussion of *County of Maui*.⁴⁵ The first, the navigable waters theory, posits that groundwater can be considered “navigable waters” under the Act in certain circumstances.⁴⁶ This theory runs counter to the EPA and the Corps’s definition of “waters of the United States,” which categorically excludes groundwater.⁴⁷ The second, the conduit theory, suggests that groundwater can operate as a conduit that carries pollution from a point source to jurisdictional surface waters.⁴⁸

1. The Navigable Waters Theory

There has long been a general understanding that “waters of the United States”—the phrase the CWA uses to define “navigable waters”—encompasses more than just navigable-in-fact waters.⁴⁹ Courts and the federal agencies have at various points considered wetlands, nonnavigable tributaries, and other nonnavigable waters to be “waters of the United States.”⁵⁰ The navigable waters theory uses this broad definition as a basis

43. *Id.* § 1362(14).

44. See Damien Schiff, *Keeping the Clean Water Act Cooperatively Federal—or, Why the Clean Water Act Does Not Directly Regulate Groundwater Pollution*, 42 WM. & MARY ENV'T L. & POL'Y REV. 447, 460 (2018); Kathrine Klaus, Note, *The Conduit Theory: Protecting Navigable Waters from Discharges to Tributary Groundwater*, 43 VT. L. REV. 871, 878 (2019).

45. A third theory, the point source theory, proposes that groundwater is a “point source” of pollution. The U.S. District Court for the Eastern District of Kentucky held in favor of the point source theory. See *Ky. Waterways All. v. Ky. Utils. Co.*, 303 F. Supp. 3d 530, 542 (E.D. Ky. 2017). However, the Sixth Circuit rejected the point source theory when it partially affirmed the district court’s ruling. See *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 933, 938 (6th Cir. 2018), *abrogated by* *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020).

46. See generally Blumm & Thiel, *supra* note 9; Wood, *supra* note 9.

47. See Navigable Waters Protection Rule, 85 Fed. Reg. 22,250 (Apr. 21, 2020) (to be codified at 33 C.F.R. pt. 328 and 40 C.F.R. pts. 110, 112, 116, 117, 120, 122, 232, 300, 302, and 401); see also *supra* text accompanying note 15.

48. See, e.g., *Upstate Forever v. Kinder Morgan Energy Partners*, 887 F.3d 637, 651–52 (4th Cir. 2018), *vacated*, 140 S. Ct. 2736 (2020), *abrogated by* *County of Maui*, 140 S. Ct. 1462; *Haw. Wildlife Fund v. County of Maui*, 886 F.3d 737, 749 (9th Cir. 2018), *vacated*, 140 S. Ct. 1462; see also Schiff, *supra* note 44; Klaus, *supra* note 44.

49. See William W. Sapp et al., *From the Fields of Runnymede to the Waters of the United States: A Historical Review of the Clean Water Act and the Term “Navigable Waters,”* 36 ENV'T L. REP. 10,190, 10,191 (2006).

50. See, e.g., *United States v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1330 (6th Cir. 1974) (holding that CWA jurisdiction extended to nonnavigable tributaries); *United States v. Holland*, 373 F. Supp. 665, 673 (M.D. Fla. 1974) (holding that CWA jurisdiction extended to nonnavigable mangrove wetlands); Clean Water Rule, 80 Fed. Reg. 37,054, 37,058 (June 29, 2015) (codified at 33 C.F.R. pt. 328 and 44 C.F.R. pts. 110, 112, 116, 117, 122, 230, 300, 302,

for proposing that groundwater can also be classified as a jurisdictional water.⁵¹

However, the extent to which nonnavigable waters, including groundwater, constitute “waters of the United States” is murky and has been the subject of intense debate in the courts, federal agencies, and legal scholarship since the 1980s.⁵² Where the line is drawn has significant consequences, because the vast majority of the nation’s waters are neither navigable-in-fact waters nor wetlands adjoining navigable-in-fact waters.⁵³

Although the Supreme Court has not directly ruled on the relationship between groundwater and “waters of the United States,” it has attempted to clarify the bounds of “waters of the United States” on three separate occasions.⁵⁴ These cases were confined to questions about what types of wetlands should be regulated as “waters of the United States,” but the Court’s analyses are relevant to groundwater because the same statutory language and congressional intent are discussed.⁵⁵ In *United States v. Riverside Bayview*,⁵⁶ a unanimous Court found that Congress intended to define jurisdictional waters broadly and agreed with the Corps’s interpretation that wetlands abutting navigable waters fell within the meaning of “waters of the United States.”⁵⁷ Notably, the Court based its decision in part on ecological considerations, stating that pollution to adjacent wetlands would impact the water quality of the larger “aquatic system.”⁵⁸ Then, in *Solid Waste Agency v. U.S. Army Corps of Engineers*,⁵⁹ the Court rejected the Corps’s position that isolated ponds used as habitats by migratory birds were covered by the CWA.⁶⁰ The Court clarified that its *Riverside Bayview* holding was based on the “significant nexus” between the adjacent wetlands and navigable waters.⁶¹ Because the ponds in *Solid Waste Agency* did not abut navigable waters, a “significant nexus” was lacking, and the CWA could not be read to apply to the ponds.⁶²

Finally, in *Rapanos v. United States*⁶³ the Supreme Court split 4-1-4 on the question of whether “waters of the United States” includes a wetland that at least occasionally empties into a tributary of a navigable-in-fact water.⁶⁴

and 401) (defining “waters of the United States” to include tributaries, wetlands adjacent to navigable waters, and other nonnavigable waters).

51. See Wood, *supra* note 9, at 586.

52. See Sapp et al., *supra* note 49, at 10,212–13. See generally Ramirez, *supra* note 29.

53. See Sapp et al., *supra* note 49, at 10,190.

54. See generally *Rapanos v. United States*, 547 U.S. 715 (2006); *Solid Waste Agency v. U.S. Army Corps of Eng’rs*, 531 U.S. 159 (2001); *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).

55. Blumm & Thiel, *supra* note 9, at 351.

56. 474 U.S. 121 (1985).

57. *Id.* at 133–34.

58. *Id.* at 134.

59. 531 U.S. 159 (2001).

60. See *id.* at 167.

61. See *id.*

62. See *id.*

63. 547 U.S. 715 (2006).

64. See *id.* at 729.

Writing for a plurality of the Court, Justice Antonin Scalia defined “waters of the United States” as including only “relatively permanent, standing or continuously flowing bodies of water.”⁶⁵ He reasoned that the word “navigable” should not be entirely read out of the statute; its inclusion at least requires that “waters of the United States” contain “the ordinary presence of water.”⁶⁶ Justice Scalia then concluded that the determinative factor should be whether a wetland has a “continuous surface connection” to adjacent navigable waters such that “there is no clear demarcation between ‘waters’ and wetlands.”⁶⁷ He limited the significance of the *Riverside Bayview* majority’s reliance on ecological factors, stating that such considerations may only be invoked when the case presents a boundary-drawing problem.⁶⁸ Of primary concern for Justice Scalia was that allowing the Corps to require permits for filling wetlands with only an intermittent connection to traditionally navigable waters would impinge on the states’ traditional powers over land and water use.⁶⁹ He wrote, “We ordinarily expect a ‘clear and manifest’ statement from Congress to authorize an unprecedented intrusion into traditional state authority. The phrase ‘the waters of the United States’ hardly qualifies.”⁷⁰

Meanwhile, Justice Anthony Kennedy’s concurrence articulated a much broader “significant nexus” test, under which CWA jurisdiction attaches on a case-by-case basis if wetlands “either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity” of traditionally navigable waters.⁷¹ If the effects of wetlands on downstream water quality are instead “speculative or insubstantial,” they cannot be considered “waters of the United States.”⁷² Something more than the mere existence of a hydrologic connection is required,⁷³ and Justice Kennedy indicated that quantity and regularity of water flow in the tributaries connecting a wetland to navigable waters may be an important part of the significant nexus analysis.⁷⁴ Further, Justice Kennedy stated that the significant nexus determination should be made with regard to Congress’s goal of “restor[ing] and maintain[ing] the chemical,

65. *Id.* at 739.

66. *See id.* at 734 (“As we noted in [*Solid Waste Agency*], the traditional term ‘navigable waters’ . . . carries *some* of its original substance: ‘[I]t is one thing to give a word limited effect and quite another to give it no effect whatever.’ That limited effect includes, at bare minimum, the ordinary presence of water.” (quoting *Solid Waste Agency v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 172 (2001))).

67. *Id.* at 742.

68. *See id.* (“Wetlands with only an intermittent, physically remote hydrologic connection to ‘waters of the United States’ do not implicate the boundary-drawing problem of *Riverside Bayview* . . .”).

69. *See id.* at 738.

70. *Id.* (citation omitted) (first quoting *BFP v. Resol. Tr. Corp.*, 511 U.S. 531, 544 (1994); and then quoting 33 U.S.C. § 1362(7)).

71. *Id.* at 780 (Kennedy, J., concurring).

72. *Id.*

73. *See id.* at 784.

74. *See id.* at 786.

physical, and biological integrity of the Nation's waters."⁷⁵ While he recognized that his standard does not fit neatly within the traditional zone of federal authority, he observed it "does not raise federalism . . . concerns sufficient to support a presumption against its adoption."⁷⁶ Justice Kennedy criticized the plurality's standard as inconsistent with the text, structure, and purpose of the CWA.⁷⁷ He argued that requiring permanent or continuously flowing water is impractical, given the Act's concern with downstream water quality⁷⁸ and that requiring a surface water connection finds no support in the structure of the Act.⁷⁹

In the wake of *Rapanos*, there was significant uncertainty in the courts and debate in legal scholarship about which opinion controlled.⁸⁰ Many courts have said that Justice Kennedy's test controls,⁸¹ citing the Supreme Court's guidance in *Marks v. United States*.⁸² However, other courts have held that either Justice Kennedy's or Justice Scalia's test can be used to find CWA jurisdiction over waters.⁸³ The EPA and the Corps took the former approach, publishing the highly controversial Clean Water Rule: Definition of "Waters of the United States" ("the Clean Water Rule") in 2015.⁸⁴ The Clean Water Rule adopted Justice Kennedy's significant nexus test⁸⁵ by establishing three

75. *Id.* at 779 (quoting 33 U.S.C. § 1251(a)).

76. *Id.* at 782.

77. *Id.* at 776.

78. *Id.* at 769 ("The merest trickle, if continuous, would count as a 'water' subject to federal regulation, while torrents thundering at irregular intervals through otherwise dry channels would not. Though the plurality seems to presume that such irregular flows are too insignificant to be of concern in a statute focused on 'waters,' that may not always be true.").

79. *Id.* at 774.

80. See generally PERCIVAL ET AL., *supra* note 41, at 692; James Murphy, *Muddying the Waters of the Clean Water Act: Rapanos v. United States and the Future of America's Water Resources*, 31 VT. L. REV. 355, 357 (2007).

81. See *United States v. Robinson*, 505 F.3d 1208, 1221–22 (11th Cir. 2007); *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 995 (9th Cir. 2007); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723, 724–25 (7th Cir. 2006).

82. 430 U.S. 188 (1977); *id.* at 193 ("When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, 'the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds . . .'" (alteration in original) (quoting *Gregg v. Georgia*, 428 U.S. 153, 169 n.15 (1976) (Stewart, Powell, and Stevens, JJ.))).

83. See *United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009); *United States v. Cundiff*, 555 F.3d 200, 209–10 (6th Cir. 2009); *United States v. Johnson*, 467 F.3d 56, 60 (1st Cir. 2006).

84. See Clean Water Rule, 80 Fed. Reg. 37,054 (June 29, 2015) (codified at 33 C.F.R. pt. 328 and 44 C.F.R. pts. 110, 112, 116, 117, 122, 230, 300, 302, and 401). The agencies received over one million public comments on the proposed version. *Id.* at 37,057. The final rule was challenged by a majority of states. Timothy Cama, *27 States Challenge Obama Water Rule in Court*, HILL (June 30, 2015, 12:02 PM), <https://thehill.com/policy/energy-environment/246539-27-states-challenge-obama-water-rule-in-court> [<https://perma.cc/CGT4-C623>]. Congress also attempted to overturn the final rule, but President Barack Obama vetoed the resolution. Timothy Cama, *Obama Vetoes GOP Attempt to Block Water Rule*, HILL (Jan. 19, 2016, 7:22 PM), <https://thehill.com/policy/energy-environment/266395-obama-vetoes-gop-attempt-to-block-water-rule> [<https://perma.cc/GP9B-S8QH>].

85. Clean Water Rule, 80 Fed. Reg. at 37,056 ("An important element of the agencies' interpretation of the CWA is the significant nexus standard [developed in *Riverside Bayview* and *Solid Waste Agency*] and refined in Justice Kennedy's opinion in *Rapanos*.").

categories of waters: jurisdictional by rule, nonjurisdictional, and case-specific waters that turn on a finding of a significant nexus.⁸⁶ Yet, the Clean Water Rule placed groundwater in the nonjurisdictional category—meaning that, regardless of any connection to surface waters, groundwater never constitutes “waters of the United States.”⁸⁷

The Clean Water Rule was short-lived, as the U.S. Court of Appeals for the Sixth Circuit issued a nationwide stay on the rule just two months after it became effective,⁸⁸ and in early 2017, President Donald J. Trump issued an executive order sending the rule back to the agencies for further review.⁸⁹ In the order, President Trump directed the agencies to “consider interpreting the term ‘navigable waters,’ . . . in a manner consistent with” Justice Scalia’s plurality opinion in *Rapanos*.⁹⁰ On April 21, 2020, just two days before the Supreme Court handed down its *County of Maui* decision, the EPA and the Corps released the rule’s replacement, the Navigable Waters Protection Rule: Definition of “Waters of the United States”⁹¹ (“the WOTUS Rule”). Like the one it replaced, this rule provided that groundwater was categorically excluded from the definition of “waters of the United States.”⁹²

In contrast to the agencies’ stance, advocates of the navigable waters theory have argued that Justice Kennedy’s significant nexus test requires direct federal regulation of at least some groundwater as “waters of the United States.”⁹³ These advocates emphasize the science, which supports the critical importance of groundwater for the health of other water bodies, humans, and the economy.⁹⁴ They argue that the CWA’s goal of “restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the

86. *Id.* at 37,057. “Paragraph (c)(5) of the rule defines the term ‘significant nexus’ to mean a significant effect (more than speculative or insubstantial) on the chemical, physical, or biological integrity of a traditional navigable water, interstate water, or the territorial seas.” *Id.* at 37,091.

87. *Id.* at 37,059.

88. *Ohio v. U.S. Army Corps of Eng’rs (In re Env’t Prot. Agency & Dep’t of Def. Final Rule)*, 803 F.3d 804, 806 (6th Cir. 2015).

89. Exec. Order No. 13,778, 3 C.F.R. 296 (2018).

90. *Id.* at 297.

91. Navigable Waters Protection Rule, 85 Fed. Reg. 22,250 (Apr. 21, 2020) (to be codified at 33 C.F.R. pt. 328 and 40 C.F.R. pts. 110, 112, 116, 117, 120, 122, 232, 300, 302, and 401). This rule was part of a broader effort by the Trump administration to scale back regulation under the CWA and other federal environmental laws. Nadja Popovich et al., *The Trump Administration Is Reversing More than 100 Environmental Rules. Here’s the Full List*, N.Y. TIMES (Jan. 20, 2021), <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks-list.html> [<https://perma.cc/Y45C-ERF2>].

92. Navigable Waters Protection Rule, 85 Fed. Reg. at 22,250.

93. See Blumm & Thiel, *supra* note 9, at 337.

94. See *id.*; Wood, *supra* note 9, at 569–70. In 2014, the EPA’s Science Advisory Board issued a letter approving of most of the proposed Clean Water Rule, including the rule’s application of the significant nexus test to certain waters but rejecting the decision to categorically exclude groundwater. The letter explained that groundwater “can be critical in supporting the hydrology and biogeochemical functions of wetlands and other waters,” and therefore the rule’s exclusion did not have scientific justification. See Letter from Dr. David T. Allen, Chair, U.S. Env’t Prot. Agency Sci. Advisory Bd., to Gina McCarthy, Adm’r, U.S. Env’t Prot. Agency (Sept. 30, 2014), <https://nepis.epa.gov/Exec/ZyPURL.cgi?Dockey=P100RO1P.TXT> [<https://perma.cc/GCE4-UHQB>].

Nation's waters"⁹⁵ cannot be accomplished without federal regulation of groundwater that shares a significant nexus with surface waters.⁹⁶ Further, these advocates assert that a significant body of case law, including the Supreme Court's decision in *Riverside Bayview*, supports an expansive interpretation of CWA jurisdiction that includes some groundwater.⁹⁷

One critic of the navigable waters theory points to the fact that the CWA only provides for direct federal regulation of "navigable waters," despite distinguishing between "navigable waters" and "ground waters" in multiple places.⁹⁸ Critics also argue that the CWA's legislative history precludes any reading of "navigable waters" that includes groundwater because committees in both the U.S. Senate and House of Representatives acknowledged the importance of groundwater yet chose not to establish federal groundwater standards.⁹⁹ Moreover, Representative Les Aspin proposed an amendment on the House floor that would have explicitly prohibited any unpermitted discharges to groundwater, but it was voted down.¹⁰⁰

Additionally, opponents of federal regulation of groundwater argue that expanding the CWA in this way would have dire policy implications.¹⁰¹ Certain federal statutes, including the Safe Drinking Water Act¹⁰² (SDWA), the Resource Conservation and Recovery Act of 1976¹⁰³ (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980¹⁰⁴ regulate specific activities affecting groundwater. Many states have passed laws that regulate discharges to groundwater to varying extents.¹⁰⁵ Those who urge leaving groundwater regulation to these federal statutes and the states warn that applying CWA permitting requirements to groundwater would lead to duplicative permitting and overburdened agencies.¹⁰⁶ Applying the CWA to groundwater would also "disincentivize the implementation of voluntary conservation practices" in agriculture,

95. 33 U.S.C. § 1251(a).

96. See Blumm & Thiel, *supra* note 9, at 378 ("To fulfill the purpose of the CWA, the agencies must protect the quality of the nation's waters by including groundwater among those waters whose jurisdiction is dependent upon a case-specific analysis of their nexus to other jurisdictional waters.").

97. *Id.* at 366–67.

98. See Schiff, *supra* note 44, at 449–50.

99. See *id.* at 462; see also *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994) (affirming the district court's holding that groundwater is never among the "waters of the United States" in part because congressional proposals to add groundwater to the scope of the CWA were defeated).

100. See Schiff, *supra* note 44, at 462.

101. See Scott Yager & Mary-Thomas Hart, *The Tipping Point Source: Clean Water Act Regulation of Discharges to Surface Water via Groundwater, and Specific Implications for Nonpoint Source Agriculture*, 23 *DRAKE J. AGRIC. L.* 439, 467–68 (2018).

102. 42 U.S.C. §§ 300f–300j-27.

103. 42 U.S.C. §§ 6901–6987.

104. Pub. L. No. 96-510, 94 Stat. 2767 (codified as amended in scattered sections of 26, 33, and 42 U.S.C.).

105. See THOMSON REUTERS, 50 STATE REGULATORY SURVEYS: ENVIRONMENTAL LAWS: POLLUTION: PERMITS FOR GROUNDWATER AND SURFACE WATER DISCHARGE, 0070 REGSURVEYS 13 (Apr. 2020).

106. See Yager & Hart, *supra* note 101, at 467–68.

“[b]ur[] the line between point and nonpoint source regulation,” and “cripple” regulated entities.¹⁰⁷

However, proponents of the navigable waters theory contend that those other federal and state statutory schemes do not offer comprehensive or uniform protections for groundwater.¹⁰⁸ They argue the CWA’s legislative history is inconclusive on the question of whether federal authority extends to some groundwater.¹⁰⁹ Representative Aspin’s amendment called for federal regulation of all groundwater under NPDES and the elimination of an exemption from the “pollutant” definition for materials injected into wells during oil and gas production.¹¹⁰ It has been argued that Congress rejected the amendment because of this exemption and because Congress may have assumed the statute’s definition of “navigable waters” already encompassed groundwater, rendering the amendment unnecessary.¹¹¹

2. The Conduit Theory

The conduit theory, which posits that certain groundwater discharges are subject to CWA regulation because groundwater can serve as a conduit between point sources and jurisdictional surface waters, has had more success. For decades, the EPA regularly applied NPDES permitting requirements to point source discharges that first travel through groundwater before reaching surface waters.¹¹² Additionally, many courts endorsed versions of the conduit theory.¹¹³ For instance, in *Upstate Forever v. Kinder Morgan Energy Partners*,¹¹⁴ the Fourth Circuit held that the CWA would

107. *Id.*

108. See Blumm & Thiel, *supra* note 9, at 338 (“At the state level, regulation varies wildly among jurisdictions. These inconsistent protections fail to prevent groundwater contamination in an interconnected hydrologic system.”); Wood, *supra* note 9, at 570 (“Though several federal pollution statutes are aimed in part at groundwater protection, much groundwater falls outside the federal regulatory net.”).

109. See Blumm & Thiel, *supra* note 9, at 375–76; Philip M. Quatrochi, Comment, *Groundwater Jurisdiction Under the Clean Water Act: The Tributary Groundwater Dilemma*, 23 B.C. ENV’T AFFS. L. REV. 603, 617–18 (1996).

110. Quatrochi, *supra* note 109, at 617.

111. *Id.* at 617–18.

112. See *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1472 (2020); Brief for the United States as Amicus Curiae in Support of Plaintiffs-Appellees at 22, *Haw. Wildlife Fund v. County of Maui*, 886 F.3d 737 (9th Cir. 2018) (No. 15-17447). Note the distinction between: (1) the EPA regulating discharges that first travel through groundwater before reaching jurisdictional surface waters, and (2) the EPA regulating discharges into groundwater because the groundwater is itself a jurisdictional water (what the EPA refused to do under the Clean Water Rule and WOTUS Rule).

113. See, e.g., *Upstate Forever v. Kinder Morgan Energy Partners*, 887 F.3d 637, 651–52 (4th Cir. 2018), *vacated*, 140 S. Ct. 2736 (2020), and *abrogated by County of Maui*, 140 S. Ct. 1462; *County of Maui*, 886 F.3d at 749, *vacated*, 140 S. Ct. 1462; *N. Cal. River Watch v. Mercer Fraser Co.*, No. C–04–4620, 2005 WL 2122052, at *2 (N.D. Cal. Sept. 1, 2005); *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1179–80 (D. Idaho 2001).

114. 887 F.3d 637 (4th Cir. 2018). Plaintiffs brought a citizen suit against the owner of an underground gasoline pipeline in South Carolina that ruptured. *Id.* at 641. They alleged that the released pollutants were seeping from groundwater into nearby tributaries of the Savannah River and their adjacent wetlands. *Id.* at 643.

apply to groundwater discharges from a pipeline where there is a “direct hydrological connection” to creeks and adjacent wetlands.¹¹⁵ It emphasized that holding the contrary would undermine the Act’s purpose and its strict liability regime.¹¹⁶ Notably, it explicitly stated that it was not addressing whether groundwater itself can be considered “navigable waters” under the CWA.¹¹⁷ The Ninth Circuit embraced a slightly narrower conduit theory in *Hawaii Wildlife Fund v. County of Maui*.¹¹⁸ It held that an NPDES permit was required for groundwater discharges from underground injection wells where the discharged pollutants were “fairly traceable” to the ocean.¹¹⁹ In its decision, the Ninth Circuit cited to other circuit court decisions applying standards analogous to the conduit theory.¹²⁰ Like the *Upstate Forever* court, it made clear that it was not deciding whether groundwater is itself jurisdictional under the CWA.¹²¹

Arguments against the conduit theory often stem from federalism concerns.¹²² In establishing the CWA’s cooperative federalism framework, the argument goes, Congress sought to avoid intruding on areas of land and water use regulation traditionally left to the states.¹²³ Consequently, Congress placed great emphasis on the role of states in administering and enforcing the statute, particularly in the realm of non-point source pollution.¹²⁴ Any federal regulation of discharges to groundwater would “compromise this statutory division of labor.”¹²⁵ In *Kentucky Waterways Alliance v. Kentucky Utilities Co.*,¹²⁶ the Sixth Circuit rejected the conduit theory advanced by the plaintiffs, holding that the CWA did not cover pollutants traveling from coal ash ponds through groundwater to a nearby lake.¹²⁷ It found that the conduit theory was not compatible with the text of

115. *See id.* at 651–52. After setting forth a “direct hydrological connection” standard, the court remanded the case for further consideration by the district court. *Id.* at 653.

116. *Id.* at 648, 652.

117. *Id.* at 646 n.5 (“Had the plaintiffs alleged that ground water, of itself, falls within the meaning of navigable waters under the CWA, we would be confronting a distinctly different question here.”).

118. 886 F.3d 737 (9th Cir. 2018), *vacated*, 140 S. Ct. 1462. For the facts of the case, see *infra* Part I.C.

119. *Id.* at 749.

120. *See id.* at 747–48 (first citing *Concerned Area Residents for the Env’t v. Southview Farm*, 34 F.3d 114 (2d Cir. 1994); and then citing *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181 (9th Cir. 2002)).

121. *Id.* at 748 (“[W]e do not decide whether groundwater is a ‘navigable water’ under the statute.”).

122. *See Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 936–37 (6th Cir. 2018), *abrogated by County of Maui*, 140 S. Ct. 1462; Schiff, *supra* note 44, at 468. Such arguments also apply to the other theories of CWA regulation of groundwater discharges.

123. *See Schiff, supra* note 44, at 449.

124. *See Ky. Waterways All.*, 905 F.3d at 936–37; Schiff, *supra* note 44, at 456–57.

125. Schiff, *supra* note 44, at 449.

126. 905 F.3d 925 (6th Cir. 2018). Plaintiff environmental groups brought a citizen suit against a coal-fired power plant owner, asserting that the chemicals in the plant’s coal ash ponds were contaminating a nearby lake via groundwater. *Id.* at 928, 930–31.

127. *Id.* at 932–33.

the Act¹²⁸ nor with the CWA's purpose of preserving significant state involvement in water pollution regulation.¹²⁹

In 2019, the EPA changed its long-standing practice of regulating discharges that are conveyed through groundwater to jurisdictional surface waters.¹³⁰ The agency issued an interpretive statement, concluding that the CWA is best read as excluding all discharges from point sources into groundwater from NPDES permitting, even when pollutants would ultimately reach navigable waters.¹³¹ The action represented a wholesale refusal of any theory of groundwater regulation under the Act. However, just over a year later, the Supreme Court rejected the EPA's position in *County of Maui*.¹³²

C. County of Maui: A “Functional Equivalent” Standard

The issue before the Court in *County of Maui* was whether § 301(a) of the CWA covers discharges that travel from a point source to groundwater before finally being conveyed to a navigable water.¹³³ Since the 1980s, the County of Maui has operated a wastewater treatment facility¹³⁴ that pumps up to four million gallons daily of treated sewage water into underground wells.¹³⁵ The effluent¹³⁶ then travels about a half mile through groundwater until it reaches the ocean.¹³⁷ In 2012, environmental groups filed a CWA citizen suit against the county for discharging pollutants into navigable waters—the Pacific Ocean—without an NPDES permit.¹³⁸ The plaintiffs alleged that the facility's wastewater discharges had harmed the area's fragile ecosystem, citing a letter from the Hawai'i Department of Land and Natural Resources to the EPA that linked the discharges to coral reef degradation and invasive algal blooms just offshore of the facility.¹³⁹

Both the district court and the Ninth Circuit ruled in favor of the environmental groups, although they took slightly different approaches.¹⁴⁰ The district court held that the discharge was “functionally one into navigable water.”¹⁴¹ The Ninth Circuit reasoned that because the pollutants are “fairly

128. *Id.* at 934 (interpreting “into navigable waters” as requiring directness).

129. *Id.* at 937.

130. See 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 (Apr. 23, 2019) (codified at 40 C.F.R. pt. 122).

131. See *id.* at 16,811.

132. See *infra* notes 172–73 and accompanying text.

133. *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1468 (2020).

134. Brief for Petitioner at 6, *County of Maui*, 140 S. Ct. 1462 (No. 18-260).

135. *County of Maui*, 140 S. Ct. at 1469.

136. In this context, effluent refers to “waste material . . . discharged into the environment.” See *Effluent*, MERRIAM-WEBSTER'S DICTIONARY, <https://www.merriam-webster.com/dictionary/effluent> [https://perma.cc/A777-VTRC] (last visited Apr. 14, 2021).

137. *County of Maui*, 140 S. Ct. at 1469.

138. *Id.*

139. Complaint for Declaratory & Injunctive Relief at 20, *Haw. Wildlife Fund v. County of Maui*, 24 F. Supp. 3d 980 (D. Haw. Apr. 16, 2012) (No. 12–00198).

140. See *County of Maui*, 140 S. Ct. at 1469.

141. *County of Maui*, 24 F. Supp. 3d at 998.

traceable” from the point source to a navigable water, the discharge requires an NPDES permit.¹⁴² Other circuit courts described the statutory standard differently,¹⁴³ creating a split.

Consistent with its practice, at the time, of regulating discharges that traveled through groundwater before reaching navigable waters,¹⁴⁴ the EPA supported the plaintiffs *County of Maui* in the Ninth Circuit.¹⁴⁵ However, the EPA reversed course shortly before the Supreme Court granted certiorari in 2019.¹⁴⁶ Accordingly, the U.S. Department of Justice filed a brief with the Supreme Court supporting the County of Maui.¹⁴⁷ The county argued that an NPDES permit is required only where pollutants are delivered from a point source directly into navigable waters.¹⁴⁸

In its interpretation of § 301(a)’s “from any point source” language,¹⁴⁹ the Court declined to apply the Ninth Circuit’s test and the county’s proposed standard, instead taking a middle ground approach.¹⁵⁰ Justice Breyer, writing for the majority, articulated a new “functional equivalent” test, whereby a permit is required “if the addition of the pollutants through groundwater is the functional equivalent of a direct discharge from the point source into navigable waters.”¹⁵¹ He enumerated several potentially relevant factors to consider when making such a determination, including:

- (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.¹⁵²

Time and distance will usually be the most important factors.¹⁵³

142. *Haw. Wildlife Fund v. County of Maui*, 886 F.3d 737, 749 (9th Cir. 2018), *vacated*, 140 S. Ct. 1462; *see also supra* note 119 and accompanying text.

143. *See Upstate Forever v. Kinder Morgan Energy Partners*, 887 F.3d 637, 651–52 (4th Cir. 2018), *vacated*, 140 S. Ct. 2736 (2020), *abrogated by County of Maui*, 140 S. Ct. 1462; *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 933 (6th Cir. 2018), *abrogated by County of Maui*, 140 S. Ct. 1462; *see also supra* Part I.B.2.

144. *See supra* notes 112–13 and accompanying text.

145. *See generally* Brief for the United States as Amicus Curiae Supporting Plaintiffs-Appellees, *supra* note 112.

146. *See supra* notes 130–31 and accompanying text.

147. *See generally* Brief for the United States as Amicus Curiae Supporting Petitioner, *County of Maui*, 140 S. Ct. 1462 (No. 18-260). Notably, the U.S. Department of Justice did not ask the Court to give *Chevron* deference to the EPA’s interpretation of the CWA. *See County of Maui*, 140 S. Ct. at 1474. A discussion of *Chevron* deference is beyond the scope of this Note.

148. Brief for Petitioner, *supra* note 134, at 25.

149. *See County of Maui*, 140 S. Ct. at 1470.

150. *See id.* The Court’s test is arguably relatively similar to the Ninth Circuit’s test, but Justice Breyer indicated that the majority’s standard is intended to be narrower. *Id.*

151. *Id.* at 1468.

152. *Id.* at 1476–77.

153. *Id.* at 1477.

In an attempt to add some shape to this highly fact-sensitive standard, Justice Breyer added that the permitting requirement clearly applies where a pipe emitting pollutants ends a few feet from navigable waters and those pollutants travel through groundwater to reach the navigable waters.¹⁵⁴ On the other hand, if a pipe releases pollutants fifty miles and “many years” away from a navigable water, a permit is likely not required.¹⁵⁵ Acknowledging that its functional equivalent test would be difficult to apply,¹⁵⁶ the majority suggested that lower courts can help refine the test through individual cases and the EPA can provide administrative guidance by granting individual permits, promulgating general permits,¹⁵⁷ and developing general rules.¹⁵⁸ Justice Breyer also indicated that the CWA’s underlying objectives should guide determinations, stating that “decisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the statute’s basic federal regulatory objectives.”¹⁵⁹ While the decision was made in the NPDES permitting context, the majority opinion did not specify whether the functional equivalent standard ever applies to discharges of fill or dredged material that come under the § 404 permit program.¹⁶⁰

Justice Breyer rejected the Ninth Circuit’s “fairly traceable” test, because he was concerned that it would allow for federal regulation of discharges that only reach surface waters “in highly diluted forms” and “many years after their release.”¹⁶¹ He opined that Congress did not intend for the federal agencies to hold this kind of general groundwater regulatory authority, citing Congress’s intent to “leave substantial responsibility and autonomy to the States” in the realm of groundwater and non-point-source-pollution regulation.¹⁶² However, he also feared risking “interference with the EPA’s ability to regulate ordinary point source discharges.”¹⁶³ Justice Breyer noted, “EPA correctly points out that Congress did not require a permit for *all* discharges to groundwater But there is quite a gap between ‘not all’ and ‘none.’”¹⁶⁴ Justice Breyer did not explicitly address whether groundwater

154. *See id.* at 1476.

155. *See id.*

156. *See id.* (“The difficulty with this approach, we recognize, is that it does not, on its own, clearly explain how to deal with middle instances. But there are too many potentially relevant factors applicable to factually different cases for this Court now to use more specific language.”).

157. For an explanation of general permits, see *infra* notes 223–25 and accompanying text.

158. *County of Maui*, 140 S. Ct. at 1477. The Court also notes that the EPA and the states can mitigate harms that arise from additional permitting by “developing general permits for recurring situations or by issuing permits based on best practices where appropriate.” *Id.*

159. *Id.*

160. *See generally id.*

161. *Id.* at 1470.

162. *Id.* at 1471–72. Justice Breyer also referenced Representative Aspin’s failed amendment in the Act’s legislative history, suggesting that it shows Congress did not intend to give the federal government full authority to regulate groundwater as a category of jurisdictional waters. *Id.* at 1472.

163. *Id.* at 1473.

164. *Id.* at 1474.

ever falls under “waters of the United States,”¹⁶⁵ and he made no mention of the Trump administration’s WOTUS Rule, issued just two days before the Court’s decision,¹⁶⁶ or the Obama-era Clean Water Rule.¹⁶⁷

Justice Breyer described the EPA’s “longstanding regulatory practice” of applying the CWA’s permitting provisions to point source discharges that are conveyed through groundwater to traditionally navigable waters.¹⁶⁸ Yet, he noted that the agency has refused to exercise authority over discharges that reach groundwater only after lengthy periods, reflecting a narrower interpretation than the Ninth Circuit’s “fairly traceable” test.¹⁶⁹

Justice Breyer also rejected the position that the EPA took up before the Court and in its 2019 interpretive statement,¹⁷⁰ reasoning that the position could not be reconciled with the statute’s structure, purposes, or text.¹⁷¹ “[T]o follow EPA’s reading would open a loophole allowing easy evasion of the statutory provision’s basic purposes. Such an interpretation is neither persuasive nor reasonable.”¹⁷²

In a concurrence, Justice Kavanaugh stated that the Court’s opinion adheres to Justice Scalia’s interpretation of “from any point source” in his *Rapanos* plurality opinion.¹⁷³ Justice Kavanaugh cited Justice Scalia’s reasoning that “polluters could not ‘evade the permitting requirement of § 1342(a) simply by discharging their pollutants into noncovered intermittent watercourses that lie upstream of covered waters.’”¹⁷⁴ Justice Kavanaugh also defended any vagueness in the functional equivalent standard, emphasizing that it is a product of the statute’s imprecise statutory text.¹⁷⁵

Justice Thomas, joined by Justice Gorsuch, dissented to say that the majority’s standard departs from both the statutory text¹⁷⁶ and Congress’s intent to reserve responsibility to regulate non-point sources of pollution, like groundwater, to the states.¹⁷⁷ Justice Thomas also criticized the Court for failing to provide adequate guidance in its explanation of the factors relevant to a functional equivalent determination.¹⁷⁸

165. *Cf. supra* notes 117, 121 and accompanying text (explaining that the Fourth Circuit and Ninth Circuit explicitly stated that they were not deciding whether groundwater itself can be considered “navigable waters” under the CWA).

166. *See supra* note 91 and accompanying text.

167. *See supra* note 84 and accompanying text.

168. *County of Maui*, 140 S. Ct. at 1472 (citing *U.S. Steel Corp. v. Train*, 556 F.2d 822, 832 (7th Cir. 1977)).

169. *Id.* (citing *McClellan Ecological Seepage Situation (MESS) v. Cheney*, 763 F. Supp. 431, 437 (E.D. Cal. 1989)).

170. *See supra* notes 130–31 and accompanying text.

171. *County of Maui*, 140 S. Ct. at 1475.

172. *Id.* at 1474.

173. *Id.* at 1478 (Kavanaugh, J., concurring).

174. *Id.* (quoting *Rapanos v. United States*, 547 U.S. 715, 742–43 (2006)).

175. *See id.*

176. *Id.* at 1479 (Thomas, J., dissenting) (“Based on the statutory text and structure, I would hold that a permit is required only when a point source discharges pollutants directly into navigable waters.”).

177. *Id.* at 1480.

178. *See id.* at 1481.

In a separate dissent, Justice Alito rebuked the Court for not providing clear guidance for the regulated community, permitting agencies, and lower courts.¹⁷⁹ He wrote that the majority “adopts a nebulous standard, enumerates a non-exhaustive list of potentially relevant factors, and washes its hands of the problem.”¹⁸⁰ According to Justice Alito, the best interpretation of the statute is that it requires a permit only when pollutants are discharged directly from a point source to navigable waters.¹⁸¹ He reasoned that this interpretation would not lead to “the sort of extreme consequences that the Court finds unacceptable,” because “point source” is defined broadly in the statute to include land features such as ditches and channels.¹⁸²

II. UNCERTAINTY AFTER *COUNTY OF MAUI*

This part identifies two problems that emerge from the majority and concurring opinions in *County of Maui*. First, the meaning of functional equivalent and the range of scenarios that will meet the Court’s standard are unclear.¹⁸³ This uncertainty may lead to inconsistent applications of the functional equivalent standard in lower courts, generating confusion for owners of facilities that discharge into groundwater and for groups seeking to enforce the CWA against polluting entities.¹⁸⁴ Second, and less obviously, the Court did not clearly frame its standard as a version of the conduit theory or the navigable waters theory.¹⁸⁵ While the functional equivalent test seems to align more with the conduit theory, there is some latent ambiguity.¹⁸⁶ The EPA, the Corps, and lower courts are left to navigate this uncertainty and perhaps clarify how *County of Maui* fits within the full context of the CWA regulatory landscape.

A. A Murky Test

While *County of Maui* was celebrated as a win for environmentalists,¹⁸⁷ just how far the CWA’s protections reach remains unclear. The Court outlined seven factors to consider in determining whether a discharge through groundwater is the functional equivalent of a direct discharge from a point source into navigable waters, but it only specified how two of the factors should be weighed.¹⁸⁸ It also provided two examples to illustrate how

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

180. *Id.* at 1491.

181. *Id.* at 1486.

182. *See id.* at 1486–87.

183. *See infra* Part II.A.

184. *See infra* Part II.A.

185. *See infra* Part II.B.

186. *See infra* Part II.B.

187. *See* Richard Frank, *Here Today, Gone to Maui*, LEGAL PLANET (Apr. 25, 2020), <https://legal-planet.org/2020/04/25/here-today-gone-to-maui/> [https://perma.cc/9HTV-WK9R]; Jessica A. Knoblauch & Maggie Caldwell, *The Clean Water Case of the Century*, EARTHJUSTICE (Apr. 23, 2020), <https://earthjustice.org/features/supreme-court-maui-clean-water-case> [https://perma.cc/3YP5-LSEQ].

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

the test should be applied.¹⁸⁹ However, these illustrations do little to clarify the test, as they only explain what the outcome should be in the most extreme cases.¹⁹⁰ Even then, the Court only went so far as to say that a permit is “likely” not required if a point source releases a discharge fifty miles and “many years” away from navigable waters.¹⁹¹ Moreover, the majority did not provide clear guidance regarding how lower courts should balance the CWA’s objectives of protecting water quality and preserving states’ traditional authority to regulate groundwater pollution.¹⁹² While it emphasized the importance of both goals, the Court did not advise how each should be weighed.¹⁹³

Justice Breyer was the first to acknowledge that the majority’s functional equivalent test does not provide particularly helpful guidance on how to deal with “middle instances,”¹⁹⁴ and he passed off the job of clarifying the test to the EPA and the lower courts.¹⁹⁵ Justice Kavanaugh also admitted that the standard is less than clear,¹⁹⁶ and Justice Alito sharply criticized the majority for failing to give the regulated community and other stakeholders adequate guidance.¹⁹⁷ Industry critics have echoed this sentiment, lamenting the lack of a bright-line rule for industries that discharge any type of water pollution into groundwater.¹⁹⁸

The EPA issued a guidance memorandum on January 14, 2021, to provide guidance to regulated entities and permitting agencies on applying *County of Maui* in the NPDES permitting context.¹⁹⁹ In the guidance, the EPA identified an additional factor that the agency said should be considered in a functional equivalent analysis: “the design and performance of the system or facility from which the pollutant is released.”²⁰⁰ The addition of this factor represents a narrow interpretation of the functional equivalent test, since the EPA suggests that the test likely will not be met where a facility treats or abates its pollutant discharges before they enter groundwater.²⁰¹ However,

189. *See id.* at 1476.

190. *Id.*

191. *Id.*

192. *See supra* notes 162–63 and accompanying text.

193. *See supra* note 159 and accompanying text.

194. *See County of Maui*, 140 S. Ct. at 1476.

195. *See id.* at 1477.

196. *See id.* at 1478 (Kavanaugh, J., concurring).

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

198. *See, e.g.,* Gilmer & Saiyid, *supra* note 21.

199. Guidance Memorandum from Anna Wildeman, Acting Assistant Adm’r, U.S. Env’t Prot. Agency, on 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 (Jan. 14, 2021), https://www.epa.gov/sites/production/files/2021-01/documents/final_ow_maui_guidance_document_-_signed_1.14.21.pdf [<https://perma.cc/82HW-MY9C>].

200. *Id.* at 7.

201. *See id.* at 8. A number of states and environmental groups criticized the guidance in its draft form. *See* State Energy & Env’t Impact Ctr, *Twelve AGs Filed Comments Criticizing EPA Guidance on Implementation of Supreme Court’s Maui Clean Water Act Decision*, NYU SCH. OF L. (Jan. 11, 2021), <https://www.law.nyu.edu/centers/state-impact/ag-actions/twelve-ags-filed-comments-criticizing-epa-guidance-implementation> [<https://perma.cc/K2UX->

the future of the guidance under President Joe Biden's administration is uncertain.²⁰² While lower courts have begun to review cases that were put on hold pending the outcome of *County of Maui*,²⁰³ consensus on how the functional equivalent test should be applied likely will not develop for some time, given the fact-sensitive, case-specific nature of the test. How broadly courts and federal agencies construe the standard is important, because it will affect the level of enforcement that dischargers face and the range of legal options available to citizen groups seeking to sue polluting facilities.

1. Potential Consequences for NPDES Enforcement

Where an owner or operator of a point source that discharges pollutants (excluding fill and dredged material) into jurisdictional waters is in violation of § 301(a), they may be subject to strict liability civil penalties,²⁰⁴ administrative penalties,²⁰⁵ and an order to bring them into compliance under the NPDES permitting scheme.²⁰⁶ This includes unpermitted owners and operators, as well as owners and operators who have an NPDES permit for their facilities but who nonetheless engage in unauthorized discharge or who violate the terms of their permits.²⁰⁷ Violators may also be subject to criminal penalties.²⁰⁸ Civil penalties can reach up to \$55,800 per day,²⁰⁹ while criminal penalties can range from \$2500 to \$100,000 per day.²¹⁰ “[T]he threat of unlawful discharge and permit violation enforcement cases, with their strict liability civil penalties, promotes compliance with Section 301(a) of the Act.”²¹¹

Under the *County of Maui* standard, if a point source discharge into groundwater is found to be the functional equivalent of a direct discharge into jurisdictional waters and it falls under the NPDES permitting scheme, the main practical consequence is that the owner or operator of that point source will be required to obtain a permit from the EPA containing effluent

9N4K]; Hannah Northey & Pamela King, *Leaked Draft: EPA Aims to Clarify Supreme Court Maui Ruling*, E&E NEWS (Dec. 3, 2020), <https://www.eenews.net/stories/1063719841> [<https://perma.cc/FW9J-W5A7>].

202. See Northey & King, *supra* note 201.

203. See, e.g., *Conservation L. Found., Inc. v. Longwood Venues & Destinations, Inc.*, No. 20-1024, 2020 WL 6111192, at *1 (1st Cir. Oct. 14, 2020); *Prairie Rivers Network v. Dynegy Midwest Generation, LLC*, 976 F.3d 761 (7th Cir. 2020).

204. 33 U.S.C. § 1319(d) (“Any person who violates section 301 . . . of this Act . . . or any permit condition or limitation . . . in a permit issued under section 402 of this Act . . . shall be subject to a civil penalty . . .”).

205. *Id.* § 1319(g).

206. *Id.* § 1319(a).

207. See *id.*; David Drelich, *Restoring the Cornerstone of the Clean Water Act*, 34 COLUM. J. ENV'T L. 267, 321 (2009).

208. 33 U.S.C. § 1319(c).

209. Civil Monetary Penalty Inflation Adjustment Rule, 85 Fed. Reg. 1751, 1754 (proposed Jan. 13, 2020) (to be codified at 40 C.F.R. pt. 19).

210. 33 U.S.C. § 1319(c); see also *Criminal Provisions of Water Pollution*, EPA, <https://www.epa.gov/enforcement/criminal-provisions-water-pollution> [<https://perma.cc/Y3J8-KYCU>] (last visited Apr. 14, 2021).

211. Drelich, *supra* note 207, at 326.

limitations and requirements for water monitoring and reporting.²¹² The permit will require the owner or operator to implement mandated technology applicable to the category of industry to which the facility belongs in order to meet the permit's effluent limitations.²¹³ While it is possible that dischargers will be required to stop activity,²¹⁴ injunctive relief is not commonly available.²¹⁵ Dischargers will also be subject to any civil or criminal penalties assessed against them.²¹⁶ While these consequences represent some costs, they are generally not so burdensome as to be project prohibitive for the average discharger.²¹⁷

If the functional equivalent standard is narrowly construed such that a permit is only required when pollutants travel briefly and for a short distance through groundwater, citizen groups seeking enforcement against entities that send discharges into groundwater would have to turn more frequently to state regulatory programs.²¹⁸ Where there is no state enforcement mechanism for groundwater discharges,²¹⁹ these groups will be out of luck unless another federal statute applies, such as the SDWA or RCRA. This would make it much more difficult for nongovernmental stakeholders to secure desired remedies against polluters using the CWA's citizen suit provision.²²⁰

On the other hand, if courts find that the functional equivalent standard is met in a wide range of scenarios, citizen groups will have more options for suing over groundwater pollution.²²¹ However, even with a broadly applicable test, the scope of liability for those who violate § 301(a) is still uncertain to some extent. The majority in *County of Maui* explained that judges can “mitigate any hardship or injustice when they apply the statute's penalty provision” and should “exercise their discretion mindful . . . of the complexities inherent to the context of indirect discharges through

212. 33 U.S.C. § 1342(a); see also *NPDES Permit Basics*, *supra* note 35.

213. 33 U.S.C. §§ 1314(b), 1317, 1342(a).

214. *Id.* § 1319(b).

215. See, e.g., *Sierra Club v. Va. Elec. & Power Co.*, 247 F. Supp. 3d 753, 765 (E.D. Va. 2017), *aff'd in part, rev'd in part*, 903 F.3d 403 (4th Cir. 2018) (“Injunctive relief—especially mandatory injunctive relief—is a ‘drastic and extraordinary’ remedy, available only in unusual situations.” (quoting *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 165 (2010))).

216. See *supra* text accompanying notes 204–10.

217. See Erin Belka & Sarah Kern, *Assessing Civil Penalties in Clean Water Act Citizen Suit Cases*, 10 HASTINGS W.-NW. J. ENV'T L. & POL'Y 71, 83–84 (2003).

218. See Andrew Bittner et al., *Carving Out the Contours: The Clean Water Act and the Migration of Affected Groundwater to Waters of the United States*, FOR DEF., June 2019, at 55, 59 (citing Frank S. Hollerman III, S. Env't L. Ctr., Comment on Clean Water Act Coverage of “Discharges of Pollutants” via a Direct Hydrologic Connection to Surface Water 18 (Apr. 18, 2018), <https://www.regulations.gov/comment/EPA-HQ-OW-2018-0063-0066> [<https://perma.cc/APQ7-S58U>]).

219. State regulation of discharges into groundwater varies significantly. See THOMSON REUTERS, *supra* note 105. Some states regulate groundwater discharges as part of their administration of the NPDES program, while others regulate such discharges under state laws, see Blumm & Thiel, *supra* note 9, at 341, which may or may not contain a citizen suit provision.

220. See Bittner et al., *supra* note 218, at 59.

221. See *supra* note 13.

groundwater, so as to calibrate the Act's penalties when, for example, a party could reasonably have thought that a permit was not required."²²² Depending on how lower courts heed the majority's advice, many dischargers may be newly subject to NPDES permitting requirements while free from significant financial consequences beyond the cost of implementing technology. In other words, the current law could result in a broadly applicable test that has limited bite.

Further, the EPA has the authority to issue general permits, which, like individual NPDES permits, may contain enforceable effluent limitations.²²³ However, general permits are issued for particular categories of activities and may apply to a variety of point sources discharging into different waters.²²⁴ Dischargers seeking coverage under general permits are typically required to submit only a notice of intent to their permitting agencies, providing information about the planned discharge and expressing their intent to be covered under a general permit.²²⁵ While the adequacy of the general permit program to protect water quality and implement the objectives of the CWA has been subject to criticism,²²⁶ the Court in *County of Maui* encouraged the EPA to promulgate such permits as a way of guiding the application of the functional equivalent standard.²²⁷ If the functional equivalent test is interpreted broadly by courts, perhaps the EPA will be more likely to create general permits as a way of accommodating the potentially numerous dischargers that may become subject to the NPDES permitting program. The generic nature of these permits is less than ideal from an environmentally protective standpoint,²²⁸ but general permits at least require some degree of pollution mitigation and compliance with effluent standards.²²⁹ Moreover, a general permit is subject to review every five years,²³⁰ so it would guarantee more water resource protection than would no permit at all.

2. Potential Consequences for § 404 Enforcement

Although it is not entirely clear to what extent, if at all, the functional equivalent test applies in the § 404 permitting context,²³¹ it is worth

222. *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1477 (2020).

223. See 40 C.F.R. § 122.28(a)(3) (2020); Jeffrey M. Gaba, *Generally Illegal: NPDES General Permits Under the Clean Water Act*, 31 HARV. ENV'T L. REV. 409, 411 (2007).

224. See 40 C.F.R. § 122.28; Gaba, *supra* note 223, at 411.

225. *NPDES Permit Basics*, *supra* note 35.

226. See, e.g., Gaba, *supra* note 223, at 411 ("How, for example, can a general permit, applicable to a wide variety of sources discharging into different bodies of water, adequately comply with the inherently site-specific requirements to ensure attainment of state water quality standards?").

227. *County of Maui*, 140 S. Ct. at 1477 ("EPA, too, can provide administrative guidance (within statutory boundaries) in numerous ways, including through, for example . . . promulgation of general permits . . .").

228. See *supra* note 226.

229. See 40 C.F.R. § 122.28(a)(3).

230. See 33 U.S.C. § 1342(b)(1)(B).

231. As mentioned in Part I.C, the majority in *County of Maui* did not specify whether the test ever applies to discharges of fill or dredged material that come under the § 404 permitting program. See *supra* note 160 and accompanying text. Perhaps the Court failed to appreciate

exploring what the ramifications would be. Under the § 404 permitting program, a permit from the Corps is required for the discharge of fill or dredged material into jurisdictional waters, including some wetlands.²³² The statute authorizes the EPA, after consulting with the Corps, to deny permits where the discharge would have an “unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.”²³³ Additionally, the implementing regulations require that there be no “practicable alternative” to the proposed discharge in order for a permit to be granted.²³⁴ This provision represents a much higher standard than that under the NPDES permitting scheme, which has no such requirement. Thus, if discharges of fill or dredged material meet the functional equivalent standard, the practical consequences for the discharger may be much greater, since it is more likely that an activity may be prohibited altogether. With regard to civil and criminal penalties, the same provisions apply to both § 402 and § 404 permit violators.²³⁵

If the functional equivalent test is narrowly construed by courts, it may not cover many § 404 discharges due to the nature of fill and dredged material.²³⁶ However, if the test is interpreted to encompass a broad range of scenarios, it may have a substantial limiting effect on activity covered by § 404, including filling wetlands. Dischargers that have released fill or dredged material prior to applying for a permit could also face civil and even criminal penalties,²³⁷ although the size of these penalties is subject to judicial discretion.²³⁸

B. *The Navigable Waters Theory: Still on the Table?*

The uncertainty created by *County of Maui* is also partly a product of the Court’s failure to clearly frame its holding in relation to the navigable waters theory. Under the functional equivalent test, discharges from a point source through groundwater may be subject to the CWA’s permitting scheme if they ultimately reach navigable waters.²³⁹ The standard can certainly be viewed as a recognition that regulating point source pollution to jurisdictional surface

the distinction between the CWA’s two permitting programs, or perhaps it assumed its holding would only ever apply to chemical pollution. It is generally understood that nonsolid and chemical pollutants are more likely to be conveyed over some distance through groundwater than solid pollutants, such as fill and dredged material. *See* Drelich, *supra* note 207, at 327 (“The foreseeability of liquid pollutants reaching a receiving water appears much greater, in most circumstances, than that of solid pollutants, and the probability of a discharge is correspondingly much higher.”). Because of this reality, it is unclear how often—if ever—courts will end up applying the functional equivalent test to discharges of fill and dredged material.

232. 33 U.S.C. § 1344(a).

233. *Id.* § 1344(c).

234. 40 C.F.R. § 230.10(a) (2020).

235. 33 U.S.C. § 1319(c)–(d).

236. *See supra* note 231.

237. *See supra* note 235 and accompanying text.

238. *See supra* note 222 and accompanying text.

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

waters necessarily entails regulating some discharges that first pass through groundwater, consistent with the conduit theory.²⁴⁰ However, the decision may also be interpreted—and has been interpreted by a number of commentators²⁴¹—as an acknowledgment that, in some but not all cases, groundwater comes under the EPA and the Corps’s authority to regulate “waters of the United States.”²⁴²

Whether the Court opened the door to a navigable waters theory of groundwater regulation is ambiguous in the opinion’s text. Justice Breyer did not discuss how the Court’s holding relates to the line of cases interpreting “waters of the United States,” other than to mention a comment from Justice Scalia’s plurality in *Rapanos* regarding how the word “from” should be interpreted.²⁴³ Justice Breyer did not need to address those cases since they focused specifically on whether certain wetlands were “waters of the United States,” a different question about the scope of CWA jurisdiction.²⁴⁴ Nevertheless, the fractured *Rapanos* decision has particular relevance for groundwater, since Justice Kennedy’s concurrence can be read as compatible with the navigable waters theory.²⁴⁵ Additionally, unlike some lower courts,²⁴⁶ Justice Breyer did not explicitly say that *County of Maui* does not address the question of whether groundwater can be considered “waters of the United States.” Moreover, Justice Breyer did not address whether the decision has implications for the federal agencies’ categorical exclusion of groundwater from their definition of “waters of the United States.”²⁴⁷ Consequently, it is unclear how *County of Maui* relates to *Rapanos* and the WOTUS Rule.

240. See *supra* Part I.B.2.

241. See Alejandro E. Camacho & Melissa Kelly, *The Shape of Water After County of Maui v. Hawaii Wildlife Fund*, REGUL. REV. (July 28, 2020), <https://www.theregreview.org/2020/07/28/camacho-kelly-shape-water-after-county-maui> [<https://perma.cc/B4ZQ-A8XM>] (“[T]he Administration’s changes to the EPA’s definition of what qualifies as a protected water would exclude water bodies clearly included under the Court’s interpretation of protected waters as delineated in *County of Maui*.”); Thomas Griffin & Elizabeth Howard, *Another “New” Era: WOTUS Rule 2020—Update*, JD SUPRA (July 29, 2020), <https://www.jdsupra.com/legalnews/another-new-era-wotus-rule-2020-update-16662> [<https://perma.cc/X37J-ZE5Q>] (“[A]ccording to the Supreme Court, in at least some cases, groundwater will fall under the jurisdiction of the CWA, whereas the 2020 [WOTUS] Rule states that groundwater is completely excluded from CWA jurisdiction. This direct contradiction will need to be further addressed by the EPA, or interested parties will seek to address it through litigation.”); see also Kevin P. Holewinski et al., *Supreme Court Rules Some Discharges to Groundwater Require Clean Water Act Permits*, JONES DAY (Apr. 2020), <https://www.jonesday.com/en/insights/2020/04/supreme-court-rules-some-discharges-to-groundwater-require-clean-water-act-permits> [<https://perma.cc/C63E-5MB5>].

242. See *supra* Part I.B.1.

243. *County of Maui*, 140 S. Ct. at 1475.

244. See *supra* Part I.B.1.

245. See *supra* note 93 and accompanying text.

246. See *supra* notes 117, 121 and accompanying text (explaining that the Fourth Circuit and Ninth Circuit explicitly stated that they were not deciding whether groundwater itself can be considered “navigable waters” under the CWA).

247. See *supra* notes 84–87, 91–92 and accompanying text.

Unlike the majority, Justice Kavanaugh did address the decision's relationship to *Rapanos* in his concurrence.²⁴⁸ Because Justice Kavanaugh believed the *County of Maui* holding accords with Justice Scalia's plurality opinion in *Rapanos*,²⁴⁹ it would seem that he viewed groundwater as merely a conduit and never a jurisdictional water under the CWA.²⁵⁰ Further, the current WOTUS Rule was based on Justice Scalia's plurality opinion.²⁵¹ Perhaps this indicates that Justice Kavanaugh would understand *County of Maui* to be compatible with the WOTUS Rule and its categorical exclusion of groundwater. However, Justice Kavanaugh wrote only for himself, so his concurrence does not clearly resolve the latent ambiguity left by the majority's decision. With no other words on the matter from the Court, Justice Kavanaugh's opinion could signal that a challenge to the WOTUS Rule's exclusion of groundwater would likely not succeed.

This uncertainty has practical implications. If *County of Maui* is understood as saying that some groundwater can be regulated as "waters of the United States" on a case-by-case basis, consistent with the navigable waters theory, the decision would directly conflict with the position the Trump administration staked out in its WOTUS Rule.²⁵² Some practitioners and commentators have already characterized the decision this way.²⁵³ States and citizen groups challenging the WOTUS Rule in court²⁵⁴ could argue that the agencies' categorical exclusion of groundwater from the "waters of the United States" definition is untenable after *County of Maui*. They might call for the inclusion of groundwater in a middle, case-specific category similar to the case-specific significant nexus category established in the Clean Water Rule.²⁵⁵ Creation of such a category would begin a new chapter—focused on groundwater rather than wetlands—in the decades-long "waters of the United States" saga.²⁵⁶ Litigation would surely ensue, since extending jurisdictional status over groundwater would implicate the federalism concerns that have driven much of the past disagreement over the scope of the CWA.²⁵⁷ Federal agencies, wishing to avoid arguments that they are frustrating Congress's intent to preserve states' traditional authority

248. See *County of Maui*, 140 S. Ct. at 1478 (Kavanaugh, J., concurring); see also *supra* text accompanying notes 173–74.

249. See *County of Maui*, 140 S. Ct. at 1478 (Kavanaugh, J. concurring); see also *supra* note 173 and accompanying text.

250. Because Justice Scalia concluded that a surface water connection is required for a nontraditionally navigable water to be jurisdictional, groundwater cannot be included under his standard.

251. See *supra* notes 90–91 and accompanying text.

252. See *supra* note 92 and accompanying text. This would also conflict with the agencies' prior position in the Clean Water Rule, which also categorically excluded groundwater. See *supra* note 87 and accompanying text.

253. See *supra* note 241 and accompanying text.

254. See generally Pamela King & Hannah Northey, *Who's Suing Over Trump's WOTUS Rule?*, E&E NEWS (June 24, 2020), <https://www.eenews.net/stories/1063446011> [<https://perma.cc/B6M9-9JPZ>].

255. See *supra* note 86 and accompanying text.

256. See Ramirez, *supra* note 29, at 165. See generally Sapp et al., *supra* note 49.

257. See *supra* notes 122–25 and accompanying text.

to regulate groundwater and non–point source pollution,²⁵⁸ may be reluctant to assert jurisdiction over groundwater in such an explicit way.

On the other hand, if *County of Maui* is understood as saying that groundwater functions only as a conduit and is never a jurisdictional water, the decision may be compatible with the WOTUS Rule. Excluding groundwater from the definition of “waters of the United States” does not necessarily preclude the regulation of discharges through groundwater into waters that are deemed to be “waters of the United States.”²⁵⁹ This framing would make the success of any legal challenges to the WOTUS Rule’s exclusion of groundwater much less likely.

For the moment, it remains unclear whether *County of Maui* and the WOTUS Rule are in conflict. Perhaps this ambiguity was intentional, and the Court wished to leave it as an open question for the agencies and lower courts, or perhaps the Court simply did not articulate its intended framing clearly. Perhaps it is the latter, given that Justice Breyer referenced the decades of EPA practice applying the CWA’s permitting provisions to groundwater discharges that reach navigable waters and implied that the Court’s standard is narrower.²⁶⁰ Regardless, if left unresolved, confusion over the scope of federal protections for water resources will remain.

III. A SIGNIFICANT NEXUS OVERLAY TO BRING *COUNTY OF MAUI* INTO FOCUS

The latent ambiguity of the *County of Maui* decision and the fact-specific nature of the functional equivalent test leave lower courts and permitting agencies with an unenviable task. The ways in which they frame the Court’s holding and begin to define the test’s boundaries will shape the next chapter of discourse regarding “waters of the United States” and how groundwater discharges are regulated.²⁶¹ More saliently, these decisions will have significant implications for regulated entities seeking to understand liability risks and environmental groups weighing the costs and benefits of pursuing citizen suits under the CWA.²⁶² The future of the test will also affect the health of the nation’s water resources and the ecosystems, communities, and economies that depend on them.

This part proposes that the significant nexus test articulated in Justice Kennedy’s *Rapanos* concurrence²⁶³ can offer guidance to lower courts applying the *County of Maui* standard. As discussed above, Justice Breyer did not provide instructions about how to weigh the seven factors that he said may be relevant to a functional equivalent determination, beyond prioritizing time and distance.²⁶⁴ Further, his instructions for considering the CWA’s

258. *See supra* notes 124–25 and accompanying text.

259. *See supra* notes 249–51 and accompanying text.

260. *See County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1472–73 (2020).

261. *See supra* Part II.B.

262. *See supra* Part II.A.

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

264. *See supra* note 188 and accompanying text.

policy objectives in a functional equivalent analysis are ambiguous.²⁶⁵ Consequently, when a court encounters a case where the seven factors point in different directions, *County of Maui* offers no clear answer about whether the discharge meets the functional equivalent standard. The court will be left to do its own balancing of the Act's broad goal of protecting the nation's water resources through federal regulation and Congress's intent to preserve state authority over groundwater pollution.

Overlaying Justice Kennedy's significant nexus standard on the functional equivalent test in such cases would help courts strike the correct balance. Under this approach, a court would ask whether the discharge that is arriving to surface waters after passing through groundwater "significantly affect[s] the chemical, physical, and biological integrity" of the receiving waters.²⁶⁶ If the answer is yes, the court should conclude that the *County of Maui* test is satisfied: the discharge is the functional equivalent of a direct discharge into navigable waters. By focusing the inquiry on the discharge's effects on the integrity of navigable waters, it would ensure that courts do not stray from the Act's overarching objective of restoring and maintaining the integrity of the nation's waters.²⁶⁷

To understand the potential utility of a significant nexus overlay approach, it is helpful to first compare the functional equivalent test and Justice Kennedy's significant nexus test. Part III.A highlights the differences and similarities between the two standards and the opinions from which they are drawn. Part III.B then discusses the advantages and possible pitfalls of an overlay approach, briefly touching on how the approach may resolve some of the tension generated by the Court's failure to address whether groundwater ever constitutes "waters of the United States." Finally, Part III.C considers some alternative approaches to applying the functional equivalent test and argues that the overlay approach is both more practical for all parties involved and more consistent with the CWA's purpose of protecting the nation's water resources.

A. Comparing the Significant Nexus and Functional Equivalent Standards

It is important to start by noting the different physical circumstances that the significant nexus test and functional equivalent test were designed to address. In *Rapanos*, the Court was asked to decide whether development activity that involved filling wetlands should be subject to § 404 permitting requirements because the wetlands were "waters of the United States."²⁶⁸ Justice Kennedy's significant nexus standard aimed to require a permit where wetlands—and therefore, any filling activity in those wetlands—significantly impacted the health of hydrologically connected navigable waters.²⁶⁹ On the other hand, in *County of Maui*, the Court was concerned with discharges of

265. See *supra* notes 162–64 and accompanying text.

266. *Rapanos*, 547 U.S. at 780.

267. See *supra* note 27 and accompanying text.

268. See generally *Rapanos*, 547 U.S. 715.

269. See *id.* at 780 (Kennedy, J., concurring).

chemical pollution into groundwater, where the discharger knew that the effluent would end up in the Pacific Ocean.²⁷⁰ The Court held that such discharges, if found to be the functional equivalent of direct discharges into the ocean, would be subject to NPDES permitting requirements.²⁷¹ The two physical scenarios are distinguished by the nature of the discharge²⁷² and the type of water into which it is directly discharged. The two legal standards differ in which statutory term—“waters of the United States” and “from any point source”—they seek to define.

Despite these differences, Justice Kennedy’s significant nexus test embodies many of the same goals as the functional equivalent test. Justice Kennedy called for CWA regulation of wetlands where wetlands “either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity” of traditionally navigable waters.²⁷³ He indicated that the quantity and regularity of water flow in the tributaries connecting a wetland to traditionally navigable waters may be important factors in a significant nexus analysis.²⁷⁴ Justice Breyer similarly emphasized that CWA jurisdiction over discharges through groundwater is dependent on a variety of hydrological factors, including time, distance, and the nature of the material through which the pollution travels.²⁷⁵ Both opinions acknowledged the interconnectivity of water features and demonstrate an understanding of hydrological principles.²⁷⁶ They recognized that the characteristics of tributaries and groundwater systems may vary, thus affecting the ways in which pollutants are conveyed between point sources and surface waters.

Further, under both tests, the existence of a hydrological connection between the water directly receiving the discharge from a point source and navigable waters is necessary but not sufficient for CWA coverage. For Justice Kennedy, CWA jurisdiction attaches only when wetlands “significantly affect the chemical, physical, and biological integrity” of navigable waters.²⁷⁷ He also noted that if a wetland’s effects on downstream water quality are “speculative or insubstantial,” it cannot be considered within “waters of the United States.”²⁷⁸ In *County of Maui*, Justice Breyer raised similar kinds of concerns in his rejection of the Ninth Circuit’s “fairly traceable” standard,²⁷⁹ although his focus on downstream effects is less explicit. According to Justice Breyer, the “fairly traceable” standard would

270. See Brief for Petitioner, *supra* note 134, at 13 (“[T]he 1973 pre-construction environmental impact report . . . explained that injected effluent would ‘eventually reach the ocean.’”). See generally *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462 (2020).

271. *County of Maui*, 140 S. Ct. at 1468.

272. Because the nature of the discharge differs, the relevant permitting scheme under the CWA also differs. See *supra* notes 31–37 and accompanying text.

273. *Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring).

274. See *id.* at 786.

275. See *County of Maui*, 140 S. Ct. at 1476–77.

276. See *id.* at 1470, 1476; *Rapanos*, 547 U.S. at 786 (Kennedy, J., concurring).

277. *Rapanos*, 547 U.S. at 780.

278. *Id.*

279. See *County of Maui*, 140 S. Ct. at 1470–71.

allow for federal regulation of discharges that only reach traditionally navigable waters “in highly diluted forms” and “many years after their release.”²⁸⁰ His reasoning suggests that CWA regulation is appropriate only where upstream water pollution has at least a relatively substantial impact on downstream navigable waters. The language of the functional equivalent test itself also reflects a concern with the effects that discharges have on navigable waters.²⁸¹

Justice Kennedy and Justice Breyer also both recognized the need to balance the CWA’s purpose of protecting the nation’s waters and its policy of preserving states’ traditional regulatory authority over groundwater pollution,²⁸² but only Justice Kennedy clearly explained how his standard does so. Justice Kennedy indicated that the significant nexus determination should be guided by Congress’s goal of “restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation’s waters.”²⁸³ He acknowledged that his test does not fit neatly within the traditional zone of federal authority but states that it “does not raise federalism . . . concerns sufficient to support a presumption against its adoption.”²⁸⁴ Criticizing the *Rapanos* plurality’s standard, he contends that requiring permanent or continuously flowing water, as the plurality does, is impractical in light of the statute’s goal of protecting downstream water quality.²⁸⁵

It is less clear where Justice Breyer struck the balance, but he did express an unwillingness to allow the CWA’s commitment to preserving states’ traditional regulatory authority to undermine the statute’s main goal of protecting the integrity of jurisdictional waters. He rejected the EPA’s position that discharges through groundwater are never subject to CWA permitting requirements, reasoning that it would allow easy evasion of the statute’s basic federal regulatory objectives.²⁸⁶ Further, he stated that “Congress did not require a permit for *all* discharges to groundwater But there is quite a gap between ‘not all’ and ‘none.’”²⁸⁷ Similar to Justice Kennedy in *Rapanos*, Justice Breyer seemed to suggest that preserving the Act’s cooperative federalism framework does not require a total absence of federal oversight over water pollution that was traditionally left to the states to regulate.

Despite the fact that they were articulated in response to different physical conditions and slightly different jurisdictional questions, the significant nexus and functional equivalent tests seem to approach CWA jurisdiction in

280. *Id.* at 1470.

281. See Damien M. Schiff & Glenn E. Roper, *The Hallmarks of a Good Test: A Proposal for Applying the “Functional Equivalent” Rule from County of Maui v. Hawaii Wildlife Fund*, 38 PACE ENV’T L. REV. 1, 46–47 (2020) (explaining that other court decisions using functional equivalent or “functionally similar” standards focus on the effect of an action).

282. See *supra* notes 27, 30 and accompanying text.

283. See *Rapanos*, 547 U.S. at 779 (Kennedy, J., concurring) (quoting 33 U.S.C. § 1251(a)).

284. *Id.* at 782.

285. See *id.* at 769.

286. See *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1474–75 (2020).

287. *Id.* at 1474.

parallel ways. Their similarities support the use of Justice Kennedy’s test to illuminate Justice Breyer’s, particularly where Justice Breyer’s test lacks shape.

B. *Evaluating the Utility of an Overlay Approach*

While not a perfect solution to a vague test, a significant nexus overlay approach has benefits. It would help prevent lower courts from applying the functional equivalent test more narrowly than the *County of Maui* Court intended.²⁸⁸ It would also create consistency for courts and regulated entities, which is particularly important in light of the uncertain future of the WOTUS Rule under a new presidential administration.²⁸⁹ Finally, it offers a practical way of ensuring that lower court decisions do not disturb the CWA’s cooperative federalism framework.²⁹⁰

1. Alignment with *County of Maui*

Overlaying Justice Kennedy’s significant nexus test on the functional equivalent test would help ensure that the latter is not applied too narrowly. If the functional equivalent test is found to be satisfied only where Justice Breyer’s seven factors clearly indicate that the groundwater discharge is the functional equivalent of a direct discharge—for instance, where transit time is short and distance traveled is small—it would only prevent the creation of “large and obvious loophole[s]” in the Act.²⁹¹ The Court certainly meant to do more when it instructed lower courts to avoid “serious risks . . . of creating loopholes that undermine the statute’s basic federal regulatory objectives.”²⁹² Justice Breyer further suggested that a narrow application was not intended through his illustration of how the factors operate in extreme scenarios.²⁹³ Justice Breyer stated that where a pipe releases pollutants into groundwater fifty miles from navigable waters, and the pollutants mix with “much other material” and only reach the navigable waters “many years later,” the Act’s permitting requirements “likely do not apply.”²⁹⁴ His use of “likely” indicates that the Court did not necessarily expect a discharge to look exactly the same at the time it arrives to navigable waters as it did when it left the point source. It allows for the possibility that Justice Breyer’s factors might point in different directions, or even lean toward a “no” finding, yet the functional equivalent standard could still be met if the pollutants seriously harmed the downstream navigable waters. A significant nexus overlay accounts for this complexity by focusing a court’s attention on the impacts of a discharge.

288. *See infra* Part III.B.1.

289. *See infra* Part III.B.2.

290. *See infra* Part III.B.3.

291. *County of Maui*, 140 S. Ct. at 1473.

292. *Id.* at 1477.

293. *See id.* at 1476.

294. *Id.* (emphasis added).

By preventing courts from applying the functional equivalent test too narrowly, the overlay approach would preserve opportunities for nongovernmental stakeholders to seek enforcement measures against groundwater polluters using the CWA's citizen suit provision.²⁹⁵ This would provide important consistency in the context of a patchwork of state regulation.²⁹⁶

2. Consistency for Courts and Regulated Entities

The overlay approach would also promote consistency in the way that lower courts around the country apply the functional equivalent test. Since Justice Kennedy's significant nexus standard more explicitly asks about effects on navigable waters, overlaying that standard on the functional equivalent test in cases where the *County of Maui* factors do not point in a clear direction helps sharpen the analysis. If courts ask whether a given groundwater discharge "significantly affect[s] the chemical, physical, and biological integrity"²⁹⁷ of navigable waters, they will have a more straightforward way to make determinations in what the *County of Maui* Court calls "middle instances."²⁹⁸ As a result, determinations under the functional equivalent test will be more consistent across jurisdictions, giving regulated entities greater predictability.

Predictability for regulated entities is especially important given that the scope of "waters of the United States" remains unsettled.²⁹⁹ The fractured *Rapanos* decision provided no clear controlling standard for determining which waters are jurisdictional,³⁰⁰ and the Trump administration's WOTUS Rule faces an uncertain future due to litigation³⁰¹ and a new administration.³⁰² Moreover, *County of Maui* generated confusion about whether its holding stands in conflict with the agencies' categorical exclusion of groundwater from "waters of the United States."³⁰³ The significant nexus overlay approach is useful here. Its application likely provides the same or similar protection for groundwater and surface waters that would be provided under a navigable waters theory—where groundwater is considered jurisdictional if it shares a significant nexus with traditionally navigable waters.³⁰⁴ In other words, the group of dischargers subject to CWA permitting requirements under the overlay approach would be unlikely to differ significantly from the group of dischargers subject to permitting

295. *Cf. supra* notes 218–20 and accompanying text.

296. *See supra* note 219.

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

298. *See supra* note 156.

299. *See supra* Part I.B.1.

300. *See supra* notes 80–83 and accompanying text.

301. *See King & Northey, supra* note 254.

302. *See Hannah Northey, How Biden Could Undo Trump's Water Regulations*, E&E NEWS (Nov. 17, 2020), <https://www.eenews.net/stories/1063718667> [<https://perma.cc/XD6M-8B6S>].

303. *See supra* Part II.B.

304. *See supra* Part I.B.1.

because of a broader “waters of the United States” definition. Therefore, if the EPA and the Corps were to replace the WOTUS Rule with a rule that no longer categorically excludes groundwater from “waters of the United States,” dischargers would not experience much of a practical difference at the permitting level.

3. No Disruption to the Cooperative Federalism Framework

The *County of Maui* majority recognized that Congress intended to preserve state regulation of groundwater and other non-point sources of pollution in the CWA,³⁰⁵ emphasizing that courts should not jeopardize this goal in making “functional equivalent” determinations.³⁰⁶ A “significant nexus” overlay approach accounts for this concern.

The overlay approach protects against intrusions on state regulation of groundwater by requiring a permit only where (1) Justice Breyer’s factors do not clearly point toward a “no functional equivalence” finding, and (2) pollution from a point source significantly affects the water quality of surface water bodies. Because the focus is on the impact of point source pollution on surface waters, not groundwater, the approach does not impinge on states’ ability to regulate groundwater and non-point source pollution. Although it embodies a relatively broad approach to applying the functional equivalent test, the overlay approach is still narrower than the Ninth Circuit’s fairly traceable test,³⁰⁷ which the Court rejected in *County of Maui* because it would interfere with states’ traditional regulatory authority.³⁰⁸ Unlike the fairly traceable test, the overlay approach requires more than mere evidence that pollutants are traceable from a point source to surface waters via groundwater and, again, the focus is on whether jurisdictional surface waters are significantly impacted.

One alternative approach to ensuring that functional equivalent determinations do not undermine states’ traditional regulatory authority emerges in the scholarship discussing *County of Maui*.³⁰⁹ It involves applying the CWA’s objective of preserving states’ traditional regulatory authority as a guardrail after considering the functional equivalent factors.³¹⁰ The approach proposes that, where a discharge appears to satisfy the functional equivalent standard, “a court should not impose liability if federal regulation of the class of such discharges would upset the Act’s federal-state balance.”³¹¹ It is suggested that imposing liability in such a situation would be acceptable only if a failure to do so “would incentivize law evasion

305. *County of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1476 (2020).

306. *Id.* at 1477.

307. *Haw. Wildlife Fund v. County of Maui*, 886 F.3d 737, 749 (9th Cir. 2018), *vacated*, 140 S. Ct. 1462.

308. *County of Maui*, 140 S. Ct. at 1471–72.

309. *See generally* Schiff & Roper, *supra* note 281.

310. *Id.* at 48–50.

311. *Id.* at 50.

through the reconfiguring of otherwise regulated direct discharges.”³¹² But the *County of Maui* Court did not go quite so far when it called for courts to avoid creating loopholes in the statute.³¹³ A loophole in the CWA’s basic purpose of protecting surface waters through federal regulation could exist even where existing dischargers are not likely to change their behavior to take advantage of such a loophole. Moreover, a theoretical inquiry into the likelihood that dischargers would reconfigure their point sources to avoid federal regulation may not always be practical or easy for courts. It also may not be clear to courts if a “yes” determination under the functional equivalent standard would undermine the CWA’s cooperative federalism framework.

A significant nexus overlay approach is preferable because it does the work of balancing the Act’s statutory objectives. It would ensure that the CWA’s cooperative federalism framework is preserved by finding CWA jurisdiction only where a point source discharge significantly affects the integrity of jurisdictional surface waters.³¹⁴ It would also avoid the problem of courts needing to determine whether imposing liability would “upset the federal-state balance,”³¹⁵ a task that would likely only exacerbate any inconsistencies among courts applying the *County of Maui* standard.

Another approach courts might consider to avoid intruding on state regulatory authority is to ask whether the groundwater discharge at issue is already regulated by a state statute. If it is not subject to state regulation and at least some of the factors tend to satisfy the functional equivalent standard, a court could conclude that federal regulation is warranted. However, such an approach would not balance the CWA’s objectives as Congress or the Court intended.³¹⁶ Congress’s goal was to preserve the traditional authority of state governments to decide whether and how to regulate groundwater and non-point source pollution,³¹⁷ not for the federal government to step in where states failed to regulate groundwater pollution in a certain way. Further, focusing on the existence of state groundwater regulations is impractical, as state policy may change over time. Applying a significant nexus analysis to groundwater discharges in instances where the functional equivalent test offers limited guidance is preferable, because it is practical and ensures that neither of the CWA’s objectives is seriously disturbed.

312. *Id.* at 50, 48 (“[T]he statutory purpose [of ensuring ample federal regulation] is violated only if the discharger, in light of the rule articulated, would choose to do the same thing a different way rather than either keep doing the same thing or cease discharging altogether.”).

313. *See County of Maui*, 140 S. Ct. at 1477 (“The underlying statutory objectives also provide guidance. Decisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the statute’s basic federal regulatory objectives.”).

314. Significant effects on the downstream water body can be practically determined through evaluating scientific data. *See* Brief for Aquatic Scientists as Amici Curiae in Support of Respondents at 3, *County of Maui*, 140 S. Ct. 1462 (No. 18-260).

315. Schiff & Roper, *supra* note 281, at 50.

316. *See supra* note 159 and accompanying text.

317. *See* 33 U.S.C. § 1251(b).

4. Limitations of a Significant Nexus Overlay Approach

The significant nexus overlay approach has limitations, too. Just like the functional equivalent test, Justice Kennedy's significant nexus standard carries some ambiguity and operates on a case-by-case basis,³¹⁸ which may present new line-drawing difficulties for courts. It is also only espoused in one concurrence.³¹⁹

Although the significant nexus overlay approach does not supply a bright-line rule in difficult cases, it does offer a focused question that does the work of balancing the Act's objectives.³²⁰ The fact that Justice Kennedy's concurrence was not joined by other Justices does not reduce its utility in the groundwater discharge context, especially given the similarities between Justice Kennedy's and Justice Breyer's reasoning.³²¹ Further, lower courts are already familiar with Justice Kennedy's test since it has been treated by many as the controlling opinion in *Rapanos*.³²² While Justice Breyer did not mention Justice Kennedy's significant nexus test, one possible explanation is that he did not want to give the impression that the Court was resolving *Rapanos* by endorsing Justice Kennedy's concurrence.

Despite some potential pitfalls, a significant nexus overlay approach still offers practical utility to courts, the regulated community, and groups relying on the CWA's citizen suit provision. *County of Maui* contains minimal guidance for courts navigating difficult applications of the functional equivalent test, and the overlay approach provides a workable solution for situations where Justice Breyer's seven factors do not clearly point in one direction. If courts employ the approach, the CWA will be more promising for citizen groups seeking stronger groundwater protections. Additionally, potentially regulated entities will be better able to predict their own liability risks.

CONCLUSION

In the wake of *County of Maui*, the fact-specific and somewhat amorphous functional equivalent standard may lead to inconsistent applications among lower courts. Further, the Court's failure to articulate how the decision relates, if at all, to the ongoing debate over the scope of "waters of the United States" adds to the uncertainty generated by the decision. Employing a significant nexus overlay on the functional equivalent test in difficult cases can help illuminate a path forward for lower courts. This proposed framework is both practical to apply and consistent with Congress's vision for aggressive federal regulation of water pollution within a cooperative federal-state partnership.

318. See *supra* note 71 and accompanying text.

319. See generally *Rapanos v. United States*, 547 U.S. 715 (2006).

320. See *supra* notes 282–84 and accompanying text.

321. See *supra* Part III.A.

322. See *supra* note 81 and accompanying text.