

HARVARD ENVIRONMENTAL LAW REVIEW

WIN OR HIDDEN HURDLE?:
A CRITICAL ANALYSIS OF *COUNTY OF MAUI V. HAWAII WILDLIFE FUND* (2020)

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*County of Maui v. Hawaii Wildlife Fund*¹ is being vaunted as “the Clean Water Act case of the century”² and “the Court’s most consequential environmental law decision of 2020.”³ A ruling widely celebrated among environmentalists, *County of Maui* resolved conflicting approaches to whether section 402 of the Clean Water Act⁴ (“CWA”) applies to discharges of pollutants that reach navigable waters through groundwater. However, the resolution came with a novelty: the “functional equivalence” test, a limiting principle envisaged to avoid unwarrantedly expanding the Environmental Protection Agency’s (“EPA”) powers. But, how much more demanding is the functional equivalence test than, for example, the “fairly traceable and foreseeable” test proposed by the Ninth Circuit? More importantly, could “functional equivalence” limit the CWA’s permit program and create problems for environmentalists? This essay predicts the potential outcomes of applying each test to fact patterns similar to *County of Maui*’s, attempting to evince and compare their ability to set limits to the CWA.

I. *County of Maui* and the Functional Equivalence Test

County of Maui establishes that a permit under the CWA’s National Pollutant Discharge Elimination System (“NPDES”) program is required when “there is a direct discharge from a point source into navigable waters *or* when there is the *functional equivalent of a direct discharge*.”⁵ Elaborating on this newly crafted test, Justice Breyer, who authored the 6-3 majority opinion, explained that there is functional equivalence with a direct point source

¹ 140 S. Ct. 1462 (2020).

² Jessica A. Knoblauch & Maggie Caldwell, *The Clean Water Case of the Century*, EARTHJUSTICE (Apr. 23, 2020), <https://perma.cc/Z2ZW-F87B>.

³ Richard Frank, *The U.S. Supreme Court’s Most Important 2020 Environmental Law Decisions*, LEGAL PLANET (Dec. 29, 2020), <https://perma.cc/9XFM-G3NM>.

⁴ 33 U.S.C. § 1342.

⁵ *Cnty. of Maui v. Haw. Wildlife Fund*, 140 S. Ct. 1462, 1476 (2020).

discharge when “the discharge reaches the same result through roughly similar means.”⁶ Therefore, in determining whether a particular discharge of pollutants reaching navigable waters through groundwaters requires a permit, judges are asked to assess “how similar to (or different from) the particular discharge is to a direct discharge.”⁷

At the outset, under “functional equivalence,” the means matter. Contrary to what Chief Justice Roberts asserted at oral argument, functional equivalence is not “anything that gets to a jurisdictional water.”⁸ Rather, the way in which pollutants reach navigable waters determines the applicability of the CWA’s NPDES permit program to a discharge into groundwater. The opinion lays out a non-exhaustive list of factors that judges and EPA will have to weigh and balance on a case-by-case basis, seeking to determine how similar an actual discharge is to a hypothetical direct discharge. This list includes the time of transit, the distance traveled, the extent to which the pollutants suffered physical or chemical modifications during the journey, and the nature of the conveyance material.⁹

The majority adopted “functional equivalence” in response to the conundrums that alternative statutory interpretations generated.¹⁰ The County of Maui advanced a “means-of-delivery test” that circumscribed the NPDES permit program to direct discharges. Because this would create a roadmap for evasion, allowing facilities to circumvent the requirement, for example, by discharging pollutants from pipes ending a few feet from navigable waters, the Supreme Court dismissed the petitioner’s proposal. The Court also rejected the “fairly traceable” standard applied by the Ninth Circuit—and its “proximate cause” complement put

⁶ *Id.*

⁷ *Id.* at 1476.

⁸ Transcript of Oral Argument at 51, *Cnty. of Maui*, 140 S. Ct. 1462 (No. 18-260).

⁹ *Cnty. of Maui*, 140 S. Ct. at 1476.

¹⁰ Justice Breyer listed seven factors that would inform the Court’s functional equivalence analysis: transit time, distance traveled, the nature of the material through which the pollutant travels, the extent to which the pollutant is diluted or chemically changed as it travels, the amount of the pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, the manner by or area in which the pollutant enters the navigable waters, and the degree to which the pollutant has maintained its specific identity.

forward by Hawaii Wildlife Fund—because it would enlarge EPA’s authority in a way that would allow a federal agency to encroach upon States’ powers.

The “fairly traceable” test, as envisaged by the Ninth Circuit in the case below, dictates that when pollutants from a point source are “fairly traceable from the point source to a navigable water”¹¹ at more than *de minimis* levels, their discharge requires a permit even if the addition of pollutants is done by groundwaters. Because tracing pollutants back to their origin calls for an inquiry into causation, but most importantly, because solely applying “fair traceability” would cast the net of EPA’s authority too wide, the respondents introduced “proximate causation.”¹² This last test requires assessing if a particular addition of pollutants into navigable waters “is a ‘foreseeable’ or ‘natural and probable’ consequence”¹³ of a certain point source discharge. Conflating these legal theories, Hawaii Wildlife Fund argued that if pollutants in navigable waters “can be traced to a specific point source from which it *predictably* flows to navigable waters,”¹⁴ the originating point source discharge is subject to an NPDES permit.

A “fairly traceable and foreseeable” analysis differs from a “functional equivalence” one. Tracing pollutants back to their original point source and establishing whether such an event was foreseeable for the polluter is certainly a different analytical operation than assessing how similar an actual discharge of pollutants is to a hypothetical direct discharge. Under “fairly traceable and foreseeable,” judges and EPA are expected to elucidate a chain of causation and establish the foreseeability of its relations. It is irrelevant whether the pollutants at issue travel a long or short distance, whether their identity remains the same throughout the journey, or whether they take a long or short time to get into navigable waters. In contrast, these conditions

¹¹ *Cnty. of Maui*, 140 S. Ct. at 1469 (citing *Haw. Wildlife Fund v. Cnty. of Maui*, 886 F.3d 737, 749 (9th Cir. 2019)).

¹² Brief for Respondents at 20, *Cnty. of Maui*, 140 S. Ct. 1462 (2020) (No. 18-260).

¹³ *Id.*

¹⁴ *Id.* at 40.

matter when applying “functional equivalence.” Rather than merely attributing an addition of pollutants to a particular point source, this test requires forecasting a direct discharge scenario to set a baseline, and then assessing how similar the actual discharge is to that baseline.

II. Applying Functional Equivalence to Similar Cases

Regarding their ability to limit the scope of the NPDES permit program, as the Court intended, how much further does “functional equivalence” go than “fairly traceable and foreseeable” would have? Examining how the test might apply to similar cases may cast some light. When the Supreme Court delivered *County of Maui*, at least four cases concerning the applicability of the NPDES permit program to point source discharges to navigable waters through groundwater were in the pipeline. The first one to be handed down was *Upstate Forever v. Kinder Morgan Energy Partners*,¹⁵ decided by the Fourth Circuit on April 12, 2018. The case concerned the leakage of over 369,000 gallons of gasoline from a pipeline owned by Kinder Morgan Energy Partners, which ruptured in late 2014 six to eight feet underground in Belton, South Carolina.¹⁶ The plaintiffs asserted that gasoline and gasoline toxins had seeped through groundwater and reached surface waters, namely two nearby tributaries of the Savannah River, Browns Creek and Cupboard Creek, and their adjacent wetlands.¹⁷ The pipeline broke less than 1,000 feet from Browns Creek, and in January 2015, hazardous gasoline was found in its waters.¹⁸

Upstate Forever is a case of an involuntary discharge of pollutants, which contrasts with *County of Maui* in that the wastewater reclamation facility in *County of Maui* was purposefully designed to dispose of wastewater in the Pacific Ocean. In applying a “fairly traceable and foreseeable” standard, the question of whether Kinder Morgan Energy Partners’ pipeline required a permit hinges upon whether the pipeline ruptures and effects can be

¹⁵ 887 F.3d 637 (4th Cir. 2018).

¹⁶ *Id.* at 643.

¹⁷ *Id.*

¹⁸ *Id.*

considered foreseeable. A court answering positively could find that an NPDES permit is required, since the gasoline found in Browns Creek can be traced to the pipeline (an undisputed point source) and since its reaching navigable waters through groundwater, even if an accident, was predictable. However, this question would not have arisen under a “functional equivalence” test. In comparing the gasoline spill with a hypothetical discharge of gasoline directly into the water, whether the spill was purposeful or accidental is unimportant. Rather, judges would be asked to consider that the gasoline traveled a short distance of 1,000 feet, that the gasoline was found in navigable waters just months after the pipe ruptured, and that the identity of the pollutant was arguably maintained along its passage through groundwaters. That is, the spill could be considered “functionally equivalent” to a direct discharge of gasoline.

A different outcome could be expected from the remaining cases, all of which concern the deliberate disposal of coal ash wastewater produced by coal-fired power plants into nearby navigable waters.¹⁹ *Sierra Club v. Virginia Electric Power*,²⁰ also decided by the Fourth Circuit in September 2018, dealt with a power plant operated by Dominion, which from 1953 to 2014 managed its coal ash in ponds on site through man-made ponds.²¹ Once the ash had settled on the pond floor, the water was discharged into nearby navigable waters, an operation authorized by a state permit.²² Dominion monitored the surrounding groundwaters during its sixty year-operation, and in 2002 its tests revealed that the level of arsenic in the groundwater exceeded state protection standards.²³ The plaintiffs filed the lawsuit after finding arsenic in the Elizabeth River and Deep Creek, both navigable waters.²⁴

¹⁹ In the coal ash cases, whether coal ash ponds constitute “point sources” is debatable. Nevertheless, for the purposes of this essay, coal ash ponds will be treated as “point sources,” thereby allowing the analysis to focus on whether there is an “addition of pollutants from a point source to navigable waters.”

²⁰ 903 F.3d 403 (4th Cir. 2018).

²¹ *Id.* at 407.

²² *Id.* at 408.

²³ *Id.* at 415.

²⁴ *Id.* at 406.

Because pollutants from coal ash are disposed of in navigable waters *by design*, the “fairly traceable and foreseeable” test would generally be satisfied. However, asserting that these discharges are “functionally equivalent” to direct discharges of coal ash into navigable waters may prove a more challenging enterprise. An important feature of *Sierra Club*, and of the fact patterns to be recounted next, is that arsenic and other pollutants are leached from coal ash accumulations and carried by groundwater and rainwater into navigable waters.²⁵ By and large, coal ash does not reach navigable waters through these management techniques. In addition, Dominion discharged coal ash wastewater into navigable waters for fifty years before significant levels of arsenic were found in groundwater. This scenario is hardly equivalent to a hypothetical direct discharge of coal ash into navigable waters. In the actual discharge, the pollutant arrives at navigable waters with a different identity—arsenic leached from coal ashes instead of coal ashes themselves—and becomes noticeable after a considerable amount of time. Put differently, arsenic reaching navigable water after being leached from coal ash and transported through groundwaters generates a different image than that of coal ashes being deposited directly into the water.

In both *Upstate Forever* and *Sierra Club*, the Fourth Circuit ruled that the power plants at issue required NPDES permits since their point source discharges targeted groundwaters with a hydrological connection to navigable waters. Shortly after, on September 24, 2018, the Sixth Circuit issued two opinions concerning similar fact patterns but reaching the opposite conclusion: that coal ash wastewater disposal into navigable waters did not require a NPDES permit because they did not constitute direct discharges. *Kentucky Waterways Alliance v. Kentucky Utilities Company*²⁶ and *Tennessee Clean Water Network v. Tennessee Valley Authority*²⁷ involved coal-fired power plants that had been in operation since the late 1950s and

²⁵ *Id.* at 410.

²⁶ 905 F.3d 925 (6th Cir. 2018).

²⁷ 905 F.3d 436 (6th Cir. 2018).

1970s, respectively, and which possessed federal or state authorization to dispose of their coal ash wastewater by discharging it into groundwaters ultimately reaching nearby navigable waters. Selenium, in *Kentucky Waterways*,²⁸ and heavy metals and other pollutants, in *Tennessee Clean Water Network*,²⁹ were found in the recipient bodies of water.

The Sixth Circuit coal ash cases engender the same difficulties as the Fourth Circuit's *Sierra Club* when analyzed under the "functional equivalence" test. Because of the standard's emphasis on the way pollutants enter navigable waters, distinguishing a direct discharge of coal ash into navigable waters from pollutants that leached from coal ash into navigable waters via groundwater is crucial. Whether these discharges of pollutants are "functionally equivalent" to a direct discharge will depend on how significant these differences will seem to judges and EPA. Nevertheless, the fact remains that in coal ash cases, "functional equivalence" sets a more demanding argumentative threshold than the "fair traceability and foreseeability" test, under which any plant designed to dispose of their wastewater by delivering it to navigable waters through groundwaters undisputedly would require a NPDES permit.

On the whole, Justice Breyer's "functional equivalence" standard arguably adds further constraints to the scope of the CWA NPDES permit program, warranting a more critical appraisal. In the cases analyzed above, pollutants released from point sources were unquestionably reaching navigable waters. The latter would generally suffice if the governing standard was one of "fair traceability and foreseeability," particularly when, as in the coal ash cases, pollutants are purposefully being disposed of in navigable waters by discharging them in groundwater. This is not bound to be the case when applying a "functional equivalence standard." Even if pollutants are ultimately found in CWA-covered waters, if how this happens does not resemble a paradigmatic direct discharge, an NPDES permit is not required. The

²⁸ *Ky. Waterways*, 905 F.3d at 931.

²⁹ *Tenn. Clean Water Network*, 905 F.3d at 438.

“Clean Water Act case of the century” should be welcomed with a grain of salt. Rather than adding teeth to the CWA, “functional equivalence” may create a hidden hurdle for protection of the waters of the United States.