

No. 18-260

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**In The  
Supreme Court of the United States**

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COUNTY OF MAUI, HAWAII,

*Petitioner,*

v.

HAWAII WILDLIFE FUND; SIERRA CLUB  
MAUI GROUP; SURFRIDER FOUNDATION;  
WEST MAUI PRESERVATION ASSOCIATION,

*Respondents.*

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**On Writ Of Certiorari To The  
United States Court Of Appeals  
For The Ninth Circuit**

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**BRIEF OF *AMICI CURIAE* WATER SYSTEMS  
COUNCIL AND THE NATIONAL GROUND WATER  
ASSOCIATION IN SUPPORT OF PETITIONER**

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**QUESTION PRESENTED**

Whether the Clean Water Act requires a National Pollution Discharge Elimination System (NPDES) permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source, such as groundwater.

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**INTRODUCTION AND INTEREST OF *AMICI***<sup>1</sup>

This appeal involves the question of whether discharges to soil or groundwater that eventually make their way to jurisdictional waters require a National Pollution Discharge Elimination Permit (NPDES), or whether such discharges are regulated under the non-point source management portion of the Clean Water Act (CWA). 33 U.S.C. § 1329 (2018). For the reasons stated below, *Amici* Water Systems Council (WSC) and the National Ground Water Association (NGWA) respectively submit that the NPDES provisions of the CWA do not apply to such discharges, but the discharges are regulated under the CWA.

*Amici* hold a keen interest in protecting the quality and quantity of groundwater in the United States. Founded in 1932, WSC is a national nonprofit organization with programs solely focused on private water wells and small, shared wells serving more than 13 million households, or 34 million Americans, nationwide. U.S. Bureau of Census American Housing Survey, <https://www.census.gov/programs-surveys/ahs/data.2017.html> (follow “AHS 2017 Summary Tables” hyperlink;

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<sup>1</sup> This brief was authored solely by Jesse J. Richardson, Jr., counsel for Water Systems Council and the National Ground Water Association. No person or entity, other than Water Systems Council and the National Ground Water Association, their members, or their counsel, made a monetary contribution to the preparation or submission of the brief. Respondents have filed a blanket consent. *Amici* obtained written consent from Petitioner on April 29, 2019.

then “Select Table” for “Plumbing, Water, and Sewage Disposal”; then follow “Get Table” hyperlink).

WSC members are leaders in the water well industry who are dedicated to promoting and protecting our nation’s precious groundwater supply. The membership is made up of 18 major manufacturers of well components, 14 major distributors of said products, 22 state associations of groundwater professionals, and 26 well contractors. Annual sales in the water well industry are estimated to top \$5 billion.

WSC is committed to ensuring that Americans who depend on wells have safe, reliable drinking water and educating well owners, consumers, and policymakers at the local, state, and federal levels about water wells and the importance of protecting America’s groundwater resources. WSC strives to help well owners, as well as local, state, and federal governments, maintain the quality and quantity of groundwater.

NGWA is the largest trade association and professional society of groundwater professionals in the world, whose mission is to advocate for the responsible development, use, and protection of groundwater resources. Representing over 11,000 groundwater professionals within the United States and internationally, NGWA represents scientists, engineers, contractors, manufacturers, and suppliers committed to the responsible development, management, and use of groundwater. NGWA members work to advance groundwater knowledge through education and outreach, advocacy,

cooperation and information exchange, and enhancement of professional practices.

*Amici's* interest in this case stems from the significant role groundwater plays in sustaining the United States' economy. Concurrent with the need for protecting surface water is the need to ensure adequate fresh groundwater for drinking water, industrial and manufacturing applications, food production, and ecosystem support. Ninety percent of America's freshwater supplies lie underground, but the use of groundwater resources varies widely due to geology, topography, and climate. Over 34 million people in the United States rely on private wells and 87 million are served by groundwater from community water systems. Seventy-one percent of groundwater withdrawn is for irrigated agriculture. Additionally, forty percent of baseflow of streams is contributed from groundwater discharge through streambeds.

WSC and the NGWA support protection of groundwater and surface water resources. With respect to point source pollution, WSC and the NGWA assert that:

- Control of potential and active sources of contamination should be a national objective, reducing the need for remediation of groundwater.
- Aquifers should be protected from degradation, recognizing that no degradation may be economically and technically impractical in many circumstances.

- Groundwater quality should be protected for existing and potential beneficial uses.
- Methods available to control point source contamination include land-use controls and containment or isolation of contaminant sources.
- Waste reduction, education, and technology transfer are important actions to protect groundwater.
- Increased scientific research can provide the basis for land-use control decisions.



### **SUMMARY OF ARGUMENT**

The structure of the Clean Water Act indicates that Congress intended to regulate discharges to groundwater under the nonpoint source pollution provisions of the Act. Discharges to groundwater do not lend themselves to easy measurement and establishment of effluent limitations as do point sources of pollution. The Clean Water Act noticeably omits mention of groundwater in the National Pollution Discharge Elimination System (NPDES) provisions. The Clean Water Act only refers to groundwater in a limited way in the nonpoint source provisions.

If some discharges to groundwater are covered under the point source provisions of the Clean Water Act, only those discharges into groundwater flowing in defined subterranean channels should be covered. In these cases, which are rare, the groundwater

resembles a point source or “conduit.” The common law distinguishes between percolating groundwater and groundwater flowing in defined channels in establishing water rights. Percolating groundwater was treated as part of the soil (and still is treated in that way in some states). On the other hand, water flowing in identifiable underground streams or channels is subject to the same rules as surface streams and rivers. Notably, Justice Scalia referred only to surface water *flowing in channels* as conduits when approving of treating some indirect discharges to covered waters as point source discharges.

The NPDES permitting scheme is not appropriate for regulating discharges to groundwater, whereas several other aspects of state and federal law are. In addition to coverage under the nonpoint source provisions of the Clean Water Act, such discharges are covered under other federal laws. The Safe Drinking Water Act, 42 U.S.C. §§ 300f et seq., the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq., the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601 et seq., and the Endangered Species Act, 16 U.S.C. §§ 1531 et seq. all provide coverage for at least some discharges to groundwater that eventually migrate to waters of the United States.

Instead of adding partial coverage through an addition to the fractured system of existing regulation, adherence to the framework set out by the Clean Water Act will provide better protection of our nation’s waters, including groundwater. 33 U.S.C. § 1329 clearly

contemplates a cooperative effort between the federal government, states, and Indian tribes to address discharges to groundwater. Efforts under this umbrella can best be coordinated between the various governmental agencies to protect water resources. Given the diversity of geology, climate, and use of groundwater resources, states should play the lead role in regulating these discharges. In addition, land use and groundwater are closely connected. States regulate land use and should lead efforts to regulate discharges to groundwater.



## ARGUMENT

### **I. The Structure of the Clean Water Act Clearly Evinces Congress' Intent to Regulate Releases to Groundwater Under the Nonpoint Source Provisions of the CWA.**

The Clean Water Act (CWA) was enacted in 1972 with the stated objective “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a) (2018). To those ends, the CWA prohibits the “discharge of any pollutant by any person” into navigable waters unless otherwise authorized by the CWA. *Id.* § 1311(a). The “discharge of a pollutant” is defined as “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12). The term “point source,” in turn, means “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container . . . from which pollutants are or may be

discharged.” *Id.* § 1362(14). The CWA provides for the issuance of permits authorizing the discharge of pollutants into navigable waters in compliance with specified effluent standards. *Id.* § 1311(a). In 33 U.S.C. § 1342(a), the CWA established the National Pollutant Discharge Elimination System (NPDES), under which EPA may “issue a permit for the discharge of any pollutant” provided that the authorized discharge complies with the effluent standards specified in the permit or otherwise imposed by the CWA. Through that system, the EPA also shares regulatory authority with the states, and a state may elect to establish its own permit program, subject to EPA approval. *Id.* § 1342(b)–(c). When a state elects to establish its own program, the EPA suspends its federal permit program and defers to the state’s, allowing the state discharge permit (SPDES) to authorize effluent discharges under both state and federal law.

NPDES permits require the permittee to meet numeric or narrative effluent limitations. 33 U.S.C. §§ 1311(a), 1342(a). 33 U.S.C. § 1362(11) defines the term “effluent limitation” as “any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.” 33 U.S.C. § 1314(g) provides that in assisting states in implementing the NPDES program, the EPA shall publish guidelines “to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean.”



If the NPDES program were to be construed as applying to releases to groundwater, calculation of effluent limitations would be difficult, if not impossible, since the limitations could not, as is usually the case, be measured at the “end-of-the-pipe.” Daniel R. Mandelker, *Controlling Nonpoint Source Water Pollution Can It Be Done?*, 65 Chi.-Kent L. Rev. 479, 482 (1989). Instead, calculations would have to be made as to the percentage of the release that would make its way to the jurisdictional water, how much of the contaminant would be removed or filtered by the soil, and other variable factors. Enforcement and measurement of the actual releases into the jurisdictional water could also prove extremely problematic and seems antithetical to the design of the NPDES program.

Regulating releases to groundwater under the NPDES program also potentially requires a wide swath of activities to obtain an NPDES permit. Almost every pollutant originates from a point source. *See, e.g., Concerned Area Residents for the Env't v. Southview Farms*, 34 F.3d 114 (2d Cir. 1994) (finding that a swale in field where liquid manure from large dairy farm collected before flowing into nearby streams and vehicles used to spread manure were “point sources”). To give the term “any addition of any pollutant to navigable waters from any point source,” 33 U.S.C. § 1362(12), meaning, the “addition” needs to be direct or any discharge that eventually makes its way to navigable waters would require a permit.

Groundwater is not mentioned in connection with the NPDES program. However, to approve a

state-submitted NPDES program, the administrator must determine that adequate authority exists *within the state* to “control the disposal of pollutants into wells.” 33 U.S.C. § 1342(b)(1)(D). This provision further indicates that Congress intended that all regulation of discharges into groundwater be regulated by the states pursuant to 33 U.S.C. § 1329. *See Exxon Corp. v. Train*, 554 F.2d 1310, 1324 (5th Cir. 1977). This provision applies to nonpoint source pollution.

Most courts find that groundwater, because of its diffuse character and dispersal over widespread areas, is a nonpoint source of pollution, rather than a point source. *See Sierra Club v. El Paso Gold Mines*, 421 F.3d 1133, 1141 n.4 (10th Cir. 2005) (“Groundwater seepage that travels through fractured rock would be nonpoint source pollution, which is not subject to the NPDES permitting.”); *Northwest Env'tl. Def. Ctr. v. Brown*, 640 F.3d 1063, 1070 (9th Cir. 2011) (“Stormwater that is not collected or channeled and then discharged, but rather runs off and dissipates in a natural and unimpeded manner, is not a discharge from a point source. . . .”); *Cordiano v. Metacon Gun Club*, 575 F.3d 199, 220–21 (2d Cir. 2009) (“In practical terms, nonpoint source pollution does not result from a discharge at a specific, single location (such as a single pipe) but generally results from land runoff, precipitation, atmospheric deposition, or percolation.”); *Tenn. Clean Water Network v. TVA*, 905 F.3d 436, 444 (6th Cir. 2018) (“The CWA has no say over [groundwater].”).

An interpretation of the statute that extends the scope of the NPDES permitting requirements to cover hydrologically connected groundwaters would

constitute a substantial expansion of federal authority into the “[s]tates’ traditional and primary power over land and water use.” *SWANCC v. U.S. Army Corps of Engineers*, 531 U.S. 159, 174 (2001). Congress “would have said so more clearly” if it intended statutory language to take on such a disputed meaning. *Bluewater Network v. EPA*, 370 F.3d 1, 18 (D.C. Cir. 2004). Indeed, such “an unprecedented intrusion into traditional state authority” would ordinarily require “[a] clear and manifest statement from Congress.” *Rapanos v. United States*, 547 U.S. 715, 738 (2006) (plurality opinion). Yet no such statement of congressional intent can be found in the language of the CWA. In fact, the structure of the CWA and the provisions of 33 U.S.C. § 1329 indicate the contrary.

**II. If the Court Finds That Some Releases to Groundwater Require NPDES Permits, Only Those Releases That Migrate to Jurisdictional Waters Through Subterranean Streams Should Require Permits.**

**A. The Strongest Theory for Regulating Groundwater Under the Point Source Provisions of the CWA Would Include Regulating Only Groundwater Flowing in Subterranean Streams, but Even This Theory Has Been Rejected by the EPA.**

Originally, commentators posited that two alternative theories could support inclusion of discharges to groundwater under the point source provisions of the Clean Water Act. The first theory (“point source

theory”) would treat some forms of “tributary groundwater” as “extensions of ‘point sources.’” Mary Christina Wood, *Regulating Discharges into Groundwater: The Crucial Link in Pollution Control Under the Clean Water Act*, 12 Harv. Envtl. L. Rev. 569, 574 (1988). The second (“tributary theory”) would expand the definition of “navigable water” to include tributary groundwater. *Id.*

Note that both theories would only cover tributary groundwater. Tributary groundwater is defined differently by different states in the context of water rights, and Wood does not explicitly define “tributary groundwater.” However, the context makes it appear that Wood contemplates a definition of tributary groundwater that would exclusively include groundwater traveling in subterranean channels. *See, e.g., id.* at 575.

The point source theory includes groundwater traveling in subterranean channels as point sources. *Id.* The tributary theory relies on the inclusion of non-navigable tributaries as “waters of the United States” under 33 U.S.C. § 1362(7). 40 C.F.R. § 230.3(s)(5). Although not clear, Wood appears to include only water traveling in subterranean channels in this definition as well. The case at hand, as well as other cases decided and pending in other courts, take these theories well beyond groundwater traveling in subterranean channels, to include percolating groundwater. *See, e.g., Hawai’i Wildlife Fund v. County of Maui*, 886 F.3d 737 (9th Cir. 2018) (the case below); *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637 (4th Cir.), *petition for cert. filed*, 87 U.S.L.W. 3069 (U.S.

Aug. 28, 2018) (No. 18-268); *Sierra Club v. Virginia Electric & Power Co.*, 903 F.3d 403 (4th Cir. 2018).

Later commentators and cases rely on a third theory, “groundwater as a conduit.” *See, e.g.*, Allison L. Kvien, Note, *Is Groundwater That is Hydrologically Connected to Navigable Waters Covered Under the CWA? Three Theories of Coverage & Alternative Remedies for Groundwater Pollution*, 16 Minn. J.L. Sci. & Tech. 957, 960 (2015). Kvien reiterates but rejects the point source theory and the tributary theory laid out by Wood, but appears to either remove the requirement of tributary groundwater from the theories, or redefine tributary groundwater. Kvien confuses the concept of groundwater as a tributary of waters of the United States under the tributary theory with groundwater qualifying as waters of the United States under Justice Kennedy’s substantial nexus test. *Id.* 944–86. Discussion of the point source theory likewise abandons any notion of groundwater in subterranean channels, but acknowledges that the diffuse nature of groundwater makes the point source argument a weak one. *Id.* 986–87. Kvien instead uses the “hydrologically connected” test in analyzing each of the three options: point source theory, tributary theory, and groundwater as a conduit.

The conduit theory provides “a far less burdensome approach than the point source theory.” *Id.* at 987. Discharges to groundwater under this theory, attributed by Kvien to *Hawai’i Wildlife Fund v. Cty. of Maui*, 24 F. Supp. 3d 980, 994–96 (D. Haw. 2014), *aff’d* sub nom. *Hawai’i Wildlife Fund v. Cty. of Maui*, 881 F.3d 754 (9th Cir. 2018), and *aff’d* sub nom. *Hawai’i*

*Wildlife Fund v. Cty. of Maui*, 886 F.3d 737 (9th Cir. 2018), eliminates the challenge of proving that the groundwater is confined and discrete. *Id.* However, the elimination of these requirements also substantially weakens the argument in favor of the theory. Removed from consideration are the characteristics that, if possessed by groundwater, would make discharges to groundwater analogous to covered activity.

Yet another theory excludes discharges into groundwater. The “terminal point source theory” provides that any intermediary between the point source and navigable water breaks the connection and is not covered by the NPDES program. *Kentucky Waterways Alliance v. Kentucky Utilities Co.*, 905 F.3d 925 (6th Cir. 2018). The EPA’s recent interpretative statement rejects all of these theories and adopts the categorical rule that all releases to groundwater are excluded from the scope of the NPDES program. 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. 78 (April 23, 2019). The EPA explicitly rejects the notion that movement of groundwater through formations that resemble point source discharges should be covered. *Id.* at 16821. The EPA called the mode of transport through the groundwater “immaterial.” *Id.*

**B. Common Law Water Rights Distinguish Percolating Groundwater from Groundwater Flowing in Identifiable Subterranean Streams, Providing a Template for the CWA.**

Early common law classifications of water used broad categories: (1) surface streams and lakes, (2) wetlands, (3) surface run-off water, and (4) groundwater. 2 Waters and Water Rights § 19.01 (2019). Although all waters on the surface could be classified as surface water, legal categories include diffuse surface water (stormwater) and waters confined to an identifiable area such as a river or lake. *Id.* The United States Congress similarly distinguishes between types of surface water in the Clean Water Act. For example, the definition of point source excludes “agricultural stormwater.” 33 U.S.C. § 1362 (2018).

Likewise, since the mid-1800s, the common law has distinguished between “percolating groundwater” and “subterranean streams.” 2 Waters and Water Rights § 19.05(a1). Percolating groundwater constitutes:

Those waters which slowly percolate or infiltrate their way through the sand, gravel, rock, or soil, which do not then form a part of any body of water or flow of any watercourse, surface or subterranean, but which may eventually find their way by force of gravity to some watercourse or other body of water, with whose waters they mingle, and thereby lose their identity as percolating waters.

*Id.* § 19.05(b)(1.01), quoting 2 Clesson S. Kinney, *Irrigation and Water Rights* § 1183, at 2150 (2d ed. 1912). These waters “ooze” or “seep” in the ground, as opposed to flowing in an identifiable channel or stream. *Id.*

Subterranean streams are characterized by “defined limits, a single direction of flow, and the regular expectation of a fairly continuous flow.” *Id.* § 19.05(a)(2), at 19–30. The Virginia Supreme Court has characterized a subterranean stream as “defined.” *Miller v. Black Rock Springs Improvement Co.*, 99 Va. 747, 40 S.E. 27, 30 (1901). “Defined means a contracted and bounded channel. . . .” *Id.* (quoting 14 Mews, E.C.L. 1955). The common law treats subterranean streams as surface streams and uses the riparian rights doctrine to allocate rights to such streams, as with surface streams. 2 *Waters and Water Rights* § 19.05(a)(2).

The law presumes that groundwater does not flow in underground streams, but is percolating. *Id.* §§ 19.05(a)(1.01), 19.05(a)(3). Percolating groundwater receives different treatment under the common law than subterranean streams. Early common law treated percolating groundwater as part of the soil, not recognizing separate rights in that water. *Id.* § 19.01. “Groundwater was a mere ingredient of the soil.” *Id.* at 19-3. The English Common Law rule for percolating groundwater, the Absolute Dominion Rule, reflects this heritage, giving landowners the right to pump and use such water as they wish, with impunity. *Id.* § 20.03. England still uses this rule, with restrictions, as do some states in the United States. *Id.*; *Water Systems*



Council, Who Owns the Water: A Summary of Existing Water Rights Laws (August 2016).

In some contexts, similar to a subterranean stream, one might argue that a hydrological connection between groundwater and surface water occurs through a “conduit.” In addition to subterranean streams, bedrock fractures, lava tube openings, karst, or cave or conduit openings provide a channel for groundwater movement. These settings may accurately be characterized as conduits. However, percolating groundwater is dispersed throughout the subsurface and does not move in identifiable streams and channels and should not be so characterized. Movement through percolating groundwater appears as classic nonpoint source pollution.

The United States Court of Appeals for the Sixth Circuit rejected an argument that karst conduits amounted to point sources in *Kentucky Waterways Alliance v. Kentucky Utilities Co.*, 905 F.3d 925 (6th Cir. 2018). The court found that the only difference between karst terrain and less conducive soils, like clay, is “expediency.” *Id.* at 934. Karst terrain still does not constitute a “discernable, discrete, [or] confined” conveyance. *Id.*

Justice Scalia has opined, in dicta, on indirect discharges. *Rapanos v. United States*, 547 U.S. 714, 742–44 (2006). In a case involving the scope of “waters of the United States,” Justice Scalia, in his plurality opinion, responded to contentions that a narrow definition of WOTUS would allow polluters to evade the

permitting requirement by discharging into noncovered waters. Since lower courts applying 33 U.S.C. § 1342 have found that discharges “*that naturally [wash] downstream*” to covered waters are covered by the CWA, Justice Scalia asserted that the concern was unfounded. *Id.* at 743. The United States Court of Appeals for the Sixth Circuit opined that courts and commentators arguing that this statement indicates that discharges into nonpoint sources like groundwater require a permit are mistaken. *See Kentucky Waterways Alliance*, 905 F.3d at 936 (where the court says that Justice Scalia’s reference to “conveyance” makes clear he only wanted to say that intermediary point sources do not break the chain of liability; it was not a position on nonpoint source to point source pollution); *see also Tennessee Clean Water Network v. Tennessee Valley Auth.*, 905 F.3d 436 (6th Cir. 2018) (relying on the same reasoning as *Kentucky Waterways Alliance*).

Bolstering the conclusion of the Sixth Circuit, examination of the cases cited in Justice Scalia’s plurality opinion in *Rapanos* for this proposition reveal that all of the indirect discharges involved occurred through surface water channels that resembled, and sometimes were held to be, point sources. *United States v. Velsicol Chemical Corp.*, 438 F. Supp. 945, 946–47 (W.D. Tenn. 1976) (a municipal sewer system separated the “point source” and covered navigable waters); *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133, 1137, 1141 (10th Cir. 2005) (2.5 miles of tunnel separated the “point source” and “navigable waters”); *South Florida Water Management Dist. v. Miccosukee Tribe*,

541 U.S. 95, 105 (2004); *United States v. Ortiz*, 427 F.3d 1278, 1281 (10th Cir. 2005) (a storm drain that carried flushed chemicals from a toilet to the Colorado River was a “point source”); *Dague v. City of Burlington*, 935 F.2d 1343, 1354–55 (2d Cir. 1991) (a culvert connecting two bodies of navigable water was a “point source”), rev’d on other grounds, 505 U.S. 557 (1992); *Concerned Area Residents for Environment v. Southview Farm*, 34 F.3d 114, 118–19 (2d Cir. 1994) (adopted both the “indirect discharge” rationale and the “point source” rationale in the alternative, applied to the same facts).

However, Justice Scalia referred to the intervening waters “conduits,” “channels” (four times), or “conveyances” and limited the acceptance of the conduits to surface water. *Rapanos v. United States*, 547 U.S. 714, 743–44 (2006). The definition of point source includes the terms conduits and channels, indicating the close nature of these intervening waters to point sources themselves. 33 U.S.C. § 1362(14). Percolating groundwater cannot be characterized as a “conduit,” “channel,” or “conveyance.”

Although the distinction between subterranean streams and percolating groundwater arguably makes effective regulation of groundwater contamination more difficult, 2 Waters and Water Rights § 19.05(a1), the legislature drew a similar line in distinguishing between point and nonpoint source pollution under the Clean Water Act. A cleaner line, however, would be to honor the structure of the CWA and find that discharges to groundwater are covered by 33 U.S.C. § 1329, and not the NPDES provisions.

### **III. Other Federal Statutes Regulate Groundwater Contamination.**

In addition to the Clean Water Act under 33 U.S.C. § 1329, a number of other federal statutes regulate groundwater contamination. The Safe Drinking Water Act (the Act), 42 U.S.C. §§ 300f et seq., establishes uniform water quality standards for public water systems in the United States. Under the Safe Drinking Water Act, states hold primary enforcement responsibility so long as the state adopts drinking water regulations no less stringent than the national primary drinking water regulations, adopts and implements adequate procedures for enforcement of the state regulations, keeps adequate records, and meets other requirements set out in the Act. 42 U.S.C. § 300g-2(a). Part C of the Act addresses protection of underground sources of drinking water against contamination by underground injection of waste or other substances. 42 U.S.C. §§ 300h to 300h-8. 42 U.S.C. § 300h establishes requirements for states to regulate underground injection of fluids that endanger drinking water sources.

The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 et seq., addresses the safe management and cleanup of solid and hazardous waste. *See, e.g., Kentucky Waterways Alliance v. Kentucky Utilities Co.*, 905 F.3d 925 (6th Cir. 2018) (dismissing Plaintiffs' claim under the Clean Water Act for groundwater contamination from coal ash ponds, but allowing a RCRA claim to go forward).

The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601 et seq., provides for the remediation of hazardous pollution and establishes a Federal “Superfund” to assist in cleanup of contaminated sites. The United States Environmental Protection Agency (EPA) seeks out responsible parties for the contamination, and cleans up the site if responsible parties cannot be identified or found, or where responsible parties do not act.

Finally, the Endangered Species Act, 16 U.S.C. §§ 1531 et seq., may provide protection of groundwater resources where a threatened or endangered species is present. *Supra* Kvien, 16 Minn. J.L. Sci. & Tech. at 998–99. For example, karst environments contain a number of threatened and endangered species. Sixteen species of endangered karst invertebrates reside in karst environments in Travis, Williamson, and Bexar Counties in Texas alone. U.S. Fish and Wildlife Services, *Karst Invertebrates*, [https://www.fws.gov/southwest/es/austintexas/esa\\_sp\\_karstinverts.html](https://www.fws.gov/southwest/es/austintexas/esa_sp_karstinverts.html) (last accessed Apr. 30, 2019).

#### **IV. States are Best Suited to Regulate Groundwater and Already Adequately Regulate Groundwater.**

The Clean Water Act “anticipates a partnership between the States and the Federal Government.” *Arkansas v. Oklahoma*, 50 U.S. 91, 101 (1992). The policy behind the CWA respects the primacy of states with respect to regulation of land and water resources. “It is

the policy of Congress 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 (including restoration, reservation and enhancement) of land and water resources. . . .” 33 U.S.C. § 1251(b) (2018).

The structure of the Clean Water Act clearly expressed the Congressional intent to regulate groundwater contamination under 33 U.S.C. § 1329. That provision provides for the submission of plans and programs by the states to the EPA for approval with regard to state and local programs for controlling pollution added from nonpoint sources to navigable waters. The statute anticipates a program where the states develop and implement regulations, while the federal government provides technical assistance. States traditionally control and protect groundwater resources. Any hydrologically connected groundwater theory must take great care to respect this cooperative federalism. *See, e.g.,* Damien Schiff, *Keeping the Clean Water Act Cooperatively Federal—Or, Why the Clean Water Act Does Not Directly Regulate Groundwater*, 42 Wm. & Mary Env'tl. L. & Pol'y Rev. 447 (2018) (rejecting the hydrologically connected groundwater theory).

Groundwater and land use are inextricably connected. 2 Waters and Water Rights § 19.04 (2019). The geology of each setting, which varies widely, dictates the extent and type of effective regulation to protect groundwater. *Id.* Given the dependence on regional and local conditions, groundwater regulation is particularly suited for the states. *Id.* States protect

groundwater under state groundwater quality statutes, under state common law, and, in some states, through the state public trust doctrine. *Supra* Kvien, 16 Minn. J.L. Sci. & Tech. at 993–96.

A nationwide survey of how states (including the District of Columbia) regulate groundwater discovered that all 49 states that responded and the District of Columbia regulate groundwater. Sharon B. Megdal et al., *Groundwater Governance in the United States: Common Priorities and Challenges*, 53 *Groundwater* 677, 678 (Sept.-Oct. 2015). One state did not respond. Twenty-five states indicated that the laws recognized the connection between surface water and groundwater, while 43 states responded that state regulation addressed groundwater quality. *Id.* Three states did not respond to either of those questions. *Id.* Thirty-one states indicated that local agencies have at least some groundwater oversight and enforcement authority. *Id.* The top priority for state groundwater regulation is groundwater quality and contamination, with 45 states indicating that issue is a priority. *Id.* at 681.

Based on variation in geology, climate, and groundwater use, state governments are in the best position to regulate groundwater quality, including any point source releases. Discharges to groundwater are often complex and site-specific, and states effectively manage these discharges with a range of regulatory measures. The flexibility afforded states empowers those with expertise in local environmental conditions to make decisions for the most effective regulation of pollution discharged to groundwater in each state.

Regarding groundwater pollution, some states have adopted groundwater discharge permit authority other than NPDES to regulate discharges to groundwater, while others rely on the Resource Conservation and Recovery Act (RCRA) or the Safe Drinking Water Act's Underground Injection Control (UIC) program to regulate discharges to groundwater. A state's role in regulating pollutant discharges to groundwater through the RCRA and UIC programs requires expertise and hydrologic understanding of flowpaths, time, and geographic area.

RCRA permits may include groundwater effects on nearby surface waters as part of a remediation program, and UIC wells—such as Class III (solution mining), IV (hazardous/radioactive waste wells) and V (non-hazardous waste) permits—may consider potential impacts to surface waters. Class II wells (oil and gas produced fluids with deeper injection depths and the greatest volume of waste to be disposed) receive limited review.

Most states implement the CWA's NPDES permit program for discharges to surface water. The most significant challenge for states is coordinating state programs that regulate planned point source releases to groundwater hydrologically connected to surface water. The state must ensure that proposed releases are treated uniformly across those programs. States working with EPA and other federal agencies should target cross-program coordination to protect all waters in appropriate legal ways, recognizing their essential health



and economic contributions to the affected communities.

NGWA conducted a review of state regulatory programs for discharges of pollutants to surface water or groundwater and found that sufficient regulations exist at the state level to provide protection of water resources. In fact, several states have chosen to regulate point source discharges of pollutants to groundwater via hydrologically connected sources.

States also already regulate many aspects of the groundwater industry. Every state but Pennsylvania regulates water well construction. Most, if not all, states require that water well contractors be licensed. Continuing licensure often requires continuing education. Some states provide for special licenses, testing, and training for pump installers. Regulating discharges of groundwater through the NPDES program would add an additional, often duplicative, layer of regulation to this process. The additional regulation would also needlessly increase the cost of water well systems to consumers.

Although water well contractors are highly unlikely to conduct activities that would add pollution to groundwater, and even more highly unlikely to introduce pollution that would eventually migrate to jurisdictional waters, subjecting these releases to NPDES permit requirements causes uncertainty. The uncertainty includes the specter of litigation that alleges that an NPDES permit is required. *See, e.g., Colorado Tr. for Prot. & Benefits v. Souder, Miller and Assocs.,*

*Inc.*, 870 F. Supp. 2d 1173 (D. Colo. 2012) (action against surveying firm alleged that drilling of boreholes discharged contaminants into waters of the United States in violation of the CWA; District Court granted summary judgement on the CWA claim).



## CONCLUSION

Groundwater protection in the United States has been called “fragmented.” *Supra* Megdal et al., at 681. A comprehensive approach is needed to most effectively protect groundwater quality and quantity. Providing for regulation of discharges to groundwater under the NPDES program only further fragments the system of groundwater governance. The NPDES program would only protect groundwater in those circumstances where the contaminants eventually make their way to jurisdictional waters.

Determination of whether the groundwater is “hydrologically connected” or whether the pollution is “fairly traceable” to the discharge to groundwater would likely be very difficult and very costly. In some cases, the time and expense would lead to a conclusion that no NPDES permit is needed. If an NPDES is needed, another costly and time-consuming process would determine the effluent limitations, which would, in turn, prove costly to enforce. The resources that would be used in this endeavor are better spent towards a collaborative federal-state-local effort to protect groundwater resources.

Because groundwater is not a “navigable water,” the responsibility lies with the states to regulate discharges to groundwater. States and the EPA must work together in the spirit of cooperative federalism to achieve the CWA objective of “water quality that provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.”

*Amici* submit that this can best be accomplished by leaving CWA regulation of discharges to groundwater to the provisions contained in 33 U.S.C. § 1329. Those provisions leave primary responsibility for control of nonpoint pollution, including discharges to groundwater, to the states, while giving the federal government a meaningful role. Ensuring groundwater remains a safe, reliable water resource requires state, federal, and local governments to work together to ensure its management, protection, and use. While the federal government’s role in groundwater protection should be focused on research, technology transfer, and funding assistance, states should determine the level of protection afforded to groundwater since they manage the groundwater resource. The level of protection that states provide may vary with the use and value of the resource.

The judgment below should be reversed.

Respectfully submitted,

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