

No. 18-260

IN THE
Supreme Court of the United States

COUNTY OF MAUI,
Petitioner,

v.

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

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

**AMICUS CURIAE BRIEF OF THE NATIONAL
CONFERENCE OF STATE LEGISLATURES, NATIONAL
ASSOCIATION OF COUNTIES, NATIONAL LEAGUE OF
CITIES, INTERNATIONAL CITY/COUNTY MANAGEMENT
ASSOCIATION, INTERNATIONAL MUNICIPAL LAWYERS
ASSOCIATION, ASSOCIATION OF CALIFORNIA WATER
AGENCIES, CALIFORNIA ASSOCIATION OF SANITATION
AGENCIES, IDAHO WATER USERS ASSOCIATION, IDAHO
WATER RESOURCES BOARD, ET AL
IN SUPPORT OF PETITIONER**

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<i>Gulf Oil Corp. v. Copp Paying Co.</i> 419 U.S. 186 (1974).....	24
<i>Hawaiï Wildlife Fund v. Cty. of Maui</i> 886 F.3d 737 (9th Cir. 2018).....	5
<i>Hess v. Port Authority Trans–Hudson Corp</i> 513 U.S. 30 (1994).....	28
<i>Kansas v. Colorado</i> , No. 105, ORIGINAL, 2000 WL 34508307, at *6 (U.S. Aug. 31, 2000)	34
<i>Kelley v. United States</i> 618 F. Supp. 1103 (W.D. Mich. 1985)	23
<i>Martin v. Waddell</i> 41 U.S. 367 (1842).....	12
<i>N.Y. v. E.P.A.</i> 138 S. Ct. 1164 (2018).....	12
<i>Or. Nat. Desert Ass’n v. United States Forest Serv.</i> 550 F.3d 778 (9th Cir. 2008).....	26
<i>Oregon v. Corvallis Sand & Gravel Co.</i> 429 U.S. 363 (1977).....	12

<i>PPL Montana, LCC v. Montana</i> 132 S.Ct. 1215 (2012).....	13
<i>Pollard’s Lessee v. Hagan</i> 44 U.S. 212 (1845).....	12
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<i>Riverkeeper, Inc. v. E.P.A.</i> 138 S. Ct. 1165 (2018).....	12
<i>Shively v. Bowlby</i> 152 U.S. 1 (1894).....	12
<i>Solid Waste Agency of N. Cook County v. United States Army Corps of Eng’r (SWANCC)</i> 531 U.S. 159 (2001).....	28
<i>Texas v. New Mexico</i> 462 U.S. 554 (1983).....	34
<i>United States v. Bass</i> 404 U.S. 336 (1971).....	29
<i>United States v. Burlington N. & Santa Fe Ry. Co.</i> 520 F.3d 918 (9th Cir. 2008), rev’d, 556 U.S. 599 (2009)	35
<i>United States v. Lopez</i> 514 U.S. 549 (1995).....	27

<i>United States v. Rio Grande Dam & Irrig. Co.</i> 174 U.S. 690 (1899).....	12
<i>Village of Oconomowoc Lake v. Dayton Hudson Corp.</i> 24 F.3d 962 (7th Cir. 1994).....	21, 22, 23
<i>W.R. Grace & Co. v. E.P.A.</i> , 261 F.3d 330 (3d Cir. 2001)	9
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33 U.S.C. § 1251(b)	28, 29
33 U.S.C. § 1311(a)	25
33 U.S.C. § 1329	24
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40 C.F.R. § 122.26	19
40 C.F.R. § 122.44	31
40 C.F.R. § 122.44(d)(1)(i)	31
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40 C.F.R. §§ 130.2(g)-(i)	26
40 C.F.R. § 141	29
40 C.F.R. § 142	29
40 C.F.R. §§ 144.1-144.89	17, 29
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Other Authorities

California Regional Water Quality Control Board, Santa Ana Region, <i>Order No. 2004-002, Producer/User Water Recycling Requirements for Orange County Water District , Interim Water Factory 21 and Groundwater Replenishment System Groundwater Recharge and Reuse at Talbert Gap Seawater Intrusion Barrier and Kraemer/Miller Recharge Basins, Orange County (Mar. 12, 2004)</i>	16
--	----

California State Water Resources Control Board, <i>Order No. WQ 2014-0194-DWQ, Statewide National Pollutant Discharge Elimination System Permit for Drinking Water System Discharges to Waters of the United States</i> (Nov. 18, 2014).....	10
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Definition of “Waters of the United States”—Recodification of Preexisting Rule, 83 Fed. Reg. 134, 32233 (July 12, 2018).....	27
Environmental Quality, Oversight Monitor, <i>Idaho's Treasure; the Eastern Snake River Plain Aquifer</i> (May 2005)	35
United States Environmental Protection Agency, <i>Guide for Estimating Infiltration and Inflow</i> , June 2014.....	18
Katherine Hafner, <i>HRSD is now injecting millions of gallons of treated wastewater into our aquifer</i> , Daily Press (Apr. 17, 2019).....	15

Memorandum: Achieving Water Quality Through Integrated Municipal Stormwater and Wastewater Plans (Oct. 27, 2011).....20

Orange County Water District, OCWD
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Order No. R4-2012-0175, NPDES
Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating From the City of Long Beach MS4 (Nov. 8, 2012)19

Order No. WQ 2014-0194-DWQ,
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Paul Jones and Patricia Sinicropi,
“Invest in water reuse infrastructure for a strong American economy,” The Hill, Apr 14, 2018.....13

R. Herndon and M. Markus, *Large-Scale Aquifer Replenishment and Seawater Intrusion Control Using Recycled Water in Southern California* (2008)14

U.S. Environmental Protection Agency,
NPDES Permit Writers' Manual at
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United States Environmental
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Water Pollution Control Legislation:
Hearing Before the H. Comm. on
Public Works, 92nd Cong. 281-93
(1971) (statement of Hon. William
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INTERESTS OF AMICI CURIAE

Amici are organizations from across the United States whose members are public and private entities that provide water supply, water conservation, flood and stormwater management, and wastewater treatment services to the public.¹

The Association of California Water Agencies (“ACWA”) is the largest coalition of public water agencies in the nation, representing 440 water agencies. ACWA’s members range in size from small irrigation districts to some of the largest water wholesalers in the world.

The California Association of Sanitation Agencies (“CASA”) is a nonprofit mutual benefit corporation comprised of more than 100 local public agencies that provide wastewater collection, treatment, water recycling, renewable energy and biosolids management services to millions of California residents, businesses, industries, and institutions.

The Idaho Water Users Association (“IWUA”) is a nonprofit corporation representing over 300 canal companies, irrigation districts, water districts, groundwater districts, municipal and public water suppliers, hydroelectric companies, aquaculture

¹ Pursuant to Rule 37.6 of the Rules of the Supreme Court, no counsel for a party to the case authored this brief in whole or in part, and neither such counsel nor any party made a monetary contribution intended to fund the preparation or submission of the brief. Counsel of record received notice at least 10 days prior to the due date of the amicus curiae’s intention to file this brief. All counsel of record have consented to the filing of this brief.

interests, agri-businesses, professional firms, and individuals dedicated to the wise and efficient use of the Idaho's water resources.

The Idaho Water Resources Board ("IWRB") is an agency of the State of Idaho responsible for the formulation and implementation of the Idaho state water plan, financing of water projects, and the operation of programs that support sustainable management of Idaho's water resources. IWRB assists with the planning and operation of managed aquifer recharge programs to increase sustainability of the Eastern Snake River Plain Aquifer ("ESPA"). IWRB currently funds operation of seven off-canal managed aquifer recharge sites and numerous on-canal recharge projects on the ESPA.

The International City/County Management Association ("ICMA") is a nonprofit professional and educational organization of over 9,000 appointed chief executives and assistants serving cities, counties, towns, and regional entities. ICMA's mission is to create excellence in local governance by advocating and developing the professional management of local governments throughout the world.

The International Municipal Lawyers Association ("IMLA") is a nonprofit professional organization of more than 3,000 local government entities, including cities, counties, and special districts. IMLA's mission is to advance responsible development of municipal law through education and advocacy.

The League of California Cities ("LCC") is an association of 475 California cities dedicated to protecting and restoring local control to provide for

the public health, safety, and welfare of their residents, and to enhance the quality of life for all Californians.

The National Association of Counties (“NACo”) is the only national association that represents county governments in the United States. NACo serves as an advocate for county government and works to ensure that counties have the resources, skills and support needed to successfully lead their communities. NACo’s members provide water wastewater and flood control services to the nation’s 3,069 counties.

The National Conference of State Legislatures (“NCSL”) is a bipartisan organization that serves the legislators and staffs of the Nation’s 50 States, its Commonwealths, and Territories. NCSL provides research, technical assistance, and opportunities for policymakers to exchange ideas on pressing issues. NCSL advocates for the interests of state governments before Congress and federal agencies, and regularly submits amicus briefs in cases, like this one, that raise issues of vital state concern.

The National League of Cities (“NLC”) is the voice of America’s cities, towns and villages, representing more than 200 million people. NLC works to strengthen local leadership, influence federal policy and drive innovative solutions.

The National Water Resources Association (“NWRA”) is a nonprofit, voluntary organization of state water associations, whose members include cities, towns, water conservation and conservancy districts, irrigation and reservoir companies, ditch companies, farmers, ranchers, and others with an

interest in water issues in the western states. NWRA has member associations in Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Texas, Utah, and Washington.

The WateReuse Association is an internationally-recognized organization made up of water utilities, businesses, government agencies and not-for-profit organizations dedicated to recycling water to ensure communities have a safe, reliable and cost-effective supply of water. WateReuse advocates for policies, laws and funding at the state and federal level to increase the practice of recycling water.

The Western Coalition of Arid States (“WESTCAS”) is an organization of water and wastewater service providers who advocate for water resources in the arid southwest. Members are from Arizona, California, Colorado, Nevada, New Mexico and Texas. WESTCAS was formed in 1992 to collectively address water quality issues in an area of the country where precipitation is limited and unique arid ecosystems are the norm.

Amici submit this brief based on their interest in ensuring that the Clean Water Act National Pollutant Discharge Elimination System (“NPDES”)² permitting scheme remains predictable and lawfully within the scope of the Clean Water Act.

² Clean Water Act, 33 U.S.C. §§ 1251-1388 (1972).

SUMMARY OF ARGUMENT

Amici submit this brief to highlight the risk posed to their members and to provide the Court with examples of projects that are environmentally beneficial and/or necessary for protecting basic public health and safety that could be hindered by permitting under the Clean Water Act's NPDES program.

In its decision below, the Ninth Circuit rewrote the Clean Water Act to create a new test for determining whether a Clean Water Act NPDES permit is required for a discharge to “waters of the United States.” Specifically, the court found the County of Maui violated the Clean Water Act “because (1) the County discharged pollutants from a point source, (2) the pollutants are fairly traceable from the point source to a navigable water such that the discharge is the functional equivalent of a discharge into the navigable water, and (3) the pollutant levels reaching navigable water are more than de minimis.” *Hawai'i Wildlife Fund v. Cty. of Maui*, 886 F.3d 737, 749 (9th Cir. 2018).

This new “fairly traceable” test redefines and expands the circumstances under which an NPDES permit is required in a manner that will potentially infringe on the ability of state and local governments to provide core services that are essential to protecting public health and safety.

Amici feel strongly that the NPDES program is not the appropriate legal or practical solution for managing groundwater. Rather, releases of pollutants into groundwater are already regulated

through other legal mechanisms. Adding another federal layer of regulation will impose additional limitations on how and when government agencies can operate water supply, sanitation and flood control projects that protect public health and the environment.

Amici respectfully submit this brief in support of Petitioner and Appellant County of Maui (“County”), and request the Court reverse the 9th Circuit’s decision for the following reasons:

1. Many of amici’s members rely on the ability to use and interact with groundwater without the surface water oriented limitations of the Clean Water Act’s NPDES program. Expanding the program to include releases to groundwater that reach navigable waters is unnecessary and will expose public agencies to liability for activities that are inseparable from their core services.
2. The Clean Water Act’s NPDES program was not designed or intended to apply to releases to (or through) groundwater. The Ninth Circuit’s decision reads new language into the Act and changes the role of the states. There are other authorities, including the Clean Water Act’s Nonpoint Source Management Program and other state and federal laws that are better designed to address releases to groundwater. Without a clear statement from Congress about the desire to upend this regulatory regime, the Court should

not extend the Act into areas traditionally governed by the states.

3. In many instances, issuing Amici's members NPDES permits for releases to groundwater will be infeasible because of the surface water oriented nature of the Clean Water Act and the varied groundwater geology present across the United States. Groundwater is complex and imposing NPDES requirements on releases to groundwater is very likely to result in unattainable or arbitrary standards and liability for amici's members.

For the reasons set forth herein, amici urge the Court to reverse the Ninth Circuit's decision.

ARGUMENT

I. AMICI'S MEMBER'S RELY ON THE ABILITY TO USE AND INTERACT WITH GROUNDWATER

Amici's members provide water supply, sanitation and flood control services to the public. These services address the most basic human needs and they are critical for protecting public health and safety.

To provide these services, Amici's members operate projects that protect water supply by pressurizing potable drinking water lines, that deliver irrigation water in varied environments, that rely on groundwater for storage, that collect sewage for treatment in compliance with the Clean Water Act and that remove and treat potentially polluted stormwater from city streets before it can become a hazard to the public.

In each case, there is a high potential for water to flow from these projects, into groundwater and in some cases from there into surface waters. Sometimes this relationship is intentional to protect a resource (like groundwater) or to prevent pollution from being directly discharged to surface waters. In others, such as irrigation canals and other water delivery systems, it is not intentional but the risk to public health or the environment is low.

The reason why issuing NPDES permits for these types of projects is so problematic is explained in greater detail below. However, it boils down to the fact that the NPDES program is designed to regulate

discharges into surface water. The technical requirements and even the means of demonstrating compliance are geared toward the surface water setting. The program is ill suited to managing releases to groundwater. Imposing it on projects that have only an incidental relationship to surface water is very likely to result in increased costs and liability for amici's members.

A. Potable water delivery

Potable water delivery in the United States involves the use of pipelines, aqueducts and reservoirs that can and do leak to groundwater.

Sometimes, this is expected. In order to ensure that untreated groundwater cannot enter potable water lines, water in the lines is kept at high pressure so that the water will flow out in the event of a leak and prevent groundwater from entering the potable system. Older systems have leaks that are not discoverable because they are buried underground, and there is no visible sign of the leak at the surface.

Pressurizing the lines is a safe, time tested method of delivering potable water. Nonetheless, because potable water contains disinfectants such as chlorine or chloramine,³ releases of potable water to groundwater from pressurized lines could implicate the NPDES program under the Ninth Circuit's decision – if the potable water reach surface waters.

³ Disinfectants in potable water can be considered a pollutant. See, e.g., *W.R. Grace & Co. v. E.P.A.*, 261 F.3d 330, 333 (3d Cir. 2001) (describing disinfection process creating chloramines to inactivate bacteria).

In that case, NPDES permitting could require water purveyors to reduce chlorine and chloramine levels in their water delivery lines to prevent the disinfectants from reaching surface waters via leaks.

In 2014, the State of California issued an NPDES permit that requires potable water to be dechlorinated before being discharged to surface waters. The permit is ostensibly aimed at water line flushing, but it also prohibits discharges of chlorinated water from drinking water treatment plants to storage reservoirs – if those reservoirs are considered “waters of the United States” under the Act. California State Water Resources Control Board, *Order No. WQ 2014-0194-DWQ, Statewide National Pollutant Discharge Elimination System Permit for Drinking Water System Discharges to Waters of the United States* (Nov. 18, 2014), at 6, 14. https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0194_dwq.pdf.

Applying the same prohibition to releases from underground delivery lines would leave water purveyors with the option of either reducing disinfectant levels in the potable water, or spending millions of dollars chasing leaks that might not be discoverable. That kind of approach to managing releases to groundwater is unnecessary and would interfere with the safety of the water provided.

B. Water supply and irrigation

Municipal water suppliers move water vast distances across the country. The delivery system is made up of canals, aqueducts, pipelines and reservoirs. Some of this infrastructure is lined and

fully contains the water being transferred, but some is not. Water escapes from these facilities and into underlying or surrounding groundwater formations, and in some cases back to surface waters.

Similarly, agricultural water delivery relies on canals and aqueducts. Many of these facilities are unlined and allow water to seep into the ground, in some cases reaching surface water. For example, in eastern Idaho, the ground is highly permeable and irrigation water routinely leaves the delivery system and infiltrates into underlying groundwater.

The State of Idaho takes advantage of this system by engaging in managed recharge.⁴ Managed recharge is accomplished by diverting water into unlined canals and/or basins and allowing that water to seep into the ground. Some, if not most, of the recharged water will stay in the aquifer. However, some portion of the recharged water will flow to springs or seeps that feed surface streams.

Idaho is not the only state that relies on managed recharge. It is a valuable tool used throughout the arid west to stabilize declining water supplies.

⁴ In 2009, Idaho legislature enacted House Bill 264 approving the Eastern Snake Plain Comprehensive Aquifer Management Plan (“CAMP”). Idaho Code Ann. § 42-1734B (West 2017). The CAMP process established goals managing the aquifer, including managed aquifer recharge. The Idaho Legislature reiterated its commitment to recharge in 2016, through a Senate Concurrent Resolution directing the Idaho Water Resources Board (“IWRB”) to develop a program to recharge an annual average of 250,000 acre-feet by 2024. The goal of this managed recharge is to stabilize and recover the Eastern Snake River Plain Aquifer and to restore spring flows that feed the Snake River and its tributaries.

Imposing the NPDES framework on managed groundwater recharge would effectively halt these efforts.

Raw water can carry pollutants. *Catskill Mountains Chapter of Trout Unlimited, Inc. v. E.P.A.*, 846 F.3d 492, 500 (2d Cir. 2017), cert. denied sub nom. *N.Y. v. E.P.A.*, 138 S. Ct. 1164 (2018), and cert. denied sub nom. *Riverkeeper, Inc. v. E.P.A.*, 138 S. Ct. 1165 (2018). And although water transfers are exempt from the NPDES program, *id.* it is unclear whether water that escapes during transit qualifies for the exemption. The Ninth Circuit's rationale could mandate NPDES permits for these releases.

Management of water supplies is a fundamental right (and responsibility) of the states.⁵ 33 U.S.C. § 1251(g) (1972); *PPL Montana, LCC v. Montana*, 132 S.Ct. 1215, 1226-28 (2012); *Oregon v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 372-74 (1977); *Shively v. Bowlby*, 152 U.S. 1, 49-50 (1894); *Pollard's Lessee v. Hagan*, 44 U.S. 212, 224-29 (1845); *Martin v. Waddell*, 41 U.S. 367, 410 (1842). Regulating releases to groundwater that are incidental to water transfers under the NPDES program raises

⁵ Under the equal footing doctrine, each state retains sovereign authority over the navigable waters and the underlying lands within its borders. *California v. United States*, 438 U.S. 645, 662 (1978), citing *United States v. Rio Grande Dam & Irrig. Co.*, 174 U.S. 690, 709 (1899). The states' authority is subject to the federal government's power to regulate and control navigation, however the principle informs the meaning of Clean Water Act. The Act cannot be construed to limit or hinder water rights and the movement of water for purposes of supply within the states.

constitutional questions and potentially violates the plain terms of the Clean Water Act.

C. Groundwater recharge and water reuse

Water recycling is the process of intentionally capturing wastewater, stormwater, saltwater or graywater and cleaning it as needed for a designated beneficial freshwater purpose such as drinking, industrial processes, surface or ground water replenishment, and watershed restoration.

The importance of encouraging recycled water development cannot be overstated. Communities across the country are incorporating water reuse into their water management strategies as a proven method for ensuring a safe, reliable, locally controlled water supply. By 2027, the volume of recycled water produced in the United States is projected to increase 37% from 4.8 billion gallons per day to 6.6 billion gallons per day. Paul Jones and Patricia Sinicropi, “*Invest in water reuse infrastructure for a strong American economy*,” The Hill, Apr 14, 2018.

<https://thehill.com/opinion/energy-environment/383180-invest-in-water-reuse-infrastructure-for-a-strong-american-economy>.

Recycled water can contain low levels of chlorine, nitrogen, and total dissolved solids. These constituents are present at levels that are safe for public health and (depending on the level of treatment) human consumption, but they are still classified as pollutants under the Clean Water Act. *See* 33 U.S.C. § 1362(6).

As a result, the Ninth Circuit’s decision could impede reuse projects by requiring NPDES permits

in cases where the recycled water may end up in surface waters after being released to groundwater. This could occur in the case of groundwater recharge or injection (like in Maui), seepage from recycled water storage ponds and even in cases where the water is used for irrigation and it seeps through groundwater to surface waters.

Recycled water is the future of water supply planning all over the United States – from small scale irrigation projects, to large scale programs designed to strengthen regional water security.

For example, in southern California, water supply agencies have been injecting recycled water into the ground to prevent seawater from polluting aquifers used for drinking water supply. Seawater intrusion has been a major factor governing the amount of groundwater that can be reliably pumped from the Orange County groundwater basin. Between 1953 and 1975, four seawater intrusion barriers were constructed along coastal southern California in Los Angeles and Orange counties. R. Herndon and M. Markus, *Large-Scale Aquifer Replenishment and Seawater Intrusion Control Using Recycled Water in Southern California* (2008) <https://www.ocwd.com/media/1857/large-scale-aquifer-replenishment-and-seawater-intrusion-control-using-recycled-water-in-southern-california.pdf>.

The seawater intrusion barriers consist of a series of wells that sit several miles inland from the coast and inject highly treated recycled water into the aquifer to “create a pressurized subsurface hydraulic “mound” or “ridge” that prevents the

inland flow of saline groundwater.” *Id.*, see also Orange County Water District, *OCWD Partners with U.S. Navy to Combat Seawater Intrusion* (Dec. 2017), <https://www.ocwd.com/news-events/newsletter/2017/december-2017/ocwd-partners-with-us-navy-to-combat-seawater-intrusion/>.

The barriers are located up to several miles inland and are designed to intentionally reverse the groundwater flow so that recycled water injected into the ground will push outward toward the ocean. They are carefully managed to maximize the use of recycled water and prevent seawater from moving further inland.

A similar project is underway in Norfolk Virginia – in this case to limit land subsidence, help reduce the nutrient discharges to the Chesapeake Bay, and hopefully reduce flooding.

At least half of the land subsidence in the Norfolk/Hampton Roads area is thought to be caused by the compacting of the aquifer. Katherine Hafner, *HRSD is now injecting millions of gallons of treated wastewater into our aquifer*, *Daily Press* (Apr. 17, 2019), <https://www.dailypress.com/news/politics/dp-wns-glad-you-asked-water-aquafier-0418-story.html>.

Land subsidence, coupled with sea level rise results in large scale flooding. The Hampton Roads Sanitary District (“HRSD”) has started a groundwater recharge project that will eliminate up to 90% of the District’s current discharges to the Chesapeake Bay by injecting the water into the Potomac Aquifer. The project is designed to prevent further land subsidence in the area. Darryl Fears,

Hampton Roads' solution to stop the land from sinking? *Wastewater*, Wash. Post (Oct. 20, 2016), https://www.washingtonpost.com/national/health-science/hampton-roads-solution-to-stop-the-land-from-sinking-wastewater/2016/10/20/9537865a-8198-11e6-b002-307601806392_story.html?utm_term=.f33a207e2df1.

Both the southern California and Virginia projects are highly managed. Neither is designed to release water to the ocean (or the Chesapeake Bay), and there is no indication that such releases are occurring. Nonetheless, because of the nature of the activity, the Ninth Circuit's decision creates risk of potential future liability, and could hinder similar projects that have higher connectivity to surface waters.

EPA has never required NPDES permits for these types of projects because they are already covered by other federal and state programs. Water recycling programs that utilize underground injection as an environmental buffer to provide natural filtration are highly regulated and operate in compliance with the Federal Safe Drinking Water Act's Underground Injection Control ("UIC") requirements. 40 C.F.R. §§ 144.1-144.89 (2010).⁶

⁶ Orange County Water District's seawater intrusion barrier operation is subject to stringent state law requirements. California Regional Water Quality Control Board, Santa Ana Region, *Order No. 2004-002, Producer/User Water Recycling Requirements for Orange County Water District, Interim Water Factory 21 and Groundwater Replenishment System Groundwater Recharge and Reuse at Talbert Gap Seawater Intrusion Barrier and Kraemer/Miller Recharge Basins, Orange County* (Mar 12, 2004).

Requiring a NPDES permit would be duplicative and burdensome.

Imposing the NPDES framework on responsible, well planned recycled water projects will limit their viability by increasing operational costs and potentially exposing end users to liability. The court's "fairly traceable" test could therefore cause a significant setback to water reuse policies and public support, which have gained important momentum in recent years.

D. Sewage collection

Basic sanitation is a core function of government that protects communities from disease and allows water utilities to recycle water, stretching supplies in water constrained environments.

Wastewater treatment utilities operate treatment plants and other critical infrastructure to convey, store, and treat wastewater. These utilities provide services that are essential to protecting public health and the environment.

Sewage is conveyed to wastewater treatment plants via a collection system. These systems range in size from a few hundred miles to several thousands of miles of buried pipe. Utilities implement a number of methods to maintain their systems, including closed circuit television inspections and rehabilitation and repair programs. Regardless of diligent and rigorous maintenance and repair, these systems can leak. With tens of thousands of miles of pipeline, leaks are difficult to

https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2004/04_002_wdr_ocwd_iwf21_03122004.pdf

predict and locate. Nonetheless, utilities have programs in place to locate and fix leaks over time and, in general, most leaks are found and fixed through this process.

Water released to groundwater from leaks in the collection system have never been covered by the NPDES program. Instead, EPA requires any agency seeking a grant from EPA or loans from the Clean Water Act State Revolving Fund program to demonstrate that leaks are kept to a minimum and there is a program in place to adequately maintain the collection system. 40 C.F.R. § 35.2120 (1985); U.S. Environmental Protection Agency, *Guide for Estimating Infiltration and Inflow*, June 2014 (“Virtually every sewer system has some infiltration and/or inflow. Historically, small amounts of I&I are expected and tolerated.”)⁷

⁷ That has not stopped environmental groups and opportunistic plaintiffs from trying to change the status quo. For example, in *26 Crown Assocs. v. Greater New Haven Reg'l Water Pollution Control Auth.*, the plaintiffs alleged that the local sewer agency must obtain an NPDES permit every time the New Haven collection system backs up into a basement, seeps into groundwater and enters navigable waters. *26 Crown Assocs. v. Greater New Haven Reg'l Water Pollution Control Auth.*, No. 3:15-cv-1439, 2017 WL 2960506 *1 (D. Conn. July 11, 2017). See also *California River Watch v. City of Laguna Beach*, Case 8:14-cv-01659 (C.D. Cal Oct. 14, 2014) Complaint at 5, (plaintiffs alleged pipeline cracks and other structural defects in the City’s collection system result in discharges to adjacent surface waters and represent a violation of Clean Water Act); and *California River Watch v. City of Santa Rosa*, Case 3:15-cv-02349 (N.D. Cal. May 27, 2015) Complaint at 8-9 (alleging same.)

NPDES permitting as required by the Ninth Circuit's decision could force wastewater utilities to chase every possible leak immediately or face fines of up to \$37,500 per day, per leak. Diverting massive resources to leak detection would require dramatic rate increases – that can be very difficult for communities located in areas with aging infrastructure.

E. Stormwater pollution control

Amici's members operate flood control systems – known in environmental parlance as municipal separate storm sewer systems (“MS4s”) – to protect human lives by diverting stormflows away from developed areas during wet weather.

The Clean Water Act requires MS4s to operate under NPDES permits. Permit requirements vary by the size of the population the system serves. 33 U.S.C. § 1342(p)(3)(B) (1972); 40 C.F.R. § 122.26 (2011).⁸

EPA regulations and guidance documents require MS4 operators to implement Low Impact Development (“LID”) and other “green” infrastructure on new development within their jurisdiction.⁹

⁸ EPA regulations do not require very small systems to obtain permits.

⁹ See, e.g., U.S. EPA - Nancy Stoner and Cynthia Giles, *Memorandum: Achieving Water Quality Through Integrated Municipal Stormwater and Wastewater Plans* (Oct. 27, 2011), https://www.epa.gov/sites/production/files/2015-10/documents/memointegratedmunicipalplans_0.pdf; see also California Regional Water Quality Control Board Los Angeles Region, *Order No. R4-2012-0175, NPDES Permit No.*

Urban development has caused hardscaping to be the dominant landform in urban areas. During rain events, water flows off of buildings and city streets at much higher rates and volumes than would occur under natural conditions. Stormwater flows from urban areas carry pollutants to surface waters. LID and green infrastructure attempt to reduce pollutant flows by retaining stormwater in infiltration basins and rain gardens that most often divert the water (or portions thereof) to groundwater. This prevents the pollutants from reaching surface water, and reduces the volume and speed of the flows to preserve the “natural” condition of the system.¹⁰

The Ninth Circuit’s decision calls this kind of activity into question because under the Court of Appeals’ rationale, if the pollutants in stormwater percolate through groundwater to adjacent streams, it is a violation of the Clean Water Act.

CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating From the City of Long Beach MS4 (Nov. 8, 2012),

https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/la_ms4/2012/Order%20R4-2012-0175%20-%20A%20Final%20Order%20revised.pdf (provision VI.D.7.c.i - requiring new development and redevelopment projects to retain on-site stormwater runoff from the 0.75-inch , 24-hour rain event or the 85th percentile, 24-hour rain event).

¹⁰ EPA has expressed a preference for diverting these flows to groundwater because it keeps pollutants out of surface streams – regardless of the impact to groundwater quality, which is often localized and is outside the purvey of the Clean Water Act. See note 8, *supra*.

EPA regulations and guidance require MS4 operators (mostly cities and counties) to use their land use authority to impose LID requirements on new private development within their jurisdiction. As a result, many LID facilities are privately owned and maintained. Implementing the Ninth Circuit's decision would mean thousands of individually owned LID facilities would need NPDES permits.

The Seventh Circuit Court of Appeals dealt with this exact question in *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994). In that case, the Court of Appeals rejected a “not in my backyard” lawsuit challenging construction of a Target warehouse. The plaintiffs alleged that a retention basin that would prevent pollutants from flowing off of the warehouse parking lot from entering a nearby stream by infiltrating it into groundwater still required an NPDES permit.

The Seventh Circuit rejected the claim holding that Congress did not intend to regulate releases to groundwater with the NPDES program:

The omission of ground waters from the regulations is not an oversight. Members of Congress have proposed adding ground waters to the scope of the Clean Water Act, but these proposals have been defeated, and the EPA evidently has decided not to wade in on its own. . . . [W]e are confident that the statute Congress enacted excludes some waters, and ground waters are a logical candidate. Two courts have held that ground waters are not part of the

(statutory) ‘waters of the United States.’ [citation]. The possibility of a hydrological connection cannot be denied [citation] but neither the statute nor the regulations makes such a possibility a sufficient ground of regulation.

Village of Oconomowoc, 24 F.3d at 965.

EPA has encouraged and funded the development of LID and green infrastructure. United States Environmental Protection Agency Water Infrastructure and Resiliency Finance Center, *Federal and State Funding Programs - Stormwater & Green Infrastructure Projects*, April 2017. https://www.epa.gov/sites/production/files/2017-05/documents/federal-and-california-sw-funding-programs_0.pdf. Many municipalities have invested heavily in these projects with the support and guidance of EPA.

The Ninth Circuit’s decision would put these projects at risk because it would impose surface water oriented requirements on releases to groundwater, adding a significant layer of expense and liability to private property owners who are required to install LID infrastructure in their development projects. Imposing NPDES requirements in this setting will discourage new LID and green infrastructure.

II. CONGRESS DID NOT INTEND THE CLEAN WATER ACT TO REGULATE RELEASES TO (OR THROUGH) GROUNDWATER

The text, structure, and legislative history of the Clean Water Act demonstrate Congress’s intent to

leave the regulation of groundwater to the states. *See, e.g. Village of Oconomowoc Lake*, 24 F.3d at 965 (stating “Congress elected to leave [regulation of groundwaters] to state law[.]”); *Tenn. Clean Water Network*, 905 F.3d at 439 (“[T]he states to regulate pollution of non-navigable waters” such as groundwater.)

A. Congress declined to extend the Act despite requests from the Administrator of the EPA

At a 1971 hearing before the Senate Public Works Committee, then EPA Administrator William Ruckelshaus requested that EPA be granted authority to regulate groundwater under the Clean Water Act. *Water Pollution Control Legislation: Hearing Before the H. Comm. on Public Works*, 92nd Cong. 281-93 (1971) (statement of Hon. William Ruckelshaus, Administrator, EPA) (emphasis added).

Despite this request, Congress rejected amendments to extend the scope of the NPDES program to include groundwater. As the Fifth Circuit observed in analyzing this legislative history, “there is not the slightest hint that any Member thought the bill would grant the Administrator any power to regulate deep-well disposal ***or any other form of groundwater pollution***. Instead, all the evidence points to precisely the opposite understanding.” *Exxon Corp. v. Train*, 554 F.2d 1310, 1328-29 (5th Cir. 1977) (emphasis added); *see also Kelley v. United States*, 618 F. Supp. 1103, 1107 (W.D. Mich. 1985) (acknowledging the “unmistakably clear legislative history .

demonstrat[ing] that Congress did not intend the Clean Water Act to extend federal regulatory and enforcement authority over groundwater contamination”).

The failure of a proposed amendment “strongly militates against a judgment that Congress intended a result that it expressly declined to enact.” *Gulf Oil Corp. v. Copp Paying Co.*, 419 U.S. 186, 200 (1974). The Congressional record provides strong evidence that Congress did not intend to regulate groundwater under the NPDES program.

B. Contributions to surface water from groundwater are nonpoint sources to be regulated by the states

Clean Water Act section 301(a) prohibits the discharge of a pollutant, from any point source, to navigable waters, without a permit. 33 U.S.C. § 1362(12) (2019); 33 U.S.C. § 1311(a) (1995). This is the basis of the NPDES permitting program.

The Clean Water Act also includes requirements for pollution that comes from nonpoint sources. The Clean Water Act’s Nonpoint Source Management Program requires each state to identify those waters within their jurisdiction that are impacted by nonpoint source pollution and develop a management plan for controlling pollution from those sources. 33 U.S.C. § 1329 (2002).

The Nonpoint Source Management Program encompasses the contribution of pollutants to the navigable waters that do not come from a point sources, and expressly applies to contributions from groundwater. Section 319, which defines the program, contains a groundwater-specific grant

provision – for the purpose of assisting states in “carrying out groundwater quality protection activities” that will “advance the State toward implementation of a comprehensive nonpoint source pollution control program.” § 1329(i)(1).

The Nonpoint Source Management Program does not take a one size fits all approach. Instead, states have flexibility to do a variety of things to achieve clean water. Activities include those necessary “to protect the quality of groundwater and to prevent contamination of groundwater from nonpoint sources.” The programs are robust, and rely the ability of state and local government to use their land use and police powers to impose requirements that are beyond federal authority or more appropriately implemented at the local level.

C. The Clean Water Act accounts for nonpoint sources with TMDLs and WQBELs

The Nonpoint Source Management Program works in parallel with the NPDES program to account for and manage all contributions of pollutants to the navigable waters. Section 303 of the Act (establishing the Water Quality Standards and Total Maximum Dailey Load (“TMDL”) programs) brings the two together.

Pursuant to section 303(d) of the Act, the EPA is required to adopt a TMDL for any water body that does not attain applicable Water Quality Standards, no matter the source of pollution. § 1313(d).

EPA regulations divide TMDLs into two parts: “Load Allocations,” for nonpoint source pollution, and “Wasteload Allocations,” for point source

pollution. 40 C.F.R. §§ 130.2(g)-(i) (1989). Waste Load Allocations are incorporated into NPDES permits as WQBELs. Load Allocations are incorporated into the Nonpoint Source state management plans.

The Ninth Circuit Court of Appeals' decision in *Pronsolino v. Nastri* illustrates how the programs work. *Pronsolino v. Nastri*, 291 F.3d 1123, 1123 (9th Cir. 2002). In that case, the EPA imposed a TMDL on a river that was polluted only by nonpoint sources of pollution. Some of the property owners who owned land in the river's watershed applied for an agricultural permit which was granted along with certain restrictions to comply with EPA's TMDL. The property owners sued the EPA, contending that EPA did not have the authority to impose TMDLs on a river that was polluted only by nonpoint sources of pollution.

Both the trial court and the Ninth Circuit Court of Appeals sided with the EPA, holding that the CWA's 303(d) listing and TMDLs requirements apply to all waters of the United States regardless of the source of impairment.

Thus groundwater contributions to surface water are accounted for under the Clean Water Act, and managed by the states as part of their role in the Act. *Am. Farm Bureau Fed'n v. E.P.A.*, 792 F.3d 281, 289 (3rd Cir. 2015) (stating "States in turn regulate nonpoint sources. There is significant input and oversight from the EPA, but it does not regulate nonpoint sources directly."); *see also Or. Nat. Desert Ass'n v. United States Forest Serv.*, 550 F.3d 778, 780 (9th Cir. 2008) (stating "The CWA's disparate

treatment of discharges from point sources and nonpoint sources is an organizational paradigm of the Act.”).

D. The Clean Water Act regulates the channels of commerce; regulating releases to groundwater with the NPDES program is a step into areas of traditional State control without a clear statement from Congress

The Clean Water Act is based on Congressional authority to regulate the channels of commerce. Definition of “Waters of the United States”—Recodification of Preexisting Rule, 83 Fed. Reg. 134, 32233 (July 12, 2018).¹¹ The concept imposes important limitations on the reach of the Act. Construing the Act to reach beyond the channels of commerce, and into areas of traditional state regulation calls into question the constitutional underpinnings of Congressional authority.

To avoid that conflict, Congress preserved the states’ central role in water management and land use planning when it adopted the Clean Water Act. The Act therefore approaches protection of the nation’s waters as a partnership between states and the federal government, and expressly reserves state

¹¹ As articulated in the Supreme Court’s decision in *United States v. Lopez*, Congressional power over commerce is limited to regulating the channels of interstate commerce, persons or things engaged or transferred in interstate commerce; and activities that substantially affect or substantially relate to interstate commerce. *United States v. Lopez*, 514 U.S. 549, 558-59 (1995).

authority over water and land use. 33 U.S.C. § 1251(b) (1987).

In *Solid Waste Agency of N. Cook County v. United States Army Corps of Engineers (SWANCC)*, this Court held that the Army Corps of Engineers lacks authority under the Act to regulate isolated waters, in part because holding otherwise would allow the Corps and the EPA to intrude into areas of traditional state authority. *Solid Waste Agency of N. Cook County v. United States Army Corps of Eng’r (SWANCC)*, 531 U.S. 159, 172 (2001). Justice Rehnquist, writing for the majority held:

[W]e find nothing approaching a clear statement from Congress that it intended § 404(a) to reach an abandoned sand and gravel pit such as we have here. Permitting respondents to claim federal jurisdiction over ponds and mudflats falling within the “Migratory Bird Rule” would result in a significant impingement of the States’ traditional and primary power over land and water use. *See, e.g., Hess v. Port Authority Trans–Hudson Corp.*, 513 U.S. 30, 44 (1994) (“[R]egulation of land use [is] a function traditionally performed by local governments”). Rather than expressing a desire to readjust the federal-state balance in this manner, Congress chose to “recognize, preserve, and protect the primary responsibilities and rights of States ... to plan the development and use ... of land and water resources ...” 33 U.S.C. § 1251(b). We thus read the statute as written to avoid the significant constitutional and federalism

questions raised by respondents' interpretation

SWANCC, 531 U.S. at 174.

The Court's holding applies equally to federal courts and prevents lower courts from expanding federal regulation beyond the scope of the Congressional action – especially into areas of traditional state control. “In traditionally sensitive areas, such as legislation affecting the federal balance, the requirement of clear statement assures that the legislature has in fact faced, and intended to bring into issue, the critical matters involved in the judicial decision.” *United States v. Bass*, 404 U.S. 336, 349 (1971).

The area of groundwater regulation is already occupied by multiple federal and state laws.¹² The

¹² See, e.g. the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-28 (2018); Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), 7 U.S.C. §136 (1996); Federal Safe Drinking Water Act, 42 U.S.C. §§ 300f-300j-27 (2016); Resource Conservation and Recovery Act (“RCRA”) 42 U.S.C. §§ 6901-6908a (1998); Safe Drinking Water Act Regulations, 40 C.F.R. § 141 (1975); Safe Drinking Water Act Regulations, 40 C.F.R. § 142 (1976); Underground Injection Control Program Regulations, 40 C.F.R. §§ 144.1-144.89 (2010); Cal. Water Code §§ 10720-10737.8 (West 2015) (California Sustainable Groundwater Management Act); Cal. Water Code §§ 13000 - 13399 (West 1970) (Porter Cologne Water Quality Control Act); Haw. Rev. Stat. § 13-168-1 (Hawaii Water Commission Rules on groundwater); Idaho Code Ann. § 42-1734B (West 2017) (Idaho CAMP Program); Mo. Ann. Stat. § 644.143 (West 2019) (Missouri Clean Water Law); Or. Rev. Stat. § 468b.150-197 (2009) (prevention of groundwater contamination); Wash. Admin. Code § 173-200 (West 1990) (Water Quality Standards for Groundwaters of the State of Washington).

Ninth Circuit's decision will impose the Clean Water Act's NPDES program onto a landscape that is already fully regulated, and erase the role of the Nonpoint Source Management Program. The Clean Water Act does not include any kind of clear statement of intent to regulate groundwater in this way. In fact, all evidence is to the contrary, that Congress intended to leave regulation of groundwater (and its contribution to surface waters) to the states. For that reason, the Ninth Circuit's decision should be reversed.

III. COMPLIANCE WITH NPDES PROGRAM REQUIREMENTS IS NOT FEASIBLE FOR RELEASES TO (OR THROUGH) GROUNDWATER

The varied nature of groundwater, and the fact that Clean Water Act NPDES requirements are written in terms of discharges to surface water make implementing the Ninth Circuit's decision infeasible. In short, the Clean Water Act relies on the ability to accurately measure the pollutants that are being discharged to surface waters at the point of discharge. Pollutants that flow through groundwater first prevent that kind of assessment because the point of entry to surface waters is obscured, and the pollutants can change during the course of their journey.

A. The Clean Water Act and its implementing regulations are drafted in terms of discharges to surface water

The foundational terms and requirements of the Clean Water Act apply to discharges of pollutants to jurisdictional surface waters. The operative

requirements of the Act are all written in terms of managing the chemistry of a discharge and the relationship it will have to the chemical, physical and biological integrity of the receiving surface water. The NPDES program simply isn't designed to manage releases to or through groundwater.

For example, the Water Quality Standards program is one of the pillars of the Clean Water Act. 33 U.S.C. § 1313. The program requires states to designate uses for all surface waters within their boundaries, and to establish criteria that are necessary for those waters to attain the designated uses. *Id.* At a minimum, all waters must be designated for “fishable, swimmable” uses, meaning the waters must be fit for full body contact recreation and aquatic life. *Id.*

The NPDES program is tied to the Water Quality Standards program via effluent limits. 40 C.F.R. § 122.44. (NPDES Permits must include effluent limits). EPA regulations divide effluent limits into two categories – technology based effluent limits (“TBELs”)¹³ and water quality based effluent limits (“WQBELs”). *Id.*

WQBELs impose limits on the discharge of pollutants that the state or EPA determines will have a “reasonable potential” to cause or contribute to an exceedance of any Water Quality Standard in the receiving water. 40 C.F.R. § 122.44(d)(1)(i) (2015). They can be numeric limits or “best management practices” that ensure the pollutant at

¹³ TBELs dictate the methods of treatment at a facility and set a floor as to the level of treatment effluent will receive before it is discharged.

issue will not cause or contribute to an exceedance. See 40 C.F.R. § 122.44(k)(3).

A “reasonable potential analysis” is used to determine whether a discharge, alone or in combination with other sources of pollutants in the receiving water could lead to an excursion above an applicable Water Quality Standard. U.S. Environmental Protection Agency, *NPDES Permit Writers’ Manual* at 6-23 (2010).

This is a highly technical endeavor that requires modeling, consideration of flows and pollution loads already present in the receiving water, and the location of the proposed discharge and its contribution of pollutants. All of this is premised on the ability to ascertain conditions at the point of discharge and how that relates to the receiving surface water. *Id.* at 6-16 to 6-17.

The EPA has developed a permit writers manual that dictates how states and the EPA should develop permit conditions, including WQBELs and monitoring requirements. The manual states that “[m]onitoring locations should provide a representative sample of the effluent being discharged into the receiving water. . . . the point where a final effluent limitation applies and the point where monitoring is required must be the same.” *Id.* at 8-5.

The challenge with applying these requirements to groundwater is that flows that travel through groundwater have diffuse points of entry to surface waters, and not all of them will be representative of the original character of the flow. Implementing NPDES permit requirements is not feasible in this

setting. Randomly choosing locations could result in dischargers being held to inappropriate standards and would represent an abuse of discretion on the part of the permit writer.

Additionally, in the groundwater setting, there is a disconnect between the point of release into the groundwater and the point at which the effluent reaches surface waters. Groundwater flow is often complex and varied. Uncertainty about what is actually entering surface waters prevents adequate modeling and monitoring and prevents application of the NPDES program.

B. Groundwater flow is complex; transport time and varied geology make NPDES permitting infeasible

It is a fundamental principle of hydrology that groundwater and surface waters are linked. Rain and snow fall to the earth and the resulting water flows into surface streams, evaporates, is absorbed by plants or infiltrates into the ground. In areas where the saturated zone occurs at the ground's surface, groundwater flows into surface waters. United States Environmental Protection Agency, Citizen's Guide to Ground-Water Protection (1990).

The often-slow movement of groundwater means that pollutants tend to remain within an aquifer and flow into surface waters slowly, over time. In some cases, groundwater flow can take place over thousands of years. The speed and concentration at which pollutants move through groundwater depend on the amount and type of pollutant, its solubility and density, and the speed of the surrounding groundwater. The amount of a pollutant that is

released into groundwater that will eventually reach surface water also varies and is dependent on both the characteristics of the pollutant itself as well as the aquifer.

These characteristics can be very difficult to measure. Groundwater can flow in different directions in different aquifers on the same site and contaminants within the aquifers may flow in entirely different directions. *Genuine Parts Co. v. E.P.A.*, 890 F.3d 304, 316 (D.C. Cir. 2018).

The interrelationship between groundwater and surface water is also complex.¹⁴ In some cases, even the best science is incapable of determining with any certainty the direction of flow or the total contribution of pollutants to surface waters. *See e.g. Burlington N. & Santa Fe Ry. Co. v. United States*, 556 U.S. 599, 604, (2009).

Groundwater flow is variable and intertwined with state interests in managing the resource for supply purposes. For example, about 60% of the

¹⁴ *See e.g. Kansas v. Colorado*, No. 105, ORIGINAL, 2000 WL 34508307, at *6 (U.S. Aug. 31, 2000) (stating “Over the period 1950-94 the groundwater resources of the state were permanently damaged; 324,866 acre-feet of groundwater from the Ogallala aquifer have been lost because of the depletions of surface flows.”); *Texas v. New Mexico*, 462 U.S. 554, 557, (1983) (stating “The non-flood “base” flow of the Pecos below Alamogordo Dam is supplied to a large part by groundwater aquifers . . . The operation of these aquifers is little understood.”); *Cappaert v. United States*, 426 U.S. 128, 133, (1976) (stating “After the Cappaerts began pumping from the wells near Devil’s Hole, which they do from March to October, the summer water level of the pool in Devil’s Hole began to decrease.”).

water entering the Eastern Snake River Plain Aquifer comes from irrigation. 86% of the water flowing out of the aquifer (estimated to be 7.1 million acre feet per year) enters the Snake River. Idaho Department of Environmental Quality, Oversight Monitor, *Idaho's Treasure; the Eastern Snake River Plain Aquifer* (May 2005), https://www.deq.idaho.gov/media/552772-newsletter_0505.pdf.

In Idaho, declining groundwater supplies have resulted in reduced spring flows from the Eastern Snake Plain Aquifer that feeds the Snake River and its tributaries. Declining water supplies have affected agricultural and municipal uses and have resulted in multiple water use conflicts throughout the region.

Lastly, as documented in decades of Superfund and RCRA litigation, the nature of pollutants can change after their release to groundwater.¹⁵ Water that is released from a pipe, or injected from a well into groundwater may be very different from what later enters surface waters.

The NPDES program is ill equipped to take this kind of uncertainty into account. Implementing the NPDES program as defined by EPA regulations and guidance requires certainty. It requires an ability to measure what pollutants are entering surface water

¹⁵ See e.g. *United States v. Burlington N. & Santa Fe Ry. Co.*, 520 F.3d 918, 931 (9th Cir. 2008), rev'd, 556 U.S. 599, (2009) (describing groundwater pollutant that evaporates quickly if exposed to air but is highly soluble in water, and when it infiltrates the ground, it moves through the soil by molecular diffusion, dispersing in all directions.)

and how those pollutants will interact with existing conditions in the receiving surface water. None of that is ascertainable for releases to groundwater.

Managing releases to (and through) groundwater is therefore most appropriately regulated by the states under their own laws, and pursuant to the Clean Water Act's Nonpoint Source Management Program.

C. The Maui case illustrates the complex nature of groundwater and why it is not appropriate to regulate groundwater contributions to surface water with the NPDES program

The Maui case provides a good example of why Congress would exclude releases to groundwater from the NPDES program. The County owns and operates four wells at the Lahaina Wastewater Reclamation Facility ("LWRF"). The LWRF receives approximately four million gallons of sewage per day. That sewage is treated and then either sold as recycled water to customers or injected into the ground through the wells at the LWRF site.

In June 2013, EPA issued a final report on how long it takes the recycled water that is injected into the ground to reach the ocean. The study involved placing tracer dye into three of the wells, and monitoring submarine seeps offshore to see if and when the dye would appear. The EPA study concluded that a hydrologic connection exists between two of the wells and the ocean,¹⁶ but that

¹⁶ Tracer dye from the remaining well was never detected in the ocean.

more than 90% of the water enters the ocean through diffuse flow, with no identifiable point of entry along an estimated two miles of coastline. The average travel time for the tracer dye was fifteen months, with an estimated total travel time estimated at four years.

Notably, the EPA study showed that the water entering the ocean has different nutrient levels than the recycled water that is injected into the groundwater at the LWRF site. The change is due to chemical modifications that naturally occur as groundwater migrates.¹⁷

The study demonstrates the uncertain path that releases to groundwater can follow. The average travel time of fifteen months was ample time for the water to interact with the aquifer and to change because of contact with groundwater.

Moreover, the fact that 90% of the LWRF water entered the ocean via diffuse flow means that calculating the contributions to receiving waters – e.g. the volume and mass of pollutants actually reaching the ocean – will be uncertain at best. Uncertainty about what actually reaches the ocean prevents adequate modeling and monitoring and prevents application of the NPDES program.

The contribution that the LWRF has to groundwater (and to the ocean via seepage) is already adequately regulated under the Safe

¹⁷ Decl. of Susan C. Paulsen, Ph.D., in Support of Def. Cnty. of Maui's Opp'n to Pls.' Mot. for Partial Summ. J. ¶¶ 15, 19, *Hawai'i Wildlife Fund v. Cnty. of Maui*, 24 F. Supp. 3d 980 (D. Haw. 2014) (No. 12-00198), ECF No. 79-3.

Drinking Water Act's UIC program, state law limitations on groundwater, and state authority under the Nonpoint Source Management Program. The Court does not need to rewrite the Clean Water Act to address activities that are already highly regulated.

CONCLUSION

Amici and their members are committed to protecting public health and the environment and feel strongly that the NPDES program is not the appropriate legal and practical solution for managing groundwater or its contribution to surface waters. Amici therefore respectfully request that the Court reverse 9th Circuit's decision in the Maui County case.

Respectfully submitted,

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