THE APPROPRIATE ROLE OF STATES AND THE FEDERAL GOVERNMENT IN PROTECTING GROUNDWATER

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
ONE HUNDRED FIFTEENTH CONGRESS
SECOND SESSION

APRIL 18, 2018

Printed for the use of the Committee on Environment and Public Works

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THE APPROPRIATE ROLE OF STATES AND THE FEDERAL GOVERNMENT IN PROTECTING GROUNDWATER

WEDNESDAY, APRIL 18, 2018

U.S. Senate,
Committee on Environment and Public Works,
Washington, DC.

The Committee met, pursuant to notice, at 10:08 a.m. in room 406, Dirksen Senate Office Building, Hon. John Barrasso (Chairman of the Committee) presiding.


OPENING STATEMENT OF HON. JOHN BARRASSO,
U.S. SENATOR FROM THE STATE OF WYOMING

Senator BARRASSO. Good morning. I call this hearing to order.

Today we are here to discuss a timely and an important issue: what is the best way to protect groundwater, and what is the appropriate role of the Federal Government? This issue has come to a forefront recently before all three branches of Government.

As we will hear from our witnesses today, a number of Federal courts have generated confusing and conflicting opinions on the issue. In February EPA recognized this confusion and asked for members of the public to file comments with the Agency by May 21st of this year.

Finally, last month Congress weighed in. Congress directed EPA to resolve this issue as part of the omnibus spending bill. The bill’s report specified releases through groundwater should not be regulated as point sources under the Clean Water Act. As Chairman of the Senate Committee with jurisdiction over the Clean Water Act, I want our members to hear from the experts and determine what additional actions are needed.

In 1971 the predecessor of this Committee, the Committee on Public Works, rejected attempts to set Federal standards for groundwater. Now, 37 years later, States, cities, farmers, water utilities, and private citizens have grave concerns that Congress’s intent has been turned on its head by recent court decisions. Those decisions place Washington in charge of permitting when groundwater connects a source of pollution to a “water of the United States.” This is a disturbing development.

A broad group of municipalities and water utilities have opposed the idea, including the city of San Francisco, the city of New York,
and the Narragansett Bay Commission in Rhode Island. They voiced their opposition in a brief filed in the Federal court last year.

Under the misguided theory, everyday activities, including farming, ranching, or having a septic tank in your backyard, could require a Federal discharge permit. This isn't what Congress intended when it passed the Clean Water Act.

Eighteen States also recently filed a brief in opposition to this expanded and unreasonable interpretation. My home State of Wyoming jointed that brief. The States explain the alarming consequences of a recent Federal court's ruling in California. If the court's ruling stands, many more individuals and companies will need to apply for Federal permits.

In the brief, the State of Arizona pointed out the number of activities it would require Federal permits could jump more than 200,000 percent. For example, up to 282,867 septic systems in that State could become federally regulated. Making matters worse, the additional permitting would come with significant added costs, but no additional environmental benefit.

States already have comprehensive groundwater protection laws. In addition, the Safe Drinking Water Act and the Resource Conservation Recovery Act already protect groundwater at the Federal level. The additional permitting would sow great confusion and result in tremendous cost. I believe it is a harmful expansion of Washington's authority.

I would now like to turn the time to the Ranking Member, my friend, Senator Tom Carper, for his opening statement.

OPENING STATEMENT OF HON. THOMAS R. CARPER,
U.S. SENATOR FROM THE STATE OF DELAWARE

Senator Carper. Thanks so much, Mr. Chairman.

To our witnesses, welcome. It is great to have somebody on this particular subject whose last name is Waters. I don't know how you figured that one out, Mr. Chairman. That is good staff work.

Senator Barrasso. And she is a witness for the majority. [Laughter.]

Senator Carper. Well, we look forward to what she has to say and our other witnesses.

Martha Clark, what is your middle name, Martha what?

Ms. Mettler. Ellen.

Senator Carper. I am married to a Martha Ann. It is always good to have a Martha on board, too.

Frank, it is nice to see you again. Frank and I were actually in elementary school together. I think in the late 1990s, when I was Governor, he was with the Department of Education. It is good to have you here as well.

Welcome, Mr. Brown and Mr. Guild, too. Thank you for coming.

The purpose of this hearing is to determine the appropriate role of States and the Federal Government in protecting groundwater, an important subject. But I say, frankly, I didn't know the role of States and the Federal Government in this regard were in question.
For over 40 years, as far as I know, it has been perfectly clear what Congress intended. In part, that is because the language in the Clean Water Act is clear, crystal clear.

The bottom line is this: if pollution travels from a divine point source, like a coal ash pond, to surface water by way of a direct hydrological connection, like groundwater, then the Clean Water Act regulates that pollution.

That is not just me speaking. Justice Scalia agreed in his opinion in the now famous Rapanos decision. This is what Justice Scalia wrote: “The Act does not forbid the addition of any pollutant directly to navigable waters from any point source, but rather the addition of any pollutant to navigable waters. Thus, from the time of the Clean Water Act’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates Section 1311(a), even if the pollutants discharged from a point source do not emit directly into covered waters, but pass through conveyances in between.” Again, not my words, but the words of Justice Scalia.

It seems to me that if the EPA is willing to rely on Justice Scalia’s majority opinion about what constitutes the “waters of the U.S.,” EPA should surely agree with him on this point, too.

Justice Scalia also correctly noted the nearly unanimous agreement among the lower courts. Of course, it is not a real legal struggle when the law is so clear. The real role of courts in these cases is to parse the facts in each unique situation they face to determine whether the hydrological connection, a point source with navigable water, is clear enough for the Clean Water Act to apply.

It is not hard for me to understand why some industries, such as oil, gas, utilities, mining, and others, might be interested in trying to inject some uncertainty into the question of whether or not to regulate pollution that flows from their leaky ponds and from their lagoons into the waters we depend on for drinking, for fisheries, for recreation.

Citizens whose health and property values have been hurt by petroleum products or arsenic or mercury or lead and other toxic materials seeping into the waterways have exercised their invaluable right to sue under the Clean Water Act, where State agencies and EPA have failed to protect them adequately, and they are winning. Why? Because the law is clear, and they have the right to be heard.

The only way to silence those in the public who have been harmed is if we in Congress choose to weaken the Clean Water Act and strip them of this ultimate tool to protect themselves. I cannot—and will not—support such an effort.

Let me also add here that EPA cannot unilaterally change the law, no matter how passionately its leaders may wish to do so. Any change in the EPA’s 40 year old position that groundwater pollution can reach and contaminate surface water would be arbitrary, and the change would likely be overturned by the courts.

So, Mr. Chairman, I am happy to welcome our witnesses here today. We welcome you all warmly. We look forward to hearing your testimonies and to the opportunity to discuss with you and our colleagues an important issue.
Having said that, we should be aware that EPA is currently taking public comment on an important environmental issue that has been regarded as a matter of settled law for decades, and that law essentially says this: if you are responsible for polluting our rivers, streams, lakes, and oceans by spilling, injecting, or leaking contaminants into groundwater, and that groundwater is hydrologically connected to surface water, then you are liable for that pollution, period. I believe that law should not change.

Thanks, Mr. Chairman.

Senator BARRASSO. Thank you very much, Senator Carper.

I would like to now welcome and introduce our witnesses.

We have Amanda Waters here, General Counsel of the National Association of Clean Water Agencies; Martha Clark Mettler, Assistant Commissioner in the Office of Water Quality at the Indiana Department of Environmental Management; Joe Guild, who is the Treasurer of the National Cattlemen’s Beef Association; Frank Holleman, the Senior Attorney at the Southern Environmental Law Center; and Anthony Brown, the CEO and Principal Hydrologist at Aquilogic.

Welcome to each and every one of you. I want to remind the witnesses that your full testimony—your written testimony—will be made part of the official record for today. We ask that you keep your statements to 5 minutes so that we have more time for questions. We look forward to hearing your testimony.

Ms. Waters, please begin.

STATEMENT OF AMANDA WATERS, GENERAL COUNSEL, NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES

Ms. WATERS. Chairman Barrasso, Ranking Member Carper, and members of the Committee, thank you for the opportunity to appear before you this morning.

NACWA, National Association of Clean Water Agencies, is a not-for-profit association that represents the interests of over 300 public clean water agencies nationwide who share a common objective to protect the environment and public health, and on behalf of NACWA, I thank you for holding this important hearing. The question before us this morning is not whether releases to groundwater that reach navigable waters should be regulated, but how such releases are and should be regulated.

The Clean Water Act is one of the most successful environmental statutes in the Nation’s history, and public utilities continue to be a paramount contributor to that success. These utilities operate the Nation’s most essential infrastructure systems, providing wastewater treatment for approximately 76 percent of the U.S. population.

The Clean Water Act’s prohibition against the discharge of any pollutant—unless authorized by an NPDES permit—is limited to the addition of pollutants to navigable waters from a point source. Groundwater is neither a point source nor a navigable water, and the direct hydrologic connection language appears nowhere in the Clean Water Act. Even the Ninth Circuit recently acknowledged that.

Congress foresaw that an NPDES permit is not always the solution to address pollutants that reach navigable waters. When the
Clean Water Act was enacted Congress rejected proposals to extend the Clean Water Act’s reach, with full knowledge that pollutants in groundwater may enter navigable waters, because the jurisdiction regarding groundwater is so complex, and it varies from State to State.

The Clean Water Act itself contains other tools, including total maximum daily loads and non-point source management programs, to deal with this type of pollution. In addition, there are other Federal environmental laws, as the Chairman mentioned, that are better designed and are utilized to address this, including the Safe Drinking Water Act.

Most importantly, by design, groundwater and non-point source pollution is primarily the responsibility of the States, and all 50 States have adopted laws that prohibit or regulate the release of pollutants into groundwater.

There are many different entities and interests that are impacted by the issue the Committee examines today, but it is important to note that NACWA members are public entities that do not make a profit from their operations, nor do they answer to shareholders. They answer only to their local communities and ratepayers, many of whom could bear additional and unnecessary financial costs if this issue is not correctly addressed.

Thus, public utilities have a compelling interest in ensuring the NPDS permitting program and attendant Clean Water Act liability remains predictable and lawfully within the Act. Regulatory certainty is necessary so that public utilities can plan prudently for the expenditure of public funds.

In addition to the lack of statutory authority, there are considerable practical and policy reasons to reject EPA’s interpretation. The existence of a direct hydrologic connection is a fact specific inquiry; it involves topography, hydrology, and geology, and will require complex technical assessments. Yet there is no clarity on how long and how far pollutants can travel for a connection to be considered direct.

This extension of liability could affect countless systems, including public drinking water pipelines and sewer collection systems. These leak due to age and to episodic failures. Determinations necessary to issue a permit would often be infeasible, if not impossible, in the context of a release to groundwater, given that a permitting authority must assess, at the end of pipe, the potential to exceed water quality standards, anti-degradation policy consistency; they have to calculate effluent limits and determine appropriate monitoring.

If a permit cannot be obtained, the Clean Water Act is a strict liability statute, which would expose NACWA members to hefty civil penalties and attorneys’ fees. And this is not an abstract fear. Two NACWA members are currently facing Clean Water Act citizen suits, and in fact, in the Second Circuit today there is oral argument for a New Haven NACWA member.

Approximately $600 billion is needed over the next 20 years to address aging public sewer systems, and to require utilities and local communities to shoulder this unnecessary regulatory burden would divert limited resources from infrastructure priorities that have more significant environmental and public health benefits.
Expanding the universe for NPDES permits could also have the unintended consequence of impeding beneficial projects, such as groundwater recharge and even green infrastructure, a wet weather management tool fully embraced by EPA and Congress.

There are also serious process deficiencies with EPA’s approach. The agency has never gone through a rulemaking to establish the direct hydrologic theory. EPA has bypassed the transparency and due process framework and has failed to consider the costs and burdens through a public process.

Public utilities are on the front lines of environmental and public health protection, and we fully support a strong regulatory framework to protect water resources, but such regulations must be grounded in the statute and consistent with congressional intent. EPA’s hydrologic connection interpretation fails on both accounts and threatens to hamper utilities in carrying out their critical public missions. Moreover, using the ill suited NPDES permitting program to regulate discharges that are better addressed by other Federal programs and State law will have a ripple effect of deterring projects that are otherwise environmentally beneficial.

I look forward to answering questions. Thank you very much.

[The prepared statement of Ms. Waters follows:]
Amanda Waters
General Counsel, National Association of Clean Water Agencies (NACWA)

Founded in 1970, NACWA is the nation’s recognized leader in regulatory, legislative and legal advocacy on the full spectrum of clean water issues. NACWA represents public clean water agencies of all sizes nationwide to help build a strong and sustainable clean water future.

Amanda manages NACWA’s litigation portfolio and implements the Association’s legal advocacy initiatives. She was previously General Counsel & Director of Public Advocacy & Outreach for the Water Environment Federation, as well as Deputy Executive Director & General Counsel for Sanitation District No. 1 of Northern Kentucky. She has also served as Deputy General Counsel for the State of Kentucky Environmental & Public Protection Cabinet and as a staff attorney with the West Virginia Department of Environmental Protection. She began her legal career as a staff attorney for the Hudson Riverkeeper. She received a law degree and Certificate of Environmental Law from Pace University and a BS in biology from Eastern Kentucky University.
The Appropriate Role of States and the Federal Government in Protecting Groundwater

April 18, 2018

Written Testimony of:

Amanda Waters
General Counsel
National Association of Clean Water Agencies

Before the:

U.S. Senate Committee on Environment and Public Works

Chairman John Barrasso
Ranking Member Thomas R. Carper
Chairman Barrasso, Ranking Member Carper and members of the Committee, thank you for the opportunity to appear before you today. My name is Amanda Waters and I am General Counsel for the National Association of Clean Water Agencies. NACWA is a not-for-profit trade association that represents the interests of over 300 public clean water utilities nationwide who share a common objective and responsibility to protect the environment and public health by providing wastewater and stormwater treatment services for their communities in compliance with the Clean Water Act (CWA). I have worked on clean water issues for nearly two decades having previously served as General Counsel for a NACWA clean water utility in Northern Kentucky and for the Departments of Environment Protection in Kentucky and West Virginia. I was fortunate to begin my legal career at the Hudson Riverkeeper. The experience I gained working as a regulator, for a regulated entity, and as an environmental advocate has given me a well-rounded perspective on the interplay between local government, states, and the US Environmental Protection Agency (EPA). As a result, I have a pragmatic passion for advancing and ensuring transparent and definitive science-based clean water policies that adhere to the statutory requirements contained in the CWA.

On behalf of NACWA, I sincerely thank the Committee for holding this hearing to gather input on regulating releases to groundwater.

The question before us is not whether releases to groundwater that reach surface water should be regulated, but how such releases are and should be regulated; specifically, should a release of a pollutant that reaches groundwater and thereafter enters a CWA jurisdictonal surface water be considered a "point source" discharge triggering the requirement for a CWA National Pollutant Discharge Elimination System (NPDES) permit. The answer requires a review of fundamental CWA provisions and, moreover, an understanding of how such releases are already regulated under other provisions of the CWA, other federal environmental statutes, and state laws, in accordance with Congressional intent.

The CWA is one of the most successful environmental statutes in the nation’s history and public clean water utilities continue to be a paramount contributor to that success. Working closely with state and federal regulators, public utilities have collectively achieved an astonishing level of pollution reduction, both at their own facilities and at thousands of industrial facilities regulated by utilities under the federal pretreatment program, since the CWA was enacted.

These public utilities own, operate, and manage the nation’s most critical infrastructure systems for protecting public health and the environment. Approximately 76% of the US population relies on the nation’s treatment plants for wastewater treatment.

The CWA’s prohibition against “the discharge of any pollutant” unless authorized, in relevant part, by a NPDES permit, 33 U.S.C. §1311(a), is limited to the addition of pollutants to navigable waters from a “point source,” id. §1362(12), which means “any discernible, confined and discrete conveyance.” Id. §1362(14). In accordance with these provisions, clean water utilities that discharge to surface waters operate pursuant to the CWA’s NPDES permit system, which is designed to be an “end-of-pipe” program under which pollutants can be effectively monitored and reported to permitting authorities. When the CWA was enacted, EPA asked Congress for authority over groundwater, in part, because EPA knew pollutants in groundwater can enter surface waters. Despite being aware that pollutants in groundwater may enter navigable waters, the Senate and the House rejected proposals to extend the
CWA’s reach. *E.g.*, S. Rep. No. 92-414, at 75 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3729 (“Several bills pending before the [Senate] Committee provided authority to establish Federally approved standards for groundwaters. ... Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation.”).

Congress foresaw that an NPDES permit is not always the solution to address pollutants that reach navigable waters; there is not a “loophole” to allow the unregulated pollution of groundwater and surface waters. The CWA itself contains other tools, including total maximum daily loads (“TMDLs”), grants, planning, and nonpoint source management programs.

There are other federal environmental laws that are better designed and are currently utilized to address releases of pollutants into groundwater including the Safe Drinking Water Act (SDWA), the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Most importantly, states may adopt more stringent requirements, see 33 U.S.C. §1370 (preserves states’ ability to adopt any requirement to control pollution), and all 50 states have adopted laws and regulations that prohibit or regulate the release of pollutants into groundwater. The CWA is a cooperative federalism statute and groundwater and nonpoint source pollution is primarily the responsibility of the states.

EPA’s direct hydrologic connection theory is contrary to the text and structure of the CWA, perpetuates regulatory uncertainty, and will significantly expand the universe of sources that would require NPDES permits or run the risk of government and citizen suit enforcement.

Public utilities have a compelling public interest in ensuring that the NPDES permitting program, and attendant CWA liability, remains predictable and lawfully within the scope of the Act. Regulatory certainty is necessary to allow utilities to plan prudently for the expenditure and investment of public funds.

There are many different entities and interests that are impacted by the important question the committee examines today, but it is important to note that NACWA’s members are the only public entities that are directly impacted from a regulatory perspective. NACWA’s members do not make a profit from their operations, nor do they answer to shareholders. They answer only to their local communities and ratepayers, many of whom could bear additional and unnecessary financial cost if this issue is not correctly addressed.

In addition to the lack of statutory authority, there are considerable practical and policy reasons to avoid extending the CWA prohibition to pollutants entering groundwater.

The existence of a direct hydrological connection is a fact-specific inquiry. It depends on site-specific factors, such as topography, climate, the distance to a surface water, geologic factors, and will require technical assessments. Yet, there is no clarity on how long and how far pollutants can travel for a connection to be considered “direct.” The Ninth Circuit’s recent decision in *Hawaii Wildlife Fund v. County of Maui* demonstrates the nebulous nature of liability: “We leave for another day the task of
determining when, if ever, the connection between a point source and a navigable water is too tenuous to support liability under the CWA.”

The costs to determine whether groundwater beneath a source has a direct hydrologic connection to navigable water will depend on the nature of the facility, its geographic location, and availability of trained hydrogeologists, among other factors. The real significance of the cost arises from the countless number of facilities upon which liability could be imposed. For example, systems that leak due to age or episodic failures include public water supply pipelines, recycled water pipelines, and sanitary sewer collection systems. These could all fall within the CWA prohibition under EPA’s direct hydrologic connection interpretation.

Critically, even if public utilities err on the side of caution and apply for a permit, there is no certainty a permit can be obtained. As previously mentioned, the NPDES permitting regulations are “end-of-pipe.” The permitting authority must calculate effluent limits, determine the potential to exceed water quality standards, ensure consistency with antidegradation policies, allocate load and waste loads as part of TMDLs, assess the need for mixing zones, and determine appropriate monitoring, among other critical functions.

Determinations necessary to issue a permit would often be infeasible (if not impossible) in the context of groundwater. If a permit cannot be obtained, the addition of pollutants must cease, or a public utility would be subject to federal enforcement and citizen suit challenges. The CWA is a strict liability statute and just one CWA violation can result in a civil penalty of $50,414 per day, in addition to injunctive relief and legal fees. NASWA members are currently facing CWA citizen suits based on this direct hydrologic connection theory.

To reduce liability, significant public resources would be needed to remove and/or replace infrastructure. The nation is already facing a public water infrastructure crisis with approximately $600 billion needed over the next 20 years to address aging public sewer lines and systems. There is no indication that Congress intended the CWA and citizen suit enforcement to be the tool used to address the nation’s infrastructure.

Expanding the NPDES universe would have the unintended consequence of impeding beneficial and innovative public infrastructure projects such as groundwater recharge systems that are used to convey stormwater or recycled wastewater into aquifers to augment public water supplies, create seawater intrusion barriers, prevent land subsidence, and eliminate surface outfalls to protect water quality. Green infrastructure, a wet weather management tool used to retain and infiltrate stormwater into the ground to minimize discharges of municipal stormwater and combined sewer overflows, could also be subject to NPDES regulation and enforcement despite already getting the broad stamp of approval from EPA and Congress.

The CWA is clear that the release of pollutants into groundwater which then flows to navigable waters is not an “addition . . . to navigable waters from a point source.” However, even if the CWA was not clear, EPA’s direct hydrologic connection theory is not a reasonable interpretation of the Act. As a matter of good government, EPA has never gone through rulemaking to establish this direct hydrologic connection theory. None of the costs or regulatory burdens to public utilities and their local ratepayers have ever been considered by EPA through a public process. EPA has bypassed the
transparency and due process safeguards in the Administrative Procedure Act, which Congress enacted to provide public notice of proposed agency action, to encourage public participation, and to afford agencies with the framework to carefully consider all relevant factors before taking final agency action.

Further, there has not been a consistent federal government position on this issue. For example, in litigation defending federal facilities against CWA citizen suits, the United States has argued that the CWA does not prohibit pollutants that enter navigable waters from spills into the soil and groundwater. *Kelley v. United States*, 618 F.Supp. 1103, 1105-06 (W.D. Mich. 1985). The bottom line is that the federal government needs to provide certainty and clarity on this issue so that regulated entities — especially public clean water utilities — know what is expected of them. Until it does so, regulators and regulated parties alike will face uncertainty, and the risks and costs that unavoidably accompany it.

Public clean water utilities are on the front lines of environmental and public health protection, and fully support a strong regulatory framework to protect water resources. But such regulations must be grounded in statute and consistent with Congress’s intent under the CWA. The direct hydrologic connection theory fails to meet this standard and threatens to hamper public clean water agencies in carrying out their critical public missions. Moreover, using the ill-suited NPDES permitting program to regulate discharges that are better addressed by other federal regulatory programs or state law will have a ripple effect of deterring projects that are otherwise environmentally beneficial.

Thank you again for holding this important hearing. I know that all parties and all witnesses here today want the same thing — clean and safe water — and I would be happy to answer any questions.
Chairman Barrasso

1. Ms. Waters, both the U.S. Court of Appeals for the Ninth Circuit and the U.S. Court of Appeals for the Fourth Circuit have issued recent decisions concerning the scope of the National Pollutant Discharge Elimination System (NPDES) program as it applies to situations where groundwater serves as a “conduit” between a point source and a surface water. Have the courts articulated a clear standard for when NPDES liability attaches?

   No. Because the “direct hydrologic connection” and “conduit” theories are not grounded in the text, structure, or legislative history of the CWA, courts have created a variety of vague and inconsistent standards for subjecting releases to groundwater to NPDES regulation. The Ninth Circuit rejected EPA’s “direct hydrologic connection” test because it “reads two words into the CWA (‘direct’ and ‘hydrological’) that are not there.” Hawai‘i Wildlife Fund v. County of Maui, 886 F.3d 737, 749 n.3 (9th Cir. 2018). Ironically, the Ninth Circuit then invented yet another new standard, claiming that NPDES permitting requirements apply when pollutants are “fairly traceable” from a point source to a navigable water and the “pollutant levels reaching navigable water are more than de minimis.” Like EPA’s “direct hydrologic connection” standard, however, the Ninth Circuit’s “fairly traceable” and “de minimis” standard appears nowhere in the statute, leaving permitting authorities, regulated parties, and courts to guess as to what those words mean. For its part, the Fourth Circuit’s majority opinion adopted EPA’s “direct hydrologic connection” interpretation, but overlooked critical indications of congressional intent in the CWA’s text, structure, and legislative history. Even if these standards were grounded in the text of the CWA, they provide no direction to the regulated community, as either standard would require extensive and costly scientific study to determine whether a discharge falls within the definition.

2. Ms. Waters, Ranking Member Carper and Mr. Holleman asserted that the “direct hydrologic connection” or “conduit theory” interpretation they support has been the agency’s consistent interpretation since the Clean Water Act was enacted. What is your view on that assertion?

   EPA’s “direct hydrologic connection” and “conduit theory” interpretations are contrary to EPA’s original interpretations and ongoing interpretations for the past 45 years. To demonstrate this, we have attached a list of EPA statements regarding discharges to
groundwater from 1973 to 2017, showing that any suggestion that EPA’s “direct hydrologic connection” and “conduit theory” interpretations have been longstanding or consistent grossly distorts the record. In seeking comments on the “direct hydrologic connection” interpretation, EPA itself recently acknowledged that it has approached this issue in “different ways … over the years.” EPA, Region 10 Tribal Newsletter (Apr. 2018).

3. Ms. Waters, to your knowledge, has the term “direct hydrological connection” ever been defined in federal statute or regulation?

No. EPA has never defined “direct hydrologic connection” in any guidance or rule. In fact, when EPA was asked whether it could define “direct hydrologic connection” in 2001 (nearly 30 years after the CWA was enacted), the agency said it was “not sure how it should define this specifically in a national rule.” EPA, CAFO Public Meeting, Denver, CO (Mar. 2001). Likewise, EPA recently said that “the connection between groundwater discharges and surface waters is too complex to determine a direct causal effect.” EPA, Response to Comments on NPDES General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewers Systems in Massachusetts, at 219 (Apr. 4, 2016).

4. Ms. Waters, what role, if any, do you see Congress playing in helping to provide certainty for public wastewater and stormwater agencies?

EPA’s “direct hydrologic interpretation” has created a massive amount of uncertainty and confusion among courts, states, and regulated parties, including public wastewater and stormwater agencies. Although we agree with the courts that have found that the plain language of the Clean Water Act makes clear that discharges to surface water via groundwater are not subject to NPDES permitting (see, e.g., Ky. Waterways Alliance v. Ky. Utils., 2017 WL 6628917 (E.D. Ky. Dec. 28, 2017), Congress could, if necessary, amend the definition of “discharge of a pollutant” in 33 U.S.C § 1362(12) to confirm what these courts have found that the statute already expressly says, i.e., to exclude discharges to surface water via groundwater.

5. At the hearing, Mr. Hollerman suggested that the “direct hydrological connection” interpretation he supports is consistent with Rapanos v. United States, 547 U.S. 715 (2006). Is that true?

No. The kind of “indirect” conveyances discussed in the plurality opinion were “sewer systems,” “pipes,” and “storm drains”—discrete conveyances that the plurality noted likely qualified as “point sources” themselves. 547 U.S. at 743. The plurality’s recognition that the CWA permitting program may apply to a discharge from one point source to another point source that ultimately discharges into navigable waters does not support the “direct hydrologic connection” theory, which claims that the conveyance of pollutants by groundwater (an indisputable nonpoint source) to navigable waters triggers NPDES permitting requirements. Indeed, that contention is fundamentally inconsistent with the plurality’s admonition that the CWA should not be interpreted to “result in a significant impingement of the States’ traditional and primary power over land and water use.” Id. at 747.
6. Ms. Waters, given your knowledge of the NPDES permitting program, are there practical concerns with how that program would be applied on a permit-basis to situations such as groundwater seepage? Do you think the NPDES program is the appropriate tool to address this type of pollution?

The NPDES program is not designed to require NPDES permits for the addition of pollutants to surface water via groundwater. Discharges of pollutants covered by section 402 are subject to “effluent limitations,” which are specific, numeric limits on pollutants at the point of discharge. 33 U.S.C. § 1362(11). (The only exception under section 402 are discharges from municipal separate stormwater sewer systems, which are required to limit pollutants to the “maximum extent practicable” standard.) As a result, the NPDES program requires identifiable discharge points for permitting. This approach only works for discernable, discrete and confined discharges to navigable waters, such as through a pipe. As EPA has explained: “[i]n contrast to … nonpoint sources, point sources of water pollution are generally characterized by discrete and confined conveyances from which discharges of pollutants into navigable waters can be controlled by effluent limitations.” 41 Fed. Reg. 24,709, 24,710 (June 18, 1976) (emphasis added). Neither EPA nor Mr. Holleman has ever explained how a permitting authority would apply effluent limitations to diffuse subsurface releases of pollutants to surface water or how a source could monitor them.

7. Ms. Waters, can you give an example of the types of regulation at the federal and state level that apply to your members’ groundwater injection activities? Is groundwater protected in all the states in which your members operate?

The Safe Drinking Water Act (SDWA) regulates underground injection wells through the underground injection control program. The SDWA is designed to protect the quality of drinking water in the United States, and specifically mandates the regulation of underground injection of fluids through wells. In addition, as indicated in the attached chart, all 50 states have robust laws that protect groundwater conditions, which in turn protects surface water conditions.

8. Ms. Waters, much of Mr. Holleman’s testimony dealt with coal ash operations, which are regulated under the Resource Conservation and Recovery Act (RCRA). If the concerns are with coal ash, the RCRA program seems best suited to address those concerns. Do you agree? Would application of the conduit theory under the Clean Water Act’s NPDES program affect more than the utility industry?

As NACWA only works with municipal wastewater and stormwater utilities, I am not familiar enough with the practices of coal ash operations to answer the first question.

EPA’s “direct hydrological connection” theory is already affecting local governments and public water treatment agencies. Application of the theory will lead to a substantial expansion of the number and types of sources that are independently treated “point sources” and thus individually subject to the requirements of the CWA and the NPDES program. The result is the potential to trigger the regulation of an indeterminable array of diffuse and indistinct sources by blurring the distinction between whole systems that can
be coherently managed and regulated, on the one hand, and components of such systems that would be subject to separate and piecemeal regulation. These diffuse sources could include public water distribution and sewer collection systems, retention ponds, municipal green infrastructure projects designed specifically to infiltrate stormwater into the ground and groundwater, and water recycling projects where recycled water is injected or seeps into groundwater.

9. At the hearing, Mr. Holleman testified that a source could avoid Clean Water Act regulation by moving a discharge back a few feet from a surface water and in turn “avoid the protections of the Nation’s waters.” Do you have input on that assertion?

The hypothetical is unrealistic—no permitting authority would authorize the movement of a discharge pipe a few feet (or even further) simply to allow that pipe to discharge onto the ground and avoid NPDES regulation. Such a notion is also at odds with reality when considering engineering design and safety standards, and volume of effluent flows, at facilities.

Indeed, at the hearing, Mr. Holleman failed to identify any instance of this occurring during the entire 45-year history of the NPDES program. In any event, the question is not whether such a discharge would be regulated, but how it would be regulated. For example, even if the discharge was not subject to NPDES permitting requirements under the CWA, the discharge still would be regulated as an underground injection well under the SDWA, or under CWA nonpoint source programs, other federal programs, and state programs like those identified in the attached chart summarizing groundwater protection laws in all 50 states.

10. Ms. Waters, in your testimony, you mention green infrastructure and water recharge projects. Can you further explain what those types of projects are and how they benefit health and the environment?

EPA’s “direct hydrologic connection” theory would likely discourage the construction or operation of a number of public and private treatment and pollution control infrastructure projects specifically designed to protect and preserve water resources. Groundwater recharge systems use spreading basins, percolation ponds, infiltration basins, and injection wells to convey stormwater or recycled wastewater into subsurface aquifers. These systems provide a host of ecological benefits; they augment public water supplies, create seawater intrusion barriers, and eliminate surface outfalls.

The DHC theory could also put green infrastructure – intended to treat stormwater to further the water quality protection goals of the CWA – at risk of being regulated as point sources of pollutants subject to CWA jurisdiction. Specifically, every instance where stormwater runoff drains into green infrastructure – for the very purpose of preventing the pollutants carried in such runoff from entering surface waters – could be viewed as a discharge to groundwater that might have a “direct hydrological connection” to surface water. This type of approach is inconsistent with how States have categorized stormwater and the infiltration of stormwater. See, e.g., Oyster Pond Embayment System TMDL at 4,
17

14 (Feb. 7, 2008) (Massachusetts assigned load allocations to stormwater runoff as nonpoint source pollution, knowing that “the vast majority of storm water percolates into the ground and aquifer and proceeds into the embayment systems through groundwater migration.”)

11. Do you think it is important for EPA to articulate a clear, binding nationwide position concerning when NPDES permitting requirements attach to particular discharges?

Yes. The way EPA has framed the issue in the February Federal Register notice (e.g., “review and revise” the DHC theory) makes it appear that EPA believes the statute gives EPA a choice. In other words, it appears the Agency believes that it could simply review and revise the DHC theory based on policy or technical reasons. NACWA does not believe that is correct.

EPA should disavow its “direct hydrologic connection” theory as contrary to the CWA’s plain language, structure and legislative history. EPA should promptly issue a memorandum (1) explaining that the agency no longer supports its statements on “direct hydrologic connection,” including the amicus brief submitted by the United States in the Ninth Circuit; and (2) confirming that an addition of pollutants to surface water via groundwater is not an “addition … to navigable waters from a point source” under the CWA.

Notwithstanding that the CWA is unambiguous on this issue and releasing short-term guidance, EPA should conduct an expedited notice and comment rulemaking so our members, other regulated entities, environmental activist organizations, the States, and other federal agencies can comment and then EPA can take final action through rulemaking on its position and how the CWA should be implemented and enforced. In part, what is so frustrating about this issue is that the public has never been able to weigh-in nor has EPA been able to hear from public entities on how this issue impacts them and the impossibility of using the NPDES permitting program to address these types of factual circumstances.

Ranking Member Carper

12. You write in your testimony that, “Despite being aware that pollutants in groundwater may enter navigable waters, the Senate and House rejected proposals to extend the CWA’s reach.”1 In support of this proposition, you quote legislative history from the Committee of Public Works (the predecessor of this committee) showing the Committee intentionally declined to provide “authority to establish Federally approved standards for groundwaters . . . Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation.”2

a. Your citation appears to be confusing the difference between regulating groundwater as a water of the United States (for which, in the words of the Committee report, there would thus be “Federally approved standards”), and merely acknowledging that

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1 Testimony of Amanda Waters at 2-3.
2 Id. (quoting S. Rep. No. 92-414, at 73 (1971))
pollutants discharged from point sources can travel relatively direct paths through groundwater into a water of the United States. Did you understand that discrepancy when you cited this authority?

i. There is no discrepancy. As noted in my testimony, EPA requested authority over groundwater, in part, because pollutants in groundwater can enter surface waters. Indeed, the Committee “recognized[d] the essential link between ground and surface waters,” S. Rep. No. 92-414, at 73 (1971), and members of Congress fully understood that pollution in groundwater could migrate to navigable waters “through seepage and other means,” 118 Cong. Rec. 10666 (1972) (floor statement of Rep. Aspin).

b. Did either the Ninth Circuit in the Hawaii Wildlife Fund case or the Fourth Circuit in the Kinder Morgan case hold that the groundwaters are jurisdictional waters under the CWA (thus establishing the prospect that EPA could, in the Committee’s terms, set “Federally approved standards for groundwaters”)?

i. No. The central question in both cases is whether releases to surface water via groundwater are subject to the CWA’s NPDES permitting program. As noted, the Ninth Circuit rejected EPA’s “direct hydrologic connection” interpretation, because it “reads two words into the CWA (‘direct’ and ‘hydrological’) that are not there.” Hawaii Wildlife Fund v. County of Maui, 886 F.3d 737, 749 n.3 (9th Cir. 2018).

13. You write in your testimony that “EPA’s direct hydrologic connection theory is contrary to the text and structure of the CWA . . . .” Your testimony also says that other statutes regulate pollutants that find their way into groundwater, citing SDWA, RCRA, and CERCLA.

a. Are you saying that the existence of SDWA, RCRA, and CERCLA illuminate congressional intent in enacting the CWA’s discharge prohibition? If yes, why?

i. Yes. Almost twenty years ago, the Supreme Court held that “the meaning of one statute may be affected by other Acts, particularly where Congress has spoken subsequently and more specifically to the topic at hand.” FDA v. Brown & Williamson Tobacco Corp., 120 S. Ct. 1291, 1301 (2000). And here, Congress “has spoken subsequently and more specifically to the topic” of groundwater contamination and its impact on surface waters through SDWA, RCRA and CERCLA. The later enactment of these statutes, and the regulation of discharges to groundwater therein, reflect Congress’ clear intent not to include discharges to groundwater within the CWA NPDES permit program.

b. The modern Clean Water Act — and the statutory language at issue in Hawaii Wildlife Fund and Kinder Morgan — was enacted in 1972. The statutes you cite were all passed after the CWA: SDWA (1974); RCRA (1976); CERCLA (1980).
When Congress wrote the discharge prohibition language, those statutes did not yet exist. When interpreting the CWA under Chevron, why should courts or regulators look to the existence of post-1972 statutes to define the scope of a statute enacted by the 92nd Congress?

i. See my response to Question 13.a. above.

c. What provision of RCRA is concerned with the protection of navigable waters? Are all discharges of pollutants conceivably capable of being regulated under RCRA?

i. As NACWA only works with municipal wastewater and stormwater utilities, I am not familiar enough with RCRA to answer this question. However, RCRA represents only one of several federal and state laws that regulate discharges to groundwater.

14. The April 18, 2018 hearing was conducted in the shadow of EPA’s request for comment on whether to maintain its longstanding position that discharges directly to surface waters via hydrologically connected groundwater are regulated by the CWA. See 83 FR 7126.

a. To your knowledge, is it EPA’s longstanding position that groundwater itself is a “water of the United States” under the CWA? Why do you believe that?

i. No. See my response to Question 2 above.

b. Were you previously aware of a 1979 Memorandum from EPA General Counsel Joan Z. Bernstein stating, “the CWA generally does not apply to groundwater,” and that EPA thus lacks the ability to set “water quality standards [for groundwater] under [CWA] § 303”? 

i. See attached list of EPA statements referenced in Question 2(a) above. While the list may not be comprehensive as to every EPA statement on groundwater, it nonetheless reflects that EPA’s “direct hydrologic connection” and “conduit theory” interpretations have not been longstanding or consistent.

15. Mr. Guild’s written testimony contains numerous concerns that groundwater may be regulated as a point source. Did either the Ninth Circuit in the Hawaii Wildlife Fund case or the Fourth Circuit in the Kinder Morgan case hold that the groundwater is a point source?

1. Neither court held that groundwater is a point source, but both decisions have the effect of transforming groundwater, as well as numerous sources long considered to be nonpoint sources, into point sources.

16. The thrust of your testimony would appear to have a much larger scope than just groundwater.
a. Is it NACWA’s legal position that any entry of pollutants to groundwater terminates Clean Water Act liability, no matter how short or direct the hydrologic flow is to a jurisdictional water, and no matter how toxic the pollutant is? Please explain your answer.

i. As outlined in my testimony, other tools exist within the CWA, and there are other federal and state environmental laws, that are better designed and currently utilized to address the release of pollutants into groundwater.

b. Is NACWA’s position limited to groundwater? For example, some streams have brief periods of subsurface flow. If a point source discharged into a foot-long stretch of subsurface flow, and the stream resurfaced as a surface water (containing the pollutants) one foot later, would that point source discharge be exempt from the Clean Water Act?

i. See my response to Question 9 above.

17. Suppose you had two pipelines carrying chemical waste over the Delaware River. Pipeline #1 ruptures directly above the river, and chemical waste starts pouring in. Pipeline #2 ruptures 100 feet from the water, and chemical waste pours onto the ground, burns through the soil, and runs downhill through a shallow subsurface connection into the Delaware River. Neither pipeline has a NPDES permit for the discharge.

a. Based on the facts presented, in your opinion, should the owner of Pipeline #1 be subject to CWA liability for that discharge? Why or why not?

b. Based on the facts presented, in your opinion, should the owner of Pipeline #2 be subject to CWA liability for that discharge? Why or why not?

c. Do you believe it would lead to absurd results if courts or the EPA regulated only one of those discharges? Why or why not?

i. As to Questions 17(a)–(c), there are not enough facts and/or missing facts to be able to reasonably answer these questions. Further, NACWA only works with municipal wastewater and stormwater utilities, and I am therefore not familiar enough with regulation of pipelines or chemical waste to answer these questions. However, generally, Congress envisioned that these types of factual scenarios—spills or releases of oil and hazardous substances (e.g., chemical waste)—would be addressed via CWA section 311, not via section 301(a) and the NPDES program. Under section 311, a “discharge” is defined differently to mean “any spilling, leaking, pumping, pouring, emitting, emptying or dumping,” section 311(a)(2), and such a discharge is prohibited “into or upon the navigable waters of the United States [or] adjoining shorelines.” CWA section 311(b)(1).

Senator Merkley
18. In your testimony before the Senate Environment and Public Works Committee, you state
that the question that should be asked is how releases to groundwater that reach surface water
should be regulated. You represent hundreds of public water utilities, much like the Lahaina
Wastewater Reclamation Facility that was the basis for the Ninth Circuit decision (Hawai’i
Wildlife Fund v. County of Maui). Please explain how you think a facility discharging to
groundwater, where that discharge impacts surface waters, should be regulated.

1. As outlined in my testimony, these discharges are currently regulated under other
federal and state statutes. Specifically, the discharges at issue in Hawai’i Wildlife
Fund v. County of Maui, are regulated as underground injection wells under the Safe
Drinking Water Act.

19. You stressed the importance of cooperative federalism in your testimony and how states
should have control over groundwater impacts to surface waters in their states. Yet in the
Hawai’i Wildlife Fund v. County of Maui case, the state was not controlling those
groundwater discharges and it created an excursion of water quality standards in surface
waters. There are many other cases where these types of discharges adversely impacted
surface waters. What cooperative federalism approach would you propose to ensure states
are regulating these types of discharges consistently across the country that gives citizens an
assurance that their waters kept clean and safe?

1. As outlined in my testimony, a myriad of state and federal environmental laws
already operate in concert to address discharges that reach surface water via
groundwater. If these statutes or regulations are not sufficiently protective of public
health and the environment, the remedy is to revise those statutes or regulations at the
state or federal level rather than to overlay the NPDES permit program on top of
these existing regulations.
EPA STATEMENTS ON DISCHARGES TO GROUNDWATER (1973-2017)


In 1973, shortly after the CWA was enacted, EPA’s Office of General Counsel issued a memorandum confirming that the term “discharge of a pollutant” is “defined so as to include only discharges into navigable waters,” and that “[d]ischarges into ground waters are not included.” In re E.I. DuPont de Nemours & Co., Op. No. 6, 1975 WL 23850, at *3 (E.P.A.G.C. Apr. 8, 1975) (emphasis added).

- United States Rule 12(b) Motion to Dismiss, 1984.

About a decade later, the United States successfully argued in Kelley ex rel. People of the State of Michigan that discharges from a U.S. Coast Guard facility to groundwater allegedly hydrologically connected to nearby navigable waters were not regulated by the point source program. 618 F. Supp. 1103, 1105-07 (W.D. Mich. 1985). In moving to dismiss the case, the United States did not dispute a hydrologic connection, such that “chemicals [could] enter the groundwaters under the … area and be discharged into Grand Traverse Bay.” United States Mem. in Supp. of Rule 12(b) Mot. & In The Alternative for Summ. J. at 3-4, Kelley ex rel. People of the State of Michigan v. United States, 618 F. Supp. 1103 (W.D. Mich. 1985) (No. G83-630) (emphasis added). Rather, the United States argued that “Michigan cannot make these claims under the Clean Water Act since the Act does not regulate pollutant discharges onto soil or into underlying groundwater.” Id. at 5. According to the United States, “[t]he statutory language, the legislative history, the case law, and EPA’s interpretation of the Act all support this conclusion.” Id. at 22.


In 1992, EPA issued guidance explaining that “EPA and the States regulate facilities [under the CWA] that either discharge wastewaters directly to surface waters or discharge to municipal treatment systems.” EPA, Final Comprehensive State Groundwater Protection Guidance at 1-27 (December 1992). In addition, “[w]hile a number of States have incorporated ground water discharges into their NPDES permits and pretreatment requirements,” EPA confirmed that “there is no national requirement to do so.” Id. (emphasis added).


In 1994, EPA proposed a new Clean Water Initiative, including an “updated CWA” that addresses water quality issues “through a new, more targeted approach.” In discussing this new approach, EPA said it was “presently unclear whether a discharge to the ground or to groundwater that rapidly moves into surface water through a ‘direct hydrologic connection’ between the point of discharge and the surface water is subject to NPDES regulation.” To address this, EPA suggested that the “CWA should be amended so that … a point source discharge to ground or to groundwater that has a direct hydrologic connection with surface waters is subject to regulation as a NPDES point source discharge.” To mitigate the consequences of such an massive expansion of the NPDES program, however, EPA suggested
that this rule should only apply if: (1) "a reasonably foreseeable direct hydrologic connection to surface waters in the proximity of the release"; (2) "a greater than de minimis quantity of the pollutant must reasonably be able to reach the surface water"; and (3) "no other Federal statute directly addresses the activity causing the release." EPA, President Clinton’s Clean Water Initiative at 104-105 (Feb. 1994).

- EPA, Office of Wastewater Management, Case Study Questionnaire, 2000.

In 2000, EPA issued a questionnaire to plants operating cooling water intake structures in connection with the development of regulations under Section 316(b) of the CWA, 33 U.S.C. § 1326(b). In the questionnaire, EPA noted that “NPDES permits are required to be held … by any point source that discharges pollutants directly to waters of the United States.” For facilities that discharge all of their “effluent” to “groundwater injection wells,” the questionnaire directed the recipients to answer “no” to the question of whether “the facility presently has or … [is] in the process of obtaining a … NPDES … permit.” EPA, Office of Wastewater Management, Case Study Questionnaire (January 2000). In the questionnaire, EPA did not suggest that the facility should determine whether impacted groundwater has a “direct hydrologic connection” to surface water.

- EPA, Memorandum to EPA Administrator Browner, 2000.

Later that same year, high-ranking EPA officials (including EPA’s Director of the Water Permits Division) issued a memorandum to EPA Administrator Browner concerning potential new regulations for Concentrated Animal Feeding Operations (“CAFOs”). As part of these new regulations, the EPA officials indicated they were “exploring an option under which CAFOs would be required to determine whether they have a reasonable potential to discharge to groundwater with a direct hydrological connection to surface water.” At the time, the EPA officials explained that this “determination would likely require hiring an assessor.” If a “potential to discharge was established,” the officials suggested that the proposed regulations “might specify additional monitoring (which may require the operator to drill wells), record keeping and reporting requirements and compliance requirements (e.g., lining existing lagoon(s) to prevent leaching) to prevent or reduce discharges to groundwater.” In light of “the potentially high costs to small operators associated with such an option,” however, the EPA officials noted that EPA should give “careful consideration” to the “associated small business impacts” and “balance these against any identified environmental benefits.” In fact, the EPA officials recommended that EPA “streamline[ ] the[se] requirements for small businesses … or exempt[ ] them altogether.”


In a 2001 update on CAFO regulation, EPA noted that “[e]xisting regulations do not explicitly address environmental concerns such as … discharges to surface water via groundwater with a direct hydrologic connection.” EPA, Concentrated Animal Feeding Operations Regulation – Update (Aug. 13, 2001).

In 2004, EPA published a report regarding effluent guidelines for reducing pollutant discharges. In that report, EPA indicated that the “National [NPDES] regulations apply to … [e]xisting facilities that discharge directly to surface waters,” but did not provide any indication that those regulations also apply to releases to groundwater with a “direct hydrological connection” to surface water. EPA, Effectiveness of Effluent Guidelines Program for Reducing Pollutant Discharges Uncertain at Chapter 1, page 2 (August 24, 2014) (emphasis added).

EPA, Response to Comments on Draft NPDES Permit, Holyoke Gas & Electric Department, Cabot Street Station, 2005.

In 2005, EPA responded to comments on a draft NPDES permit for Holyoke Gas & Electric Department’s Cabot Street Station, which sits on the banks of the Holyoke Canal System (a tributary of the Connecticut River). In discussing the facility’s options to avoid NPDES permitting requirements, EPA explained that direct surface water discharges “could be redirected to a non-surface water discharge location, such as ground injection.” EPA, Holyoke Gas & Electric Department Cabot Street Station Response to Comments on Draft National Pollutant Discharge Elimination System (NPDES) Permit No. MA0001520, at 20. Under these circumstances, EPA said that “NPDES … permit requirements would not apply, because there would be no direct discharge to a surface water of the United States.” Id.

EPA, Fact Sheet, Draft NPDES Permit, Public Service of New Hampshire, Merrimack Station, 2011.

In 2011, EPA issued a fact sheet related to a draft NPDES permit for the Public Service of New Hampshire’s Merrimack Station, which sits next to the Merrimack River in Bow, New Hampshire. Although the previous NPDES permit included discharges from roof drains, EPA eliminated those discharges from the permit because “the roof drains convey rain water from [station’s] roof and drain it into the ground.” As a result, EPA concluded, the “roof drains do not constitute a point source with a direct discharge to the Merrimack River.”

EPA, Response to Public Comments, EPA NPDES Pesticide General Permit, 2011.

Also in 2011, in response to a comment on a final NPDES pesticide general permit stating that the permit should “ensure that discharges do not affect groundwater,” EPA confirmed that the “NPDES program … is for the control of discharges to waters of the United States” and that “discharges to groundwater are not regulated under the NPDES program.” EPA, Response to Public Comments, EPA NPDES Pesticide General Permit (Oct. 31, 2011) at xxii. In confirming that the NPDES program does not regulate “discharges to groundwater,” EPA provided no indication that a source must consider whether that groundwater has a “direct” hydrological-connection to surface water.

In 2014, EPA issued a fact sheet regarding the reissuance of three NPDES permits for the discharge of stormwater from municipal storm sewer systems to waters in Massachusetts. In addressing stormwater “discharges to the subsurface,” EPA stated that “NPDES permits are applicable for point source discharges to waters of the U.S. and that “discharges to groundwater are not addressed in the NPDES program and as such are not addressed by this permit.” EPA, Fact Sheet, Draft General Permits for Stormwater Discharges Systems from Small Municipal Separate Sewer Systems in Massachusetts at 18 (Sept. 30, 2014).

- **EPA, Response to Comments on NPDES General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewers Systems in Massachusetts, 2016.**

  In 2016, in response to comments on NPDES General Permits in Massachusetts, EPA said that “[i]n general the connection between groundwater discharges and surface waters is too complex to determine a direct causal effect.” EPA, Response to Comments on NPDES General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewers Systems in Massachusetts at 219 (April 4, 2016).

- **EPA, Response to Public Comments, Permit Nos. MAG910000 and NHG910000, 2017.**

  In 2017, in response to public comments on draft NPDES permits authorizing remediation activity discharges in Massachusetts and New Hampshire, EPA again made clear that “discharges to groundwater are not regulated by the NPDES program,” but “may be regulated under other discharge permit authorities.” EPA, Response to Public Comments, Permit Nos. MAG910000 and NHG910000, at 7 (March 9, 2017). As EPA explained: “If a discharge to groundwater requires a permit, the [NPDES] is not the permit program authority under which such discharges can be covered.” Rather, “such discharges are generally regulated under the [Underground Injection Control] Program” under the Safe Drinking Water Act, or “similar programs … such as State groundwater discharge programs.”
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<td>Clean Air Act</td>
<td>Establish a price on greenhouse gases in a manner consistent with the Clean Air Act.</td>
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<td>Clean Water Act</td>
<td>Establish a fund to provide financial assistance to states for the construction of water treatment facilities.</td>
<td>2018</td>
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<td>§ 600.1(a) of the Code of Federal Regulations.</td>
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*Note:* The above table contains a portion of the text from a section of a document, likely a regulatory or legal text. The section numbers and their respective requirements are listed, along with the reference to the Code of Federal Regulations. The text is formatted in a table to provide a clear and organized view of the requirements.
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**Chapter 42**

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*Note:* The table contains amendments proposed to the California Environmental Quality Act (CEQA) regulations. The proposed changes are aimed at refining and clarifying the CEQA process to better protect environmental interests while ensuring that development projects proceed in a timely and efficient manner. The amendments are intended to provide greater clarity for stakeholders and agencies involved in the CEQA process. The changes address topics such as the definition of "public agency," the applicability of CEQA to certain types of projects, and the procedures for preparing and reviewing environmental impact reports. The proposed amendments also include updates to the list of exempted projects, ensuring that CEQA is applied consistently across the state. The substantive explanations provide further details on the intent and implications of each proposed change.
<table>
<thead>
<tr>
<th>Week</th>
<th>Action</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify &amp; count birds within the protected area.</td>
<td>Bird count data will be used to inform land management decisions.</td>
</tr>
<tr>
<td>2</td>
<td>Observe birds feeding behavior.</td>
<td>Observations will help us understand how birds use the protected area.</td>
</tr>
<tr>
<td>3</td>
<td>Collect samples of bird droppings.</td>
<td>This will help us determine the presence of certain species.</td>
</tr>
<tr>
<td>4</td>
<td>Analyze the collected data.</td>
<td>Data analysis will inform our understanding of bird distributions.</td>
</tr>
<tr>
<td>5</td>
<td>Prepare a report summarizing findings.</td>
<td>Report will be shared with stakeholders and the public.</td>
</tr>
</tbody>
</table>
Ms. Mettler. Chairman Barrasso, Ranking Member Carper, and members of the Committee, my name is Martha Clark Mettler, and it is my pleasure to appear before you today to provide the Association of Clean Water Administrators’ perspectives on the appropriate role of States and the Federal Government in protecting groundwater. I am here today representing the members of ACWA as a long time member and past president.

ACWA is the national, non-partisan professional organization representing the State, interstate, and territorial water quality officials responsible for the implementation of surface water protection programs throughout the Nation. ACWA members are on the front lines of Clean Water Act monitoring, permitting, inspection, compliance, and enforcement across the country and are dedicated to Congress’s goal of restoring and maintaining the chemical, physical, and biological integrity of our Nation’s waters.

As the primary entities responsible for carrying out the Clean Water Act, States are uniquely positioned to provide input on the appropriate role of States and the Federal Government in regulating discharges of pollutants to groundwater, specifically those discharges that may lead to surface waters via direct hydrologic connection. Discharges to groundwater are often site specific and complex, and defining direct hydrologic connection can be challenging.

Due to this complexity, as well as varying State legal frameworks, there is great diversity in State opinion on and approaches to the appropriate manner of regulating discharges to groundwater. However, States are consistent in their desire to retain their current flexibilities to regulate these discharges using their discretion to determine which laws and regulatory structures apply.

ACWA members are currently reviewing relevant case law, Federal law, and their own State laws to submit comments responsive to EPA’s recent request. My statement today does not supersede or alter the perspective or input of any individual State, including Indiana. I encourage the Committee to review individual State comments sent to the docket to fully understand the diversity among the States.

States are currently equipped with legal frameworks to regulate discharges of pollutants to groundwater, including discharges that may lead to surface waters via direct hydrologic connection. However, there is significant variety in the approaches States employ to regulate these discharges.

Some States, like New York, Wisconsin, Wyoming, and Oklahoma, include groundwater in their definitions of “Waters of the State,” allowing for regulation of direct discharges of pollutants to groundwater through State programs.

Some States, like Tennessee, Connecticut, South Dakota, West Virginia, and Nevada, utilize the Federal Safe Drinking Water Act Underground Injection Control program to regulate certain dis-
charges of pollutants to groundwater. Some States, like Maine and Kentucky, employ the Resource Recovery and Conservation Act to address groundwater pollution. And some States, like Colorado and Alaska, use Federal NPDES permitting authority to regulate discharges of pollutants to groundwater. Additionally, many States, including those listed, use variations and combinations of these regulatory controls.

It is critical that States retain maximum flexibility to regulate discharges to groundwater in ways that work for the States. Therefore, States prefer that EPA neither demand nor deny the use of NPDES for groundwater that may lead to surface water. Therefore, ACWA supports the empowerment of States to manage discharges to groundwater.

We recognize there are multiple Federal courts currently addressing Clean Water Act citizen suits on this issue. It is unclear how these courts will rule on each case; however, there is a chance that the Circuit Court decisions will be inconsistent, causing national uncertainty. This would be problematic for States implementing the Clean Water Act. Therefore, States encourage EPA to clarify its previous statements on discharges to groundwater and explicitly empower States to continue to make decisions using their own discretion.

EPA’s request for comment is an excellent opportunity for the Agency to work with States in the spirit of cooperative federalism. Therefore, Congress should allow the process to progress before taking legislative action on this issue. But at a minimum, this Committee should encourage EPA to explicitly empower the States. Further, we urge the Committee to direct the Agency to coordinate with State programs and continue to monitor EPA’s efforts, especially as the Agency reviews public comments and determines what future actions to take.

Mr. Chairman, Ranking Member Carper, and members of the Committee, I thank you for this opportunity to share ACWA’s perspectives. ACWA remains ready to answer any questions or concerns EPA or Congress may have, and would be pleased to facilitate further dialogue with our State members.

I am happy to answer any questions.

[The prepared statement of Ms. Mettler follows:]
Martha Clark Mettler  
Assistant Commissioner, Office of Water Quality  
Indiana Department of Environmental Management (IDEM)

Martha Clark Mettler joined IDEM in 1995 and began her career in the Ground Water Section. In this position, she worked on a variety of projects including Wellhead Protection and Ground Water Quality Standards. Martha became Chief of the Ground Water Section in 1999. In 2003, Martha began serving as IDEM’s Watershed Planning Branch Chief. Here, she had oversight of watershed planning, wetland certification, TMDL development, rules development, and other program areas. She was promoted to Deputy Assistant Commissioner in 2005 and to her current position as Assistant Commissioner in 2015. Martha has been an active member of ACWA since 2005, working on numerous efforts, chairing committees, and having served on the Board of Directors as Treasurer, Vice President, and President of the Association.

Martha received a B.S. in Public Affairs and a Master of Environmental Planning from Indiana University.
April 18, 2018

Testimony of

Martha Clark Mettler
Assistant Commissioner: Office of Water Quality,
Indiana Department of Environmental Management

On behalf of the
Association of Clean Water Administrators

U.S. Senate
Committee on Environment
and Public Works

Regarding
The Appropriate Role of States and the Federal Government in Protecting Groundwater
Introduction

Chairman Barasso, Ranking Member Carper, and members of the Committee, my name is Martha Clark Mettler and it is my pleasure to appear before you today to provide the Association of Clean Water Administrators’ ("ACWA") perspectives on the appropriate role of states and the federal government in protecting groundwater. I am here today representing the members of ACWA as a long-time member and past president.

I am currently the Assistant Commissioner of the Office of Water Quality at the Indiana Department of Environmental Management ("IDEM"). IDEM is responsible for the daily implementation of the Clean Water Act ("CWA") water quality programs in Indiana. I have been with IDEM since 1995 and have served as Assistant Commissioner since 2015.

ACWA is the national, non-partisan professional organization representing the State, Interstate, and Territorial water quality control officials responsible for the implementation of surface water protection programs throughout the nation. ACWA members are on the front lines of CWA monitoring, permitting, inspection, compliance, and enforcement across the country and are dedicated to Congress' goal of restoring and maintaining the chemical, biological, and physical integrity of our nation's waters.

As the primary entities responsible for carrying out the CWA, states are uniquely positioned to provide input on the appropriate role of states and the federal government in regulating discharges of pollutants to groundwater, specifically those discharges that may lead to surface waters via direct hydrologic connection. Discharges to groundwater are often site-specific and complex and
defining a “direct” hydrologic connection can be challenging. Due to this complexity, as well as varying state legal frameworks, there is great diversity of state approaches on the appropriate manner of regulating discharges of pollutants to groundwater. However, states are consistent in their desire to retain their current flexibilities to regulate these discharges using their discretion to determine which laws and regulatory schemes apply, including the federal Safe Drinking Water Act (“SDWA”), Underground Injection Control (“UIC”) Program, the federal Resource Conservation and Recovery Act (“RCRA”), state laws, as well as the CWA.

ACWA members are currently reviewing relevant case law, federal law, and their own state laws to submit comments responsive to EPA’s recent request on the issue. My statement today does not supersede or alter the perspective or input of any individual state, including Indiana. I encourage the Committee to review individual state comments sent to the docket in response to EPA’s request for comment on this issue so that you and the members of the Committee fully understand the diversity among the states.

Cooperative Federalism – State Input

ACWA appreciates EPA and this Committee seeking comment and testimony from stakeholders, especially the states. Because of states’ role under the CWA as co-regulators, states encourage EPA to maintain regular contact, through forums, calls, and other communication, with ACWA and its members throughout the life of this effort. State regulators have significant experience dealing with this issue as well as technical expertise and particular knowledge of their own waters and regulatory structures. In the spirit of cooperative federalism, we look forward to working with EPA, as well as Congress, on this important issue.
State Flexibility

States are currently equipped with legal frameworks to regulate discharges of pollutants to groundwater, including discharges that may lead to surface waters via direct hydrologic connection. However, there is significant diversity in the approaches states employ to regulate these discharges.

- Some states, like New York, Wisconsin, Wyoming, and Oklahoma, include groundwater under their definitions of “Waters of the State”, allowing for the regulation of direct discharges of pollutants to groundwater through state programs;

- Some states, like Tennessee, Connecticut, South Dakota, West Virginia, and Nevada, utilize the federal Safe Drinking Water Act (“SDWA”) Underground Injection Control (“UIC”) Program to regulate certain discharges of pollutants to groundwater;

- Some states, like Maine and Kentucky, employ the Resource Recovery and Conservation Act to address groundwater pollution; and

- Some states, like Colorado and Alaska, use federal NPDES permitting authority to regulate discharges of pollutants into groundwater that may lead to surface waters via direct hydrologic connection.

Additionally, many states, including those listed, use variations and combinations of these regulatory controls.

It is critical that states retain maximum flexibility to regulate discharges to groundwater in ways that work for the states. Therefore, states prefer that EPA neither demand nor deny the use of
NPDES for groundwater that may lead to surface water via direct hydrologic connection. States are in the best position to manage this issue for they are particularly situated to assess local environmental conditions, understand their own legal frameworks, have the expertise, and recognize how to appropriately implement the various federal and state laws that may cover a discharge of pollutants to groundwater, including discharges that may impact surface water. Therefore, ACWA supports the empowerment of states to utilize their own laws, federal laws, and CWA protections at their own discretion to manage discharges to groundwater.

Uncertainty Due to Court Decisions

We recognize that there are multiple federal courts currently addressing CWA citizen suits on this issue. The Hawai‘i Wildlife Fund v. County of Maui decision in the Ninth Circuit established a specific test to determine when the CWA applies to discharges to groundwater. The Ninth Circuit explained that for a discharge of pollutants to groundwater to violate the CWA, (1) there must be a discharge of pollutants from a point source, (2) the pollutants must be “fairly traceable” from a point source to a navigable water such that the discharge is the functional equivalent of a discharge into a navigable water, and (3) the pollutant levels reaching a navigable water are more than de minimus. In their decision in Upstate Forever, et al., v. Kinder Morgan Energy Partners, the Fourth Circuit ruled similarly to the Ninth Circuit in Maui stating, “We do not hold that the CWA covers discharges into ground water itself. Instead, we hold only that an alleged discharge of pollutants, reaching navigable waters located 1000 feet or less from the point source by means of ground water with a direct hydrological connection to such navigable waters, falls within the scope of the CWA”. There are also cases pending in the Second (26 Crown Associates v. Greater New Haven Regional Water Pollution Control Authority), Fourth (Sierra Club v. Dominion Energy),
and Sixth (Kentucky Waterways Alliance v. Kentucky Utilities and Tennessee Clean Water Network v. TVA) Circuits on the issue. It is unclear how these courts will rule. However, there is a chance that circuit courts will end up split, causing national uncertainty. This would be problematic for states implementing the CWA. Therefore, states encourage EPA to clarify its previous statements on discharges to groundwater in order to explicitly empower states to continue to make decisions at their own discretion.

Congressional and Agency Action

The EPA request for comment, Clean Water Act Coverage of "Discharges of Pollutants" via a Direct Hydrologic Connection to Surface Water [EPA-HQ-OW-2018-0063], is an excellent opportunity for the Agency to work with states in the spirit of cooperative federalism. Therefore, Congress should allow the process to progress before taking legislative action on this issue. At a minimum, this Committee should encourage EPA to clarify previous statements on discharges to groundwater in order to explicitly empower states to continue to make decisions at their own discretion.

Further, because of states' role under the CWA as co-regulators, the fact that states are in the best position to assess local environmental conditions, understand their own legal frameworks, and implement the various federal and state laws that may cover a discharge of pollutants to groundwater, we urge this Committee to direct the Agency to coordinate with state programs and continue to monitor EPA's efforts, especially as the Agency reviews public comments on this issue and determines what future actions to take.
Closing

Mr. Chairman, Ranking Member Carper and Members of the Committee, I thank you for this opportunity to share ACWA’s perspectives on the appropriate role of states and the federal government in protecting groundwater. ACWA remains committed to the goals of the CWA and look forward to working with our partners at EPA as they move forward with efforts related to this issue. ACWA remains ready to answer any questions or concerns EPA or Congress may have and would be pleased to facilitate further dialogue with our state member agencies. I am happy to answer any questions that you may have.
1. In the Hawaii Wildlife Fund case, the 9th Circuit held that it “would make a mockery of the [Clean Water Act’s] prohibitions” if polluters couldn’t dump pollutants straight into the Pacific Ocean from an outfall pipe but could pump the same pollutants into the ocean via hydrologically connected groundwater.

   a. Thinking about what the 9th Circuit said, how would regulators keep waters clean if polluters could simply discharge their contaminants into the ground 100 feet away from a “navigable” water to avoid Clean Water Act permitting requirements?

   First, polluters cannot simply discharge contaminants into the ground. Second, a Clean Water Act (“CWA”) NPDES permit is not the only tool to regulate and manage groundwater discharges. States use a variety of different statutory and regulatory approaches to address this type of discharge including the Safe Drinking Act – Underground Injection Control program (to regulate certain discharges of pollutants to groundwater), the Resource Conservation and Recovery Act (to address groundwater pollution), and other groundwater protection programs under federal and state law. Most states use variations and combinations of these regulatory controls. In considering the example provided above, states would likely consider the type of discharge, the amount of discharge, the type of pollutants in the discharge, the depth of the discharge, the surrounding soil types, proximity to surface waters, whether the surface water was impaired for the pollutants being discharged, whether the discharge flow was hydrologically connected to the surface water, along with other factors before determining whether to allow such a discharge and, if allowed, under which program the discharge would be regulated.

   b. What would you do as a practical matter to protect water quality in your state if power plants, large confined animal feeding operations, and other industrial operations could avoid Clean Water Act protections in this way?

   As they do now, states protect groundwater and surface water quality. Outside of the CWA, states have the ability to regulate and manage these discharges through many legal avenues including the Safe Drinking Act – Underground Injection Control program, the Resource Conservation and Recovery Act, and other groundwater protection programs under federal and state law.

2. In your testimony, you state, “It is critical that states retain maximum flexibility to regulate discharges to groundwaters in ways that work for the states. Therefore, states prefer that
EPA neither demand nor deny of [sic] the use of NPDES for groundwater that may lead to surface water via direct hydrologic connection.” Under the Clean Water Act, do you believe it would be helpful if EPA allowed states to submit for approval water quality standards for hydrologically connected groundwater?

As states already have the tools to regulate and manage these discharges, including CWA permitting, it would not necessarily be helpful if EPA allowed states to submit for approval water quality standards for hydrologically connected groundwater.

3. Your written testimony notes that discharges to groundwater “are often site-specific and complex and defining a ‘direct’ hydrologic connection can be challenging.” In both the recent Ninth Circuit Hawaii Wildlife Fund case and Fourth Circuit Kinder Morgan case, all parties (including the discharger) agreed that the pollutants came from the discharge at issue. Do you have the same concerns about easy cases like these that you do about some of the more complicated cases?

Regardless of the level of complexity in determining whether there is a link from a groundwater discharge to surface water contamination, states remain in the best position to make the determination of what regulatory controls apply because of the states’ role under the CWA as co-regulators. States are in the best position to assess local environmental conditions, understand their own legal frameworks, and implement the various federal and state laws listed above that may regulate a discharge of pollutants to groundwater.

Mr. Brown testified that, “there are thousands of contaminant pollutants in groundwater currently in the United States that have yet to be fully addressed.” In your experience as a state regulator, do you find that to be the case? If so, is there anything the EPA or Congress can do to allow you or other ACWA members to more rapidly address contaminated groundwater?

There are a number of unregulated constituents that may be adversely impacting both groundwater and surface water quality. Continued research is needed to understand the impacts of these constituents. Additional resources for research for EPA and its federal partners is needed. Furthermore, the states need more resources, including money, staff, and political support, to continue to address both known and potential sources of contamination.

Senator Merkley:

4. In your testimony, you say that states have many different approaches to regulating discharges to groundwater and that given the complexity these discharges sometimes present, states are best suited to address discharges to groundwater through state expertise and regulations. However, from recent rulings such as the Ninth Circuit decision on Hawaii’s Wildlife Fund v. County of Maui, and recent coal ash pond releases that contaminated surface waters, it is clear that not all states are taking approaches that protect surface water quality. How would you propose regulating groundwater discharges that
impact surface waters, to ensure that controls on those discharges are protective of state water quality standards?

States have the tools to manage and regulate these types of discharges. However, there are often other factors preventing state regulators from doing so. Some of these factors include resource constraints and political pressure. To ensure that states continue to tackle these issues, states often need additional money, staff, resources, and political support.

5. In your state, if there was an unpermitted discharge to groundwater that impacted surface waters, how would you determine whether that discharge had a reasonable potential to cause or contribute to an excursion above any water quality standard, including narrative standards? If there was a new facility proposing to discharge to groundwater near a surface water, would a reasonable potential analysis be warranted?

In response to your first question, states use different approaches along with or instead of reasonable potential to manage this type of situation. Oftentimes, coordination between groundwater and surface water regulators in a state office must occur. States would likely consider the type of discharge, the amount of discharge, the type of pollutants in the discharge, the depth of the discharge, the surrounding soil types, proximity to surface waters, etc. to determine the best approach to resolving the impacts to water quality.

In response to your second question, if a new facility was proposing to discharge near a surface water, reasonable potential analysis would be required if the state was issuing a NPDES permit. If the state were to select an appropriate regulatory tool other than a NPDES permit, the proposed discharge would be evaluated to ensure compliance with the program selected.

6. The lack of these types of critical analyses have led to the many legal cases that were discussed at the hearing. There is a clear need to address the vast disparities in state approaches to regulating groundwater discharges that impact surface waters and to prevent future releases that may harm the integrity of the nation’s waters. As a state regulator, how would you propose addressing this issue so that state requirements for groundwater discharges impacting surface waters are consistent across all states, tribes, and territories and fair to the permitted community while being protective of surface waters?

There is not a “one-size-fits-all” approach to this issue, as discharges to groundwater are often site-specific and complex and defining a “direct” hydrologic connection can be, and often is, challenging. Among states, and even within states, geography and hydrology are highly variable. Due to this complexity, as well as varying state legal frameworks, diversity of state approaches on the appropriate manner of regulating discharges of pollutants to groundwater is necessary.
Senator Barrasso. Thank you very much, Ms. Mettler.
Mr. Guild.

STATEMENT OF JOE GUILD, TREASURER, NATIONAL CATTLEMEN'S BEEF ASSOCIATION

Mr. Guild. Good morning, Chairman Barrasso, Ranking Member Carper, and members of the Committee. My name is Joe Guild. I am a rancher for Washoe County, Nevada, where I live with my wife, Catherine. I operate a cow-calf ranch and alfalfa ranch on private and public lands in Nevada and California. I am a member of the Public Lands Council and the current treasurer for the National Cattlemen's Beef Association. Thank you for allowing me to visit with you today.

One of the most complex environmental issues facing our country in recent history has been the EPA’s attempted definition of Waters of the United States. NCBA works hard to ensure that the definition of WOTUS is not expanded to include water Congress never intended to regulate. However, if EPA finds authority to regulate discharges via groundwater, any progress made on this front will be lost. The regulation of groundwater has the potential to negatively impact even more cattle operations than the damaging 2015 WOTUS rule.

The Carson River runs through a portion of the range on the smaller ranch that I manage. The water is used to irrigate hay fields and valley pastures. There is a tributary that runs right through one of the valleys on the range of that ranch. To prevent degradation of the stream bed, we move the cattle away from the stream a few times a week. I don’t have an NPDES permit for this operation because, quite frankly, I don’t think I need one; my cattle are not point sources, and thus do not meet the Clean Water Act’s discharge standard.

Through the USDA’s Natural Resource Conservation Service, I have implemented voluntary conservation practices on my operations, including the strategic placement of wells and underground pipelines to move water more efficiently and effectively throughout that operation. Such voluntary practices increase efficiency and maintain natural resource quality, both on my operation and downstream from me. However, the expansion of the Clean Water Act to regulate discharges into groundwater would change all of this. Not only would such an expansion directly contradict the intent of the law, but take authority away from States who are best positioned to manage groundwater quality.

The conduit theory that groundwater may be regulated as a point source defeats the Clean Water Act’s bifurcated approach by blurring the line between point sources and non-point sources. Bringing non-point sources into the realm of Clean Water Act regulation will exponentially expand EPA’s permitting and enforcement authority, while providing little environmental benefit at great cost to the Government.

Ranchers work hard to maintain the soil and water quality on our operations through the implementation of voluntary NRCS programs. Due to the unpredictable diffuse flow of groundwater, which varies depending on the hydrological and geological features in each region of each State, it is difficult to calculate what amount
of nutrients could be coming from my ranching operation flowing through the groundwater to a distant or even an adjacent surface water.

By regulating groundwater, the EPA accomplishes nothing other than a significant expansion of Clean Water Act authority to manage operations, which, frankly, do not need to be federally managed. Presently, discharges to groundwater are managed at the State level, and that should remain in place.

Additionally, groundwater regulation via the Clean Water Act prevents significant risk to any diversified producer. I assist in managing a large range livestock ranch of sheep and cattle in eastern Nevada. On that ranch we also produce a large quantity of alfalfa for our own use and for sale to dairies. If the direct hydrological theory becomes the law throughout our country, I will be required to get an NPDES permit for the diversified ranch because our irrigation water may discharge to a surface water through groundwater percolation.

If Congress allows the expanded interpretation of the Clean Water Act to include groundwater, all sectors of the cattle industry will face additional Federal regulation and scrutiny, with minimal environmental benefit. Farmers and ranchers will become further disenfranchised, leading to a halt in innovation and voluntary conservation programs that are successfully protecting water quality as we speak. Ultimately, increased regulation will lead to small ranchers perhaps selling their cattle and further consolidation of our industry.

Thank you for your time, Senators, and I look forward very much to your questions.

[The prepared statement of Mr. Guild follows:]
Joe Guild
2018 NCBA Treasurer

Joe Guild is a fourth generation Nevadan with roots dating back to the late 1850s. He is a third generation Nevada Lawyer licensed to practice in Nevada and California. He and his partner own Great Basin Resource Advocates, a full-service ranch management consulting firm. They currently operate a cow-calf ranch for a family trust located on private and US Forest Service land in Douglas County, Nevada and Alpine County, California. They also run a small herd of their own cattle on this ranch. Joe is a member of the management team of a very large cattle, sheep and dairy hay ranch in Eastern Nevada which operates on private and public lands. He has managed ranches and represented ranch interests for over forty years.

Joe is a Past President of the Nevada Cattlemen’s Association and was named Cattleman of the Year in 2001. He is a past chair of the NCBA Tax and Credit and Public Lands Committees. Additionally, he is the past NCBA Region VI Vice-President. From 2015-2018, Joe served as NCBA's Policy Division Policy Vice Chairman, then Chairman. He is also the Past President of the Nevada Agricultural Foundation. Joe is an alumnus of the University of Nevada Reno and is a member of the College of Agriculture, Biotechnology and Natural Resources advisory committee.

He is a US Army Veteran of the Vietnam War; First Lieutenant with an Honorable Discharge. He and his wife, Catherine, have five children and five grandchildren.
Testimony

on behalf of the

National Cattlemen’s Beef Association
&
Public Lands Council

with regards to

“The Appropriate Role of the States and Federal Government in Regulating Groundwater”

submitted to the

United States Senate
Committee on Environment and Public Works
John Barrasso, Chairman

submitted by

Joe Guild
Treasurer
National Cattlemen’s Beef Association
Member
Public Lands Council

April 18, 2018
Washington, D.C.
Good morning, my name is Joe Guild. I am a rancher from Washoe County, Nevada, where I live with my wife, Catherine. I co-operate a cow-calf ranch for a family trust located on private and US Forest Service land in Douglas County, Nevada and Alpine County, California, in addition to running a small herd of my own cattle. Additionally, I’m a member of the management team for a large cattle, sheep, and dairy alfalfa ranch in Eastern Nevada that operates on private and public lands. I’m a past president of the Nevada Cattlemen’s Association, member of the Public Lands Council, and current Treasurer of the National Cattlemen’s Beef Association. Today, I represent nearly 25,000 of America’s cattle producers who will be detrimentally impacted by federal regulation of groundwater under the Clean Water Act. Thank you, Chairman Barrasso and Ranking Member Carper, for allowing me to speak on this critical issue today.

One of the most complex environmental issues facing our country in recent history has been the Environmental Protection Agency’s (EPA) attempted definition of Waters of the United States, known simply as WOTUS. NCBA has worked hard, and continues working to ensure that the definition of WOTUS is not expanded to include water that Congress never intended to regulate. However, if the EPA finds authority to regulate discharges to surface water via groundwater, any progress made on this front will be lost. The regulation of groundwater has the potential to impact even more cattle operations than the damaging 2015 WOTUS definition.

The Carson River runs through a portion of the range on the smaller ranch that I manage. The water is used to irrigate hay fields and mountain and valley pastures. A tributary runs through one of the valleys on the mountain range. To prevent degradation of the streambed, we move the cattle away from the stream as often as possible. I don’t have an NPDES permit for this operation because, quite frankly, I don’t need one. My cattle are not point sources, and thus do not meet the Clean Water Act’s discharge standard. Through USDA-NRCS, I’ve implemented voluntary conservation practices on my operations, including the strategic placement of wells and underground pipelines to move water throughout the operation. Such voluntary practices increase efficiency and maintain natural resource quality, both on my operation and downstream. However, the expansion of the Clean Water Act to regulate discharges into groundwater would change all of this. Not only would such an expansion directly contradict the intent of the law, but take authority from those who can best manage groundwater quality.
Currently, a range of thought exists when it comes to the appropriate regulation of groundwater at the federal and state level. Among those who believe federal groundwater regulation to be necessary, two schools of thought exist. The conduit theory argues that groundwater is a point source, while the direct hydrologic connection theory claims that groundwater is a conveyance. Under the plain language of the Clean Water Act, groundwater is neither. Groundwater is sufficiently managed through state programs and the Safe Drinking Water Act. Regulation under the Clean Water Act would only lead to unnecessary, duplicative permitting and enforcement, usurping current state authority.

States are uniquely positioned to manage and prevent the discharge of pollutants into groundwater.

The Clean Water Act begins by stating that it is the “policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this Act.” This important statement indicates the key role that states play in protecting the quality of our nation’s water. Unfortunately, the EPA’s direct hydrologic connection theory completely obliterates this federal-state partnership through a de facto declaration that all waters are federal.

When Congress enacted the Clean Water Act in 1972, then amended the Act in 1987, one theme remained constant; the Clean Water Act is intended to regulate discharges to jurisdictional surface waters from point sources. The Act specifically defines a point source as a discernable, confined, and discrete conveyance that discharges pollutants to a jurisdictional surface water. By limiting Clean Water Act jurisdiction to point sources, Congress ensured that responsibility would remain with the states to regulate groundwater quality. This wasn’t an accident – Congress understood that groundwater regulation could not be a one-size-fits-all approach.

Only states have the flexibility to regulate groundwater discharges in a way that is most beneficial to the environment. The state of Nevada has a robust environmental regulatory regime, much of which is dedicated to maintaining groundwater quality. In western states like Nevada, water quality is directly tied into a question of water quantity. Questions of water quantity are
often tied directly to questions of water quality, and states cannot effectively manage water rights if they have no control over the regulation of groundwater quality.

In Nevada, we have a number of different subsurface water systems that are unique to our region. Certainly, underground flow of glacial water, which is a unique piece in Nevada’s water quality regulatory framework, should not be regulated in Mississippi, New Jersey, or Florida. One of the things I love most about our country is its geographic and topographic variety — every state provides a new adventure. But those new adventures present new challenges to overcome, and states are the only parties that can address soil and water quality in a holistic manner to ensure that our agricultural operations stay in business for many generations to come.

**Groundwater is not a point source, and regulating it as such blurs the line between point and non-point source standards that are key to the integrity of the Clean Water Act.**

The theory that groundwater may be regulated as a point source defeats the Act’s bifurcated approach by blurring the line between sources and non-point sources. Bringing non-point sources into the realm of Clean Water Act regulation will exponentially expand EPA’s permitting and enforcement authority, while providing little environmental benefit.

To determine if federally regulating groundwater as a point source under the Clean Water Act really provides a significant benefit, Congress and the EPA must consider what environmental benefit will be gained, and if that benefit outweighs a significant increase in operation costs. In the cattle industry, Concentrated Animal Feeding Operations (CAFOs) are defined as point sources under the Clean Water Act, and are therefore required to have an NPDES permit if there is a discharge from their operation into a jurisdictional surface water. Under the NPDES permit, CAFOs are required to implement manure management practices that prevent their operation from discharging. A CAFO does not receive an NPDES permit until it meets set requirements for nutrient management.

So who will this additional permitting requirement effect in the cattle industry? Me, the pasture-based cow-calf rancher, and the other ranchers like me across the country. We work hard to maintain the soil and water quality on our operations through the implementation of voluntary USDA-NRCS programs. Due to the unpredictable, diffuse flow of groundwater that varies depending on the hydrological and geological features in each region, it is difficult to calculate
what amount of nutrients could be coming from my ranching operation and flowing through groundwater to distant or adjacent surface water. That all said, it would be devastating to the farming community for the government to require farmers and ranchers to get NPDES permits for groundwater flow.

To put it in perspective, the number of cattle that graze today on pasture in the United States is less than the number of buffalo that grazed America’s prairies prior to westward expansion. Waste from non-point, pasture-based agriculture is simply not a regulatable source of surface water pollutant. By regulating groundwater, the EPA accomplishes nothing other than a significant expansion of Clean Water Act authority to manage operations that, frankly, do not need to be federally managed. Presently, discharges to groundwater are managed at the state level, and should remain so.

**Groundwater is not a conveyance as defined by the Clean Water Act.**

While it is clear that groundwater should not be regulated as a point source, additional confusion remains as to whether groundwater can be classified as a “conveyance” under the Clean Water Act. While the Act provides no definition for conveyance, the general definitions section of the Act clarifies that conveyances must be “discernable, confined, and discrete.” All prior case law in this area finds that a point source may be separated from a jurisdictional surface water, and that point source can still be subject to permitting and enforcement if a conveyance exists which connects it to the surface water. However, in all cases, the conveyances considered met the qualifications provided by the Clean Water Act. In fact, these conveyances were specifically engineered to convey pollutants from one point to another. Naturally flowing and diffuse groundwater is nothing like conveyances that were designed, built, and maintained with the sole purpose of moving effluent from one point to another.

Interpretation of the Clean Water Act to regulate groundwater as a conveyance presents a significant risk to any diversified producer. Earlier, I mentioned that I assist in managing a large operation to produce alfalfa for beef cattle, dairy cattle, and sheep. On this operation, we fertilize crops and consult with experts to ensure that nutrients are no over applied. But scientific data tells us that, even with the best precision application practices – even when we do everything possible to ensure that the application of nutrients to a crop is exact, there will always be some amount of nutrient that pass the root zone. If we do our job right, that amount will be filtered out...
by soil in the groundwater system, and has little to no environmental or public health impact. However, under the direct hydrologic connection, because a risk exists of discharging to surface water, even though that risk is minimal, operations will be required to get an NPDES permit.

If Congress allows the expanded interpretation of “conveyance” to include groundwater, all sectors of the cattle industry will face additional federal regulation and scrutiny, with little to no environmental benefit. Without an incentive, farmers and ranchers will stop working voluntarily with state and federal conservation programs to protect water quality. As producers sell off their cattle out of frustration with further regulation, the industry will face further consolidation because smaller producers are unable to comply with overly burdensome permitting requirements.

Thank you for taking the time to hear my concerns, and for listening to livestock producers around the country. The key to environmental sustainability is working together with states and stakeholders, not fighting us. Thank you for your time, and I look forward to answering your questions.
Chairman Barrasso:

1. Mr. Guild, are ranchers and farmers at risk of not knowing what liability they have under the Clean Water Act if EPA does not articulate in a clear manner when National Pollutant Discharge Elimination System (NPDES) permits are required?

Absolutely, yes. Farmers and ranchers need clear and precise environmental statutes – not ambiguous standards that require us to play a daily guessing game. We strive to maintain a healthy environment for our operations, communities, and families. Having strong environmental laws that do their jobs, while providing clear rules is necessary to preserving the land that I work hard to maintain.

2. Mr. Guild, during the hearing, you had the following exchange with Senator Van Hollen:

Senator Van Hollen: [A]s I understand your testimony, you do not dispute the fact that if you have what is unambiguously a point source, like a pipe coming out of petroleum, Duke Energy Company, or a coal ash pit, you are not arguing here today that the Clean Water Act does not apply to that, even if its conduit is through the groundwater. That is not your argument today?

Mr. Guild. That is correct. As I said in answer to Senator Inhofe’s question, the law defines what a point source is, discernible, confined, and discreet, so your description fits the description of what the law calls a point source.

Could you please elaborate on your response?

As I said in my answer, to be regulated under the Clean Water Act, a point source must be a “discernible, confined, and discrete” conveyance. Supreme Court justices have gone on to define conveyances under the clean water act as being “discernible, confined, and discrete.” Groundwater simply does not meet these qualifications to be a conveyance under the Clean Water Act.

While Senator Van Hollen attempted to distinguish between my operation and a coal ash pit, the Clean Water Act does not draw the same line. If the Clean Water Act is expanded to include leaks from a Duke Energy pipeline, an NRCS-approved manure management system is included just the same. And once pollutants mix, it’s nearly impossible to determine who’s to blame. Emphatically, groundwater movements cannot be precisely measured because those movements are not discernible, confined, and discrete.
3. In your written testimony, you state that you do not have an NPDES permit for your cattle operation “because, quite frankly, I don’t need one. My cattle are not point sources, and thus do not meet the Clean Water Act’s discharge standard.” The courts agree with you. See Ore. Natural Desert Ass’n v. Dombeck, 172 F.3d 1092 (9th Cir. 1998) (“It would be strange indeed to classify as a point source something as inherently mobile as a cow.”). Are you aware of any efforts by EPA to regulate your cattle as point sources? If so, please provide information about this effort.

While individual cattle are not considered point sources, cattle operations are considered point sources if they are designated as CAFOs. Operations with over 1,000 cattle are automatically categorized as large CAFO, and smaller animal feeding operations may be categorized as a CAFO if they discharge to a navigable water through a man-made device, such as a flushing system or ditch.

Thousands of small and medium animal feeding operations understand this, and work hard to contain pollutants within their operations. They put a lot of time, resources, and money into ensuring that they do not discharge to a jurisdictional surface water. Often, this requires the establishment of manure management systems, including lagoons, ditches, pipes, and other means of transporting manure through the operations to ensure proper management and application. However, if groundwater is considered a conveyance to surface water under the Clean Water act, this work will hurt more operations than it helps. If any lagoon, pipe, ditch, or part of a manure management system leaks, a farm will be subject to liability under the Clean Water Act.

I fear that, under the direct hydrologic connection theory, thousands of animal feeding operations would be designated as CAFOs under the Clean Water Act – subjecting them to an unnecessary regulatory burden.

4. At the hearing, Senator Van Hollen sought to clarify your concerns, asking, “You do not dispute the fact that if you had what is unambiguously a point source—like a pipe—coming out of a petroleum . . . company, or a coal-ash pit—you’re not arguing here today that the Clean Water Act does not apply to that, even if its conduit is through the groundwater. That’s not your argument today.” You responded, “That’s correct and, as I said in answer to Senator Inhofe’s question, the law defines what a point source is.”

a. Imagine if, upstream of your cattle ranch, a power plant maintained a coal-ash pit filled with toxic chemical waste. Further imagine that the chemical waste leaked out the coal-ash pit, seeped one foot underground — not into groundwater — travelled ten feet downhill into the stream, poisoning the water your cattle rely on to drink. In your opinion, should the owner of that power plant be liable under the Clean Water Act for discharging pollutants from the coal ash pond into the stream? Or should you be unable to get a court order requiring the power plant to fix the leak under the Clean Water Act?
The owner of the plant should be liable, but not under the Clean Water Act. The owner of the power plant would be liable under the Comprehensive Environmental Response, Cleanup, and Liability Act (CERCLA). Under CERCLA, a party is strictly liable for any release of hazardous substance into the environment, including the lead from the coal ash pit. While I would seek damages, I do not believe that the Clean Water Act is the appropriate vehicle, and would not seek to expand its reach.

Senator Merkley:

5. In your testimony, you claimed several times that, should EPA regulate discharges to groundwater that impact surface waters, your ranch and other livestock operations would be subject to NPDES permits. Are you aware of the National Pollutant Discharge Elimination System (NPDES) exemption for return flows from irrigated agriculture? This Clean Water Act exemption at §402(l)(1) has long exempted irrigated agriculture from a NPDES permit and altering this exemption has not been proposed.

While the irrigation return flow exemption does protect some activities on my operation, it will not save me, or thousands of other American cattle producers, from burdensome permitting requirements if the direct hydrologic connection theory is implemented. Because EPA has never formally addressed the direct hydrologic connection theory, the agency has made no formal statement on the exemption’s application to percolation. However, I believe that the exemption should include percolation from irrigated agriculture.

Under the CWA, all concentrated animal feeding operations (CAFOs) are point sources, and have to obtain a permit if they discharge into waters of the United States. CAFOs are divided by size, and can be either small, medium, or large. CAFOs differ from animal feeding operations (AFOs). To be considered a CAFO, an operation must first meet the standards for an AFO. While all large AFOs (1,000 or more cattle) are regulated as large CAFOs, small and medium AFOs are only recognized as AFOs if they meet certain criteria. If a medium AFO discharges pollutants to waters of the U.S. through a man-made ditch, flushing system, or other similar man-made device, it may be designated as a CAFO, and become subject to permitting requirements under the CWA. As previously stated, many AFO owners work hard to contain their pollutants, so that they do not discharge to a surface water and become subject to CWA permitting requirements. However, under the direct hydrologic connection theory, farmers face an unprecedented risk of discharge.

Following the Fifth Circuit’s decision in National Pork Producers Council v. EPA, EPA does not have authority to permit point sources based on their potential to discharge, and can only require permits for point sources with “an actual discharge to navigable waters.”1 Under the CWA, the only way an operation can avoid liability is to obtain a permit. Without any way to protect ourselves, cattle producers can only wait to be sued.

1 National Pork Producers Council v. United States EPA, 635 F.3d 738 (5th Cir. 2011) (vacating EPA’s rule which would require permitting for CAFOs that “propose to discharge.” Only CAFOs that actually discharge to a WOTUS need an NPDES permit.)
6. You state that groundwater percolation is a type discharge of that could be construed as a point source should EPA decide to permit groundwater discharges that impact surface waters. Congress’ exemption already includes return flows from irrigated agriculture, so that operations like yours would not need permits for irrigation, either directly or indirectly. Given that your industry is exempt, do you think that discharges directly to groundwater, such as through underground injection, that have a detrimental effect on nearby surface waters should be regulated?

It’s important to clarify that, under the direct hydrologic connection theory, groundwater will be considered a conveyance from a point source to a navigable water. If EPA implements this standard, the return flow exemption under the Clean Water Act will not protect me from regulatory burden. As previously stated, much of the cattle industry would not be exempt from regulation under the Clean Water Act. There is no need to manage these discharges under the Clean Water Act, because no regulatory gap exists. Discharges to groundwater are properly managed at both the federal and state level.

There are already federal statutes specifically designed to manage such discharges, but the Clean Water Act is not one of those statutes. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has provisions specifically designed to deal with pollutants released to groundwater. CERCLA authorizes EPA to remove pollutants if any hazardous substance is released into the environment. And “environment” is defined broadly, to include both groundwater and subsurface strata.

Additionally, underground injection facilities are subject to regulation under the Safe Drinking Water Act (SDWA). The SDWA’s Underground Injection Control program covers, among other things, hundreds of thousands of stormwater drainage wells, septic system leach fields, agricultural drainage wells, and aquifer storage and recovery projects.

State laws also address groundwater pollution. Nevada recognized the legal difference between surface and groundwater in the 1930’s, long before the Clean Water Act was passed. This recognition is comparable to the Clean Water Act’s clear differentiation between point and nonpoint sources. But more recently, in 2015, the state of Nevada updated and approved its Nonpoint Source Management Plan, which specifically highlights categories of nonpoint source pollution, and how the state is working to manage discharges. Additionally, the state has implemented three watershed plans to identify sources of pollution and lower discharges over time.
Senator BARRASO. Thank you very much, Mr. Guild, for your testimony.

Mr. Holleman.

STATEMENT OF FRANK HOLLEMAN III, SENIOR ATTORNEY, SOUTHERN ENVIRONMENTAL LAW CENTER

Mr. HOLLEMAN. Thank you. Mr. Chairman and Senator Carper, members of the Committee, thank you for the opportunity to speak with you today about the future of clean water.

I live in Greenville, South Carolina, and for the last 7 years I have worked with citizens in the southeast to protect their families and their property values and their clean water from coal ash pollution.

The current notice by the EPA is the beginning of an effort to take rights away from those citizens and allow large polluters to continue polluting lakes, rivers, and drinking water supplies.

If the proposed interpretation were adopted and the law was changed, it would blow a hole in the Clean Water Act, because any polluter could move their discharge 10 feet, 100 feet back from the water's edge and avoid the protections of the Nation's waters. Let me give you an example.

Throughout the south, utilities have stored millions of tons of coal ash in huge unlined pits, often sitting deep in groundwater directly on the banks of lakes and rivers. These pits leak toxic pollution through their bottoms and sides, and that pollution is carried by groundwater directly to drinking water wells and public waterways. Public drinking water sources have been damaged, property values have dropped, and pollution has flowed into recreational lakes.

Our State agencies have been ineffective in stopping this pollution. The most notorious examples are the 2008 collapse of TVA's Kingston coal ash dam and the catastrophic failure of Duke Energy's Dan River coal ash lagoons. By 2011 communities across the southeast had given up on waiting for their State agencies to take meaningful action and began enforcing the Clean Water Act themselves against pollution leaking from these unlined pits, and the coal ash utilities have been losing.

In Tennessee, a court ordered TVA to remove all its ash from pits sitting on top of coal field karst that flowed pollution directly into the Cumberland River. Duke Energy is now required to excavate all the ash from 10 of its 16 sites in the Carolinas, and in my home State every waterfront coal ash pit is being excavated.

Southeastern utilities are now committed to excavating over 90 million tons of ash from unlined polluting pits, and citizens made that happen, not State agencies. Just in March, under the 2015 coal ash rule, utilities were forced to reveal that they are polluting groundwater across America, with toxic and even radioactive pollution.

So, why are we here? Because large polluters see that if citizens exercise their rights, the polluters will no longer be able to get away with polluting community water supplies; it is that simple.

Since the adoption of the Clean Water Act, the EPA has consistently confirmed what the plain language clearly provides. The Act forbids unpermitted pollution that flows and leaks from a point
source, for example, an industrial pit or a pipe, to a lake or river through groundwater with a direct hydrological connection. This is a point that the administrations of Ronald Reagan and Barack Obama agreed upon, and this is a key type of illegal water pollution that citizens have been fighting through Clean Water Act enforcement.

The polluters well know that if this pollution is left to the State agencies alone, the polluters will get off the hook. If the State agencies take on the utilities, they anger the most powerful forces in the State legislatures, on which the agencies are dependent for their jobs and budgets.

The agencies lack the resources to fight the utilities’ well paid lawyers and lobbyists, and in some instances the State agencies are very close to the utilities against whom they are supposed to enforce the law. Just as one example, only 1 month after Duke Energy companies were placed on nationwide criminal probation for coal ash crimes, the North Carolina State agency director and the Governor hosted Duke Energy officials at the Governor's mansion for a private, secret dinner at which they discussed environmental issues.

The EPA notice is not about regulatory uncertainty; it is about allowing large polluters to pollute without meaningful enforcement. On behalf of the communities I have worked for throughout the southeastern United States, we ask you all to stand up for the rights of citizens, for property and water rights, and for clean water by rejecting any attempt to change the longstanding position of the EPA and the clear, longstanding language of the Clean Water Act itself.

Thank you, Senators.

[The prepared statement of Mr. Holleman follows:]
Frank Holleman
Senior Attorney, Southern Environmental Law Center
Chapel Hill, North Carolina

Frank Holleman is a Senior Attorney with the Southern Environmental Law Center in Chapel Hill, North Carolina, and coordinates SELC’s coal ash work across the Southeast. Prior to joining SELC, over the course of almost 30 years, Frank practiced law, with an emphasis on business and commercial litigation, at Wyche, Burgess, Freeman, and Parham in Greenville, S.C. Frank served as the United States Deputy Secretary of Education, as Chief of Staff to U.S. Education Secretary Richard Riley, and as a Deputy Assistant Attorney General in the Civil Division of the United States Department of Justice. Frank was a law clerk for U.S. Supreme Court Justice Harry Blackmun and Judge Harrison Winter of the U.S. Court of Appeals for the Fourth Circuit. Frank is a graduate of Furman University (magna cum laude), Harvard Law School (magna cum laude), and the London School of Economics and Political Science (M.Sc.). In 2010, he received the Environmental Awareness Award from the State of South Carolina and in 2018 the Carl F. Kohrt Distinguished Alumni Award from the Furman University Alumni Association.
THE CLEAN WATER ACT AND PROTECTION OF THE NATION’S WATERS: UNPERMITTED POLLUTION CARRIED FROM A POINT SOURCE TO A WATERWAY BY GROUNDWATER WITH A DIRECT HYDROLOGICAL CONNECTION

Testimony of Frank Holleman, Senior Attorney at the Southern Environmental Law Center

U.S. Senate Committee on Environment and Public Works

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Introduction

The position taken by the coal ash and pipeline polluters and suggested by the U.S. Environmental Protection Agency (EPA) in its recent notice would blast a hole in the protections of the Clean Water Act and undermine the integrity of the Nation’s water resources.

The Clean Water Act (CWA), by its plain terms, prohibits unpermitted pollution of the Nation’s waters from a point source. The Clean Water Act does not create an exception for polluters who dump or inject pollution short of the water’s edge and then allow the pollution to flow over and under the ground and with groundwater to a river, lake, stream, or ocean. If the Clean Water Act contained such a nonsensical exception, any polluter could pull its pipe, ditch, or container one foot, two feet, ten feet, or any other distance back from the water’s edge or inject its pollution into the ground any distance from the river’s bank and avoid the Clean Water Act entirely. It would be open season for polluters across the country, and the progress made since the enactment of the Clean Water Act in 1972 would be eroded.

Communities and water resources across the country—and particularly in the Southeast—are being harmed today by pollution from unlined leaking coal ash pits and other toxic pollution that flows with groundwater from irresponsibly sited and poorly designed waste containers near to and sometimes on the banks of drinking water reservoirs, rivers, lakes, and streams. State
agencies have been ineffective in enforcing all laws to protect communities and clean water from these dangerous and polluting point sources. The Tennessee Valley Authority’s (TVA) Kingston disaster and Duke Energy’s Dan River catastrophe are just two notable examples of long-standing threats that state agencies have ignored or failed to address. In 2015, Duke Energy companies – key parts of the country’s largest utility – were successfully prosecuted for Clean Water Act coal ash crimes, based on illegal pollution of which the state agency had long been aware. These are only a few examples.

For four decades, courts and the EPA have long held that the Clean Water Act bars this category of pollution. This issue is arising now only because citizens across the country and especially in the Southeast have tired of waiting for government agencies to act and have taken the law into their own hands by enforcing the Clean Water Act. They are fighting to protect their drinking water supplies; to stop the erosion of their property values; to protect their irrigation sources on their agricultural lands; to restore fisheries that are contaminated by heavy metals; to eliminate from public drinking water carcinogens that have appeared due to coal ash pollution in rivers; and to stop the continual flow of coal ash pollutants into popular lakes and rivers. The coal ash and petroleum polluters are rushing to the Congress and the EPA today because finally the law is being enforced and because they are finally being held accountable for their pollution. This regulatory and political activity is designed to stop this citizen enforcement, pure and simple.

For decades since the enactment of the Clean Water Act (CWA), the Environmental Protection Agency (EPA) has repeatedly – during administrations of both parties – followed the plain language of the Clean Water Act and stated that the Clean Water Act forbids unpermitted pollution of the nation’s rivers, lakes, oceans, and streams when the polluter’s unlawful
contamination travels from a point source to the jurisdictional surface water via groundwater that has a direct hydrological connection to the jurisdictional surface water. This is a point on which the administrations of Ronald Regan and Barak Obama agreed. The EPA can reach no other conclusion because the plain language of the Clean Water Act requires this conclusion. The EPA has no authority to create a loophole in the Clean Water Act for polluters who dump their unpermitted pollution short of the water’s edge, because the EPA cannot defensibly disregard the plain language of the Clean Water Act.

It should be emphasized at the outset that citizens across the Southeast and the rest of the country rely upon this important Clean Water Act protection to guard their communities and clean water from dangerous pollution. Arsenic, mercury, selenium, lead and other dangerous pollutants are leaking from unlined coal ash pits across the Southeast and elsewhere into rivers, lakes, and drinking water reservoirs. Petroleum pipelines have repeatedly cracked open and spilled thousands of gallons of gasoline and diesel fuel into waterways. Other polluters have allowed unpermitted flows of contaminants to reach our waterways through flows of groundwater with a direct hydrological connection. And repeatedly, federal and state environmental agencies have not taken effective action. Citizen enforcement of this aspect of the Clean Water Act was expressly provided for by Congress and is essential to protecting the clean water of the Southeast and the United States. The EPA should not take any action to stymie this citizen enforcement.

**Questionable Timing of the EPA’s Request.** To date, the EPA has followed the plain language of the Clean Water Act, correctly recognizing that the Clean Water Act protects the nation’s waters from unpermitted pollution dumped short of the banks of a waterway and transmitted over or under the earth or through hydrologically connected groundwater to surface
water. There is no legitimate reason for the EPA to call into question what it has repeatedly said over the course of almost half a century, and the EPA’s Notice gives none.

However, a number of fossil fuel companies, coal-burning utilities, and petroleum pipeline companies are facing liability across the country for their pollution of the nation’s waters with gasoline, diesel fuel, and coal-ash pollutants like arsenic, selenium, and mercury. They and their trade associations are political allies of this administration, and their executives (including the CEOs of Duke Energy and the Tennessee Valley Authority) have met with and talked with Administrator Pruitt.¹

Today, these powerful polluters with close ties to the administration are facing accountability for their unlawful pollution in numerous courts across the country. Both the United States Court of Appeals for the Fourth Circuit and the United States Court of Appeals for the Ninth Circuit recently rejected their arguments and held that the Clean Water Act, by its clear terms, protects the Savannah River watershed and the Pacific Ocean from unpermitted pollution that was spilled or injected just uphill from a tributary or on the ocean’s shore and that flows into the Nation’s waters under the land’s surface through hydrologically connected groundwater. The Ninth Circuit’s decision was recommended by the EPA itself in an amicus brief presented by the United States Department of Justice, and the rulings of both the Fourth and the Ninth Circuits were opposed by amici representing petroleum companies, the coal-fired utilities, and mining companies.²

¹ Kevin Bogardus, Meetings with Energy Chiefs Filled Pruitt’s Calendar, Greenwire (June 15, 2017), https://www.eenews.net/greenwire/stories/1060056130.
In Tennessee, a United States District Court found that TVA has for years violated the Clean Water Act at its Gallatin coal-fired plant by polluting the Cumberland River with coal ash and heavy metals that flow into the river with groundwater through sinkholes, seeps, and leaks in its coal ash lagoons on the river’s banks.\(^3\) That case is on appeal to the Sixth Circuit, and TVA will face the EPA’s longstanding position based on the plain text of the statute, as did the polluter in the Fourth and Ninth Circuit cases. Once more, the usual polluter amici—coal-fired utilities and mining companies—have shown up to support TVA in its defiance of the text of the Clean Water Act and the EPA’s established position based thereon.

In Virginia, another United States District Court found that Dominion Energy is violating the Clean Water Act at its Chesapeake coal-fired plant by polluting the Elizabeth River with arsenic flowing out of its riverfront coal ash lagoon via groundwater into the river.\(^4\) An appeal of that case is pending before the United States Court of Appeals for the Fourth Circuit. In all the briefs, Dominion and other polluters struggle to deal with the EPA’s many statements that contradict the polluters’ attempt to create a counter-textual loophole in the Clean Water Act.

And across North Carolina, Duke Energy faces significant liabilities for its dangerous, leaking, and polluting disposal of coal ash in riverfront unlined pits. Citizen groups have repeatedly enforced the Clean Water Act against Duke Energy in federal court for coal ash pollution (including arsenic, mercury, and selenium) that flows with subsurface groundwater into North Carolina’s waterways from nearby unlined coal ash pits. Duke Energy companies have


pleaded guilty\(^5\) to federal coal ash Clean Water Act crimes across the state and currently face three Clean Water Act enforcement actions pending in federal court.\(^6\) Duke Energy created unlined waterfront pits and dumped millions of tons of coal ash into those pits despite the EPA’s warnings in the 1970s that this irresponsible behavior risked pollution of ground and surface waters. At eight of its fourteen North Carolina coal ash sites, Duke Energy has been required by state court orders and a settlement agreement of a federal Clean Water Act suit\(^7\) to remove its coal ash from these leaking pits to eliminate the ongoing source of this pollution. Duke Energy must contemplate the possibility of further Clean Water Act enforcement against its leaking unlined coal ash pits.

The EPA’s request comes at a conspicuously convenient time to serve the litigation strategies of these polluters. This request serves the litigation needs of some of the administration’s closest and most powerful friends and some of the nation’s most notorious and legally vulnerable polluters, at the expense of clean water and the communities that rely on it.

Indeed, Dominion has already made use of the EPA’s Notice, filing it as purportedly “supplemental authority” with the United States Court of Appeals for the Fourth Circuit in its pending appeal and quoting the carefully-crafted phraseology of the EPA’s new political leaders in a thinly-veiled attempt to undercut the force of the EPA’s decades-long bipartisan position.

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To stay true to its legitimate mission\(^4\) of protecting human health and the environment by safeguarding the nation’s waters, the EPA should withdraw this dubious request and focus its attention on protecting communities and natural resources from pollution. The EPA should end this effort to help the polluters who damage those resources and threaten those communities and to facilitate the pollution that contaminates the nation’s surface waters.

**Plain Language of the Clean Water Act.** The current political leadership of the EPA has no power or discretion to change the EPA’s past position because the Act is unambiguous. The plain language of the Clean Water Act bans unpermitted discharge of pollutants from a point source to surface water and contains no exclusion for the situation when the pollution is dumped short of the water’s edge and travels over or under the ground or through groundwater to the surface water. The EPA has no authority to create a loophole for polluters that is not contained in the language of the Clean Water Act itself.

The language of the Clean Water Act is clear and unqualified: Except as otherwise in compliance with Clean Water Act requirements, “the discharge of any pollutant by any person shall be unlawful.” 33 U.S.C. § 1311(a). A “discharge” is “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12). The Clean Water Act does not provide, as some polluters would like, that a discharge is an addition of a pollutant “directly” to navigable waters, or “by” a point source. The language contains no such limitation or loophole. Instead, the language is intentionally written broadly to encompass “any” addition of “any” pollutant “to” navigable waters “from” any point source. *Id.*

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\(^4\) See, e.g., EPA, “Our Mission and What We Do”, available at https://www.epa.gov/aboutepa/our-mission-and-what-we-do (accessed March 2, 2018); 33 U.S.C. § 1251(a) (Clean Water Act: “The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”).
If Congress had intended to exclude discharges of pollutants that leave a point source some distance short of the river’s bank, but then flow over or under the surface of the ground or via groundwater to surface water, then the Clean Water Act would contain such exclusionary language. Such a remarkable gap in the Act’s prohibition against unpermitted pollution would have to be much more clearly stated, in this statutory context. In part, it would create a huge loophole in the Act’s coverage, allowing any polluter to avoid the Clean Water Act by simply moving its point source back from the water’s edge. Congress did not include such a remarkable exclusion in the Clean Water Act and, to the contrary, plainly provided that “any” discharges “to” surface waters are within the Act’s jurisdiction.

This administration and the current political leadership of the EPA have looked to Justice Scalia as their guide on Clean Water Act measures. The administration has proposed to use Justice Scalia’s plurality opinion in _Rapanos v. United States_, 547 U.S. 715 (2006), as the definition of the waters of the United States, even though a majority of the Supreme Court rejected his definitional approach. President Trump’s Executive Order on Waters of the United States (Feb. 28, 2017) Section 3.

However, Justice Scalia’s opinion rejects this effort of the EPA’s political leadership to rewrite the Clean Water Act through re-examination of the EPA’s longstanding position on discharges via hydrologically connected groundwater. As Justice Scalia explained in _Rapanos_, “[t]he Act does not forbid the ‘addition of any pollutant directly to navigable waters from any point source,’ but rather the ‘addition of any pollutant to navigable waters.’” 547 U.S. at 743 (citing 33 U.S.C. § 1362(12)(A) and § 1311(n)) (emphases in original). In this respect, unlike the plurality opinion’s approach to the definition of the “waters of the United States,” Justice Scalia’s opinion was accepted by the entire Court. If this administration embraces Justice
Scalia’s opinion for a point which was rejected by a majority of the Court, it certainly cannot disavow his opinion on a point to which no member of the Court objected.

In trying to dodge the plain language of the Clean Water Act, polluters have constructed arguments from scattered pieces of legislative history – when in fact the legislative history cannot support the polluters’ efforts to create a loophole that the Act itself does not contain. Again Justice Scalia – a Justice whom this administration has favorably cited – has condemned exactly this kind of statutory interpretation: “[I]t is utterly impossible to discern what the Members of Congress intended except to the extent that intent is manifested in the only remnant of ‘history’ that bears the unanimous endorsement of the majority in each House: the text of the enrolled bill that became law.” *Graham Cnty. Soil & Water Conservation Dist. v. United States*, 559 U.S. 280, 302 (2010) (Scalia, J., concurring in part and concurring in judgment) (emphases in original).

The text of the Clean Water Act is clear. When unpermitted pollution travels from a point source to a river or lake or ocean via hydrologically connected groundwater, there is an illegal “addition of any pollutant to navigable waters.” 33 U.S.C. § 1362(12).

This conclusion is also dictated by the statutory purposes of the Clean Water Act, set out by the Congress in the Act itself. The Clean Water Act was enacted to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” 33 U.S.C. § 1251(a), by setting a goal to “eliminate[…] the discharge of pollutants into the navigable waters[,]” id. § 1251(a)(1). If irresponsible industries were allowed to pollute the nation’s waters with abandon as long as they pulled their point sources back from the water’s edge, a huge hole would be blasted in the protections of the Clean Water Act and these fundamental statutory purposes would be entirely undercut. Instead of a landmark protection of the nation’s waters, the Clean
Water Act would become a porous requirement subject to easy manipulation by polluters, their lawyers, and friendly regulators.

In short, the current political leadership of the EPA can reverse course only by running away from the plain language of the Clean Water Act, the Act’s central purposes, and Justice Scalia. Instead, the EPA’s leadership should in this instance live up to their oath and uphold the law.

**Overwhelming Authority.** In the Notice, the EPA has misleadingly described the supposed “mixed case law.” In attempting to downplay the fact that the current leadership is attempting to go against the massive weight of authority, the Notice begins its discussion of federal court decisions by citing the small minority that have misinterpreted the Clean Water Act. In fact, an overwhelming majority of federal courts have held that the Clean Water Act protects the nation’s waters from unpermitted pollution transmitted from a point source to surface waters by groundwater with a direct hydrologic connection.

Here is a list of some of those decisions, the great bulk of which are disregarded by the EPA’s Notice:


4. *Quivira Mining Co. v. U.S. Envtl. Prot. Agency*, 765 F.2d 126, 130 (10th Cir. 1985) (finding CWA coverage where discharges ultimately affected navigable-in-fact streams via underground flows);

5. *U.S. Steel Corp. v. Train*, 556 F.2d 822, 852 (7th Cir. 1977) (CWA “authorizes EPA to regulate the disposal of pollutants into deep wells, at least when the regulation is undertaken in conjunction with limitations on the permittee’s discharges into surface waters.”), overruled on other grounds by *City of W. Chicago v. U.S. Nuclear Regulatory Comm’n*, 701 F.2d 632, 644 (7th Cir. 1983);


10. *S.F. Herring Ass’n v. Pac. Gas & Elec. Co.*, 81 F. Supp. 3d 847, 863 (N.D. Cal. 2015);

point source merely because the polluter is lucky [or clever] enough to have a nonpoint source at the tail end of a pathway to navigable waters would undermine the very purpose of the Clean Water Act”);


16. *Hernandez v. Esso Std. Oil Co.*, 599 F. Supp. 2d 175, 181 (D.P.R. 2009) (“CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States.”);

17. *Greater Yellowstone Coal. v. Larson*, 641 F. Supp. 2d 1120, 1138 (D. Idaho 2009) (“there is little dispute that if the ground water is hydrologically connected to surface water, it can be subject to” the Clean Water Act);


20. *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001) (“CWA extends federal jurisdiction over groundwater that is hydrologically connected to surface waters that are themselves waters of the United States”);

21. *Mut. Life Ins. Co. of N.Y. v. Mobil Corp.*, No. CIVA96CV1781RSP/DNH, 1998 WL 160820, at *2–3 (N.D.N.Y. Mar. 31, 1998) (denying motion to dismiss Clean Water Act claim—plaintiff’s complaint alleged that groundwater contaminated by underground storage tank failures three years prior was hydrologically connected to navigable waters);

22. *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319–20 (S.D. Iowa 1997) (where groundwater flows toward surface waters, there is “more than the mere possibility that pollutants discharged into groundwater will enter ‘waters of the United States,’” and discharge of petroleum into this hydrologically-connected groundwater violates the Clean Water Act);

23. *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994) (“since the goal of the CWA is to protect the quality of surface waters, any
pollutant which enters such waters, whether directly or through groundwater, is subject to regulation”);


25. *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182, 1195–96 (E.D. Cal. 1988) (Clean Water Act covers groundwater “naturally connected to surface waters that constitute ‘navigable waters’”), vacated on other grounds, 47 F.3d 325 (9th Cir. 1995);


At the time the EPA issued its notice, the leading case was *Hawaii Wildlife Fund v. County of Maui*, 881 F.3d 754 (9th Cir. 2018). This was the most recent decision on the issue, and a directly on-point decision by a United States Court of Appeals. This unanimous decision was rendered after the issue was squarely presented and briefed. The Ninth Circuit reached the outcome urged by the EPA itself in an amicus brief filed by the United States Department of Justice less than two years ago, concurrently rejecting the arguments of the usual industry amici. Yet, the Notice mentions this case only in passing, in the final sentence of the last paragraph of the discussion of the decisions of the federal courts.

Another United States Court of Appeals has joined the long list of courts that have followed the Clean Water Act’s plain language – the Fourth Circuit. *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, No. 17-1640 (April 12, 2018).
As the Ninth Circuit noted, other circuits have also concluded that the Clean Water Act forbids unpermitted pollution from point sources that travels on or under the ground or through groundwater to surface water. While the Notice acknowledges the Fifth Circuit’s decision in *Sierra Club v. Abston Construction*, 620 F.2d 41, 45 (5th Cir. 1980), the EPA omits *Concerned Area Residents for Environment v. Southview Farm*, 34 F.3d 114, 119 (2d Cir. 1994). The EPA’s Notice cites *Village of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 965 (7th Cir. 1994), where the plaintiffs alluded only to the “possibility” of a hydrological connection, but overlooks the Seventh Circuit’s decision in *U.S. Steel Corp. v. Train*, 556 F.2d 822, 852 (7th Cir. 1977) (emphasis added), overruled on other grounds by *City of W. Chicago v. U.S. Nuclear Regulatory Comm’n*, 701 F.2d 632, 644 (7th Cir. 1983), where the Seventh Circuit upheld the Clean Water Act’s jurisdiction over surface water impacts from injections into wells. Nor does the Notice recognize that the Tenth Circuit has upheld the Clean Water Act’s coverage of surface water pollution conveyed to a point source by groundwater flow. *Quivira Mining Co. v. U.S. Envtl. Prot. Agency*, 765 F.2d 126, 130 (10th Cir. 1985) (“the flow continues regularly through underground aquifers [sic] fed by the surface flow of the San Mateo Creek and Arroyo del Puerto [where uranium mining waste was regularly discharged] into navigable-in-fact streams.”); see also *Friends of Santa Fe Cnty. v. LAC Minerals Inc.*, 892 F. Supp. 1333, 1357–59 (D.N.M. 1995) (applying *Quivira* to find that “discharges into groundwaters that eventually move into surface waters are prohibited” by the Clean Water Act).

As of today, every United States Court of Appeals that has decided a case where unpermitted pollution travelled from a point source to surface water via hydrologically-connected groundwater has found a violation of the Clean Water Act – the Second, Fourth, Seventh, Ninth, and Tenth Circuits.
Finally, the notice cites *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 809-810 (E.D.N.C. 2014), without recognizing that it has been specifically disavowed by other courts, including another U.S. District Court in North Carolina. *Sierra Club*, 247 F. Supp. 3d at 761 n.11; *Yadkin Riverkeeper*, 141 F. Supp. 3d at 445. As set out in the *Yadkin Riverkeeper* case, the court in *Cape Fear* like some of the other courts in the small minority, mistakenly declined to exercise jurisdiction over hydrologically connected groundwater “under the theory that the groundwater is not itself ‘water of the United States.’” *Yadkin Riverkeeper*, 141 F. Supp. 3d at 445 (internal quotation omitted). The protection afforded by the Act applies to pollution of *surface waters* via groundwater flows from a point source.

And of course now, *Cape Fear* has been rendered invalid by the Fourth Circuit’s contrary ruling.

A candid review of the decisions of the federal courts can only conclude that the vast majority of federal courts – including all the Courts of Appeals that have squarely faced the issue – have enforced the Clean Water Act according to its plain terms and upheld the Clean Water Act’s application to surface water pollution that flows over and under the surface of the earth and through groundwater.

Not A New Situation. As the list of cases demonstrates, courts have been enforcing the plain language of the Clean Water Act in these circumstances for over 40 years. The jurisdictions that recognize Clean Water Act coverage of such discharges span some twenty-nine states that could not be more diverse—Alabama, Alaska, Arizona, California, Colorado, Connecticut, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Maryland, Montana, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Oregon, South Carolina,
Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, and Wyoming—as well as Puerto Rico. Many of those decisions have been in place for decades.

**The EPA’s Longstanding Position.** Since the enactment of the Clean Water Act and through every administration up to the present one, the EPA has recognized the clear words of the Act and stated that the Clean Water Act applies to surface water pollution flowing from a point source with groundwater that has a direct hydrologic connection to the surface water. The current leadership of the EPA must know the long history of the EPA’s consistent interpretation of the Clean Water Act, since the EPA itself laid out that history in its own amicus brief in the Ninth Circuit less than two years ago.

The EPA has set out that position in formal policy positions, in regulation, in response to public comments, and in federal court. The EPA’s application of the Clean Water Act to such discharges reaches back forty years to its 1977 injection well permitting and has been crystal clear for decades. In 2001, the EPA set forth a comprehensive analysis—a “general jurisdictional determination” and an “agency policy determination.” 66 Fed. Reg. 2,960, 3,018 (Jan. 12, 2001). The EPA clarified subsequently that “nothing in the 2003 [final] rule was to be construed to expand, diminish, or otherwise affect the jurisdiction of the [Act] over discharges to surface water via groundwater that has a direct hydrologic connection to surface water.” 73 Fed. Reg. 70,418, 70,420 (Nov. 20, 2008). In 2015, the EPA again reaffirmed its “longstanding and consistent interpretation” and noted that it is unaffected by “the exclusion of groundwater from the definition of ‘waters of the United States.’”

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The EPA has implemented its approach consistently by issuing individual and general National Pollutant Discharge Elimination System (NPDES) permits subject to notice, comment, and judicial review. “EPA and states have been issuing permits for this type of discharge from a number of industries, including chemical plants, concentrated animal feeding operations, mines, and oil and gas waste-treatment facilities.” For example, an EPA permit prohibits concentrated animal feeding operations from discharging “manure, litter, or process wastewater from retention or control structures to surface waters of the United States through groundwater with a direct hydrologic connection to surface waters” and requires a liner for these structures where such connections exist.

Since the EPA first acknowledged that the Clean Water Act addresses pollution carried from a point source to surface waters by groundwater with a direct hydrologic connection, Congress has amended the Clean Water Act on several occasions, yet, notably, it has never acted to change the plain meaning of the statutory language.

For the EPA to reverse course by now choosing to disregard the plain language of the Act would be arbitrary and capricious—all the more so as it is plainly a response by the current administration to the Ninth Circuit Court of Appeals’ decision affirming the EPA’s longstanding position that has been based on the clear statutory text.

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Importance of Clean Water Act Protection of Navigable Waters. The EPA cannot escape the unambiguous language of the Clean Water Act protecting against these discharges. But even if such a reversal were legal, it would be contrary to the EPA’s mission and leave crucial gaps in environmental protection that other regulatory programs cannot fill.

The Clean Water Act provides comprehensive, nationwide protection of our waters, working to ensure they are drinkable, swimmable, and fishable. It provides for robust citizen enforcement in federal court to hold polluters accountable for unpermitted discharges when government agencies cannot or will not take action. As the wide range of past and pending enforcement actions shows, pollution through hydrologic connection to jurisdictional waters happens across different industries and different sources, from pipelines to coal ash ponds. A patchwork of state programs and narrowly focused regulatory schemes, like the underground injection control regulations, cannot adequately make up for the crucial role the Clean Water Act plays in regulating these discharges. Moreover, relying on state regulatory programs to control these pollution sources would cut off citizen access to courts and undermine federal enforcement of federal law.

Conclusion. There is no need for the EPA to reconsider its position or take any further action. It should adhere to its longstanding, correct position, as it did in its Ninth Circuit amicus brief. As the EPA has stated, the determination of whether groundwater is hydrologically connected to surface water is “a factual inquiry like all point source determinations.” The courts are well able to apply the plain language to the facts of particular cases, as the Fourth and

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Ninth Circuits have recently done. Indeed, the Fourth Circuit in its opinion was careful to underscore that the specific facts of the case determine the application of the Clean Water Act. Slip Opinion at 26. The type of pollutant, the geology, the direction of groundwater flow, and the fact that the pollutant can or does reach jurisdictional surface water can all help a court determine whether there is a qualifying connection, as the EPA has itself recognized.

Any action by the EPA to reverse its longstanding position, which to date has been faithful to the requirements of the plain statutory text, would be unlawful. Further, it would only disrupt the enforcement of the law, create uncertainty, sow unhelpful confusion, foster increased litigation, and serve powerful polluting interests at the expense of the EPA’s core mission to protect public health and the environment. And it would undercut the rights of the Nation’s citizens.

14 See supra; see also Greater Yellowstone Coal. v. Larsen, 641 F. Supp. 2d 1129, 1139 (D. Idaho 2009) (connection too attenuated where movement to surface water could take up to 420 years and pollutants would have to travel underground up to four miles).
16 See, e.g., 66 Fed. Reg. at 3,017.
Senate Committee on Environment and Public Works
April 18, 2018

Question and Answer for the Record for Frank Hollemann III

Ranking Member Carper

1. At the April hearing, you made a persuasive case — consistent with EPA’s longstanding policy and the overwhelming body of judicial precedent — that point-source discharges to surface waters via groundwater are covered by the Clean Water Act. Do you believe there are currently aspects of the Clean Water Act, including the citizen suit provision that could be strengthened to ensure that polluters are held accountable for their actions? If so, please explain.

Frank Hollemann III

The Clean Water Act, as enacted by Congress in 1972, has been integral to cleaning up and protecting our nation’s waters.

Like most major environmental laws, the Clean Water Act has a “citizen suit” provision which allows individuals and groups to enforce environmental requirements against alleged violators and polluters. Throughout the history of the Clean Water Act, the citizen suit provision has been used successfully to hold polluters accountable for their actions.

The difficulty has not been with the Act itself but rather with many large industries that violate the Act’s clear provisions, and the unwillingness of our state and federal agencies to enforce the law according to its plain requirements.

Furthermore, funding for Clean Water Act programs and the staff required to implement the law and ensure its enforcement is woefully inadequate.

We appreciate your commitment to clean water, but do not believe that now is the right time to reopen the Clean Water Act for amendment. Doing so is unlikely to end up with a positive result for the nation’s waterways and the communities that rely on access to clean water. Instead, elected officials should focus on ensuring adequate funding for the agencies charged with implementing and enforcing the law.

Thank you, Senator Carper, for all you do and for your good will in the effort to protect our rivers, lakes, and oceans.
Senator BARRASSO. Thank you, Mr. Holleman. Appreciate your testimony.

Mr. Brown.

STATEMENT OF ANTHONY BROWN,
CEO AND PRINCIPAL HYDROLOGIST, AQUILOGIC

Mr. BROWN. Chairperson Barrasso, Ranking Member Carper, and members of the Committee, good morning. My name is Anthony Brown, and I am a hydrologist with Aquilogic, an environmental and water resources consulting firm. I would like to thank you for the opportunity to testify on the appropriate role of States and the Federal Government in protecting groundwater.

As stated, I am a hydrologist, and as such, my professional focus is on the science and the engineering of water. I am currently working on projects in 10 States, and over the course of my more than 30 years of professional experience, I have worked on projects in an additional 12 States.

Unlike other witnesses you will hear from today, I am not a lawyer, lobbyist, regulator, or politician. My testimony will focus on the science and engineering of water, and will address the following key issues: the natural connection between groundwater and surface waters, the contamination of groundwater by releases of pollutants, the migration of this contamination with the movement of groundwater from the contaminant source to its discharge in proximate surface waters. Additional written information related to these issues and other pertinent topics has been provided to the Committee.

First, let me talk about the hydrologic connection between groundwater and surface waters. As can be seen in the poster board I have provided, and in Figure 1 provided to the Committee, groundwater and surface waters are part of the hydrologic cycle, or water cycle.

As part of this cycle, precipitation infiltrates into the soil and percolates down to recharge the groundwater in aquifers. The groundwater flows laterally and vertically in an aquifer until it reaches a point of discharge, which can be to a manmade well or surface waters. This is the natural course of water on and beneath the land surface.

Surface waters such as streams, lakes, and wetlands are easier for a layperson to understand, as they can be seen and are more easily monitored and tested, whereas groundwater lies beneath the ground and is more difficult to visualize, monitor, or test.

What a layperson is likely not aware of is that groundwater aquifers contain 100 times more fresh water than all the lakes, rivers, swamps, and marshes on Earth. These aquifers may extend thousands of feet below the ground and can be localized or extend over thousands of square miles, such as the High Plains or Ogallala Aquifer and the California Central Valley Aquifer system.

As we know and can see, most surface waters flow downhill. In general, groundwater also flows downhill, away from areas of recharge, where precipitation infiltrates, to areas of discharge, such as surface waters. The direction and velocity of groundwater flow is controlled by numerous hydrogeologic factors that need to be considered on a site specific basis.
However, given the resistance posed by the aquifer materials, groundwater flow is much slower than the flow in streams or rivers. Streams many flow many miles in a day, whereas groundwater in an aquifer usually only flows at hundreds of feet per year.

Now I will discuss the contamination of groundwater, subsequent migration of groundwater contamination, and its discharge to surface waters. For contamination, as in toxicology, dose makes the poison. Small releases of highly toxic chemicals, such as perfluorinated chemicals, can create more water pollution than even large releases of less toxic chemicals, such as diesel fuels. The toxicity of a pollutant when regulated is reflected in the Federal maximum contaminant level, or surface water quality standard.

The USEPA has adopted MCLs for 87 pollutants and surface water quality criteria for about another 120 pollutants, and 109 pollutants are on the contaminant candidate list. However, according to the USEPA’s Toxic Substances Control Act Inventory, there are over 85,000 chemicals in commercial use within the United States as of April 2018. Therefore, more than 99 percent of all the chemicals have not been regulated.

Many regulatory programs define violations and clean up relative to these MCLs or similar standards; therefore, most pollutants are inadequately addressed, whereas some regulatory actions, such as the Clean Water Act, define violations and clean up above a background concentration for any pollutant. Thus, they address any pollutant above its natural concentration, rather than just those with regulatory standards.

Once pollutants mix with the flowing groundwater, they will move with that groundwater. As noted, groundwater flow is quite slow compared to surface water; therefore, contaminant migration will also be relatively slow. Over years or even decades, many inorganic pollutants and some organic pollutants may form contaminant plumes that are many miles long. However, most pollutants are unlikely to migrate great distances in groundwater due to the natural processes in the subsurface, which retard their transport, notably dilution and dispersion. This is referred to as natural attenuation.

In general, groundwater proximate to surface waters will discharge those waters. Also, any pollutant dissolved into groundwater will migrate with the groundwater. For many pollutants, the distance migrated by the contaminant pollutant will be limited by natural attenuation. Therefore, in general, only releases of pollutants into groundwater proximate to surface water migrate all the way to and discharge to that surface water. Given the complexity of hydrogeologic contaminant conditions, the migration of pollutants in groundwater and their discharge to proximate surface waters has to be evaluated on a site specific basis.

I have also brought with me a chart today just showing some recent articles that demonstrate where contaminated groundwater has discharged to surface water.

Now I will talk briefly about groundwater contamination. Cleanup of contaminated groundwater is often directed using various Federal and State statutory authorities, such as CERCLA or RCRA, or the Leaking Underground Storage Tank Fund. These cleanups usually require cleanup to a defined goal, such as an MCL.
or a risk based. They target groundwater contamination itself, rather than discharge of that contamination to surface water. However, for a variety of reasons, there are still tens of thousands of groundwater contaminant pollutants across the country that have yet to be fully remediated under these mechanisms.

In conclusion, in most situations, groundwater will discharge to proximate surface waters. If pollutants are released and impact groundwater proximate to the surface waters, then the pollutants will transport via groundwater, where they will subsequently discharge to the surface waters. Court rulings have ruled that these types of discharges are a violation of the Clean Water Act when they fall within the Act's terms and must be remedied.

Thank you for the opportunity to testify, and I am happy to answer your questions.

[The prepared statement of Mr. Brown follows:]
Anthony Brown
CEO and Principal Hydrologist
aquilogic, Inc.

Anthony is the founder, CEO and Principal Hydrologist at aquilogic. Prior to aquilogic, he was the Senior Vice-President of Strategy & Development at WorleyParsons, and the global sector leader for their environmental business. He was previously the CEO and one of the founding principals at Komex Environmental, a global environmental consulting company. In December 2005, WorleyParsons acquired Komex.

Anthony is a versatile and proficient professional with over 25 years of experience in hydrology, hydrogeology, water resources, water quality, fate and transport of contaminants, groundwater remediation, regulatory strategy, water resources evaluation, and water supply engineering.

Anthony has conducted and managed many groundwater resources projects, including: resource evaluation, development and management; water balance, storage capacity and safe yield analysis; and aquifer storage and recovery (ASR). He has also managed numerous hazardous waste site remediation programs, including sites with multiple potentially responsible parties (PRPs), complex hydrogeology and fate and transport, fractured rock, multiple contaminants, and co-mingled plumes.

Anthony has focused on providing consulting services to government agencies tasked with the management and restoration of water resources, and water utilities developing water resources or addressing contamination of their water supplies. Thus, he has worked on numerous projects for State and County agencies, water districts, municipal water utilities, investor-owned water utilities, and mutual water companies. He is currently an expert for the Attorneys’ General of New Jersey, Pennsylvania, Maryland and Puerto Rico in their State-wide damage claims from MTBE contamination. Anthony is also managing projects for the Water Replenishment District of Southern California (WRD), Orange County Water District (OCWD), Indian Wells Valley Water District (IWVWD), water departments at the City of Santa Monica, City of Torrance, City of San Juan Capistrano, City of Paso Robles, City of Fresno, City of Atwater, Golden State Water Company, Mojave Mutual Water Company, and Wonderful Orchards.

Anthony received his Master of Science degree in Engineering Hydrology from Imperial College London in 1988, a postgraduate diploma in Civil Engineering from Imperial College in 1988, and a Bachelor’s degree in Geography from King’s College London.
TESTIMONY OF ANTHONY BROWN BEFORE THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
ON THE APPROPRIATE ROLE OF STATES AND
THE FEDERAL GOVERNMENT IN PROTECTING GROUNDWATER
APRIL 18, 2018

INTRODUCTION

Chairperson Barrasso, Ranking Member Carper, and Members of the Committee, my name is Anthony Brown and I am a hydrologist with aquilogic, an environmental and water resources consulting firm. I would like to thank you for the opportunity to testify on “The Appropriate Role of States and the Federal Government in Protecting Groundwater.”

As stated, I am a hydrologist, and as such my professional focus is on the science and the engineering of water, in particular, the development, management and restoration of groundwater resources. I am currently working on projects in 10 States and, over the course of my more than 30 years of professional experience, I have worked on projects in an additional 12 States. My biographical sketch is attached hereto as Appendix A.

Unlike other witnesses you will hear from today, I am not a lawyer, lobbyist, regulator, or politician. My testimony will focus on the science and engineering of water, and will address the following key issues:

- The natural connection between groundwater and surface waters
- The contamination of groundwater by releases of pollutants
- The migration of this contamination with the movement of groundwater from the contaminant source to its discharge in proximate surface waters
HYDROLOGIC CONNECTION

Hydrologic Cycle

Groundwater and surface waters are part of the hydrologic cycle, or water cycle (Figure 1). As part of this cycle, precipitation that falls on the land flows to streams and other surface waters. Precipitation also infiltrates into the soil and percolates down to recharge the groundwater in aquifers. The groundwater flows laterally and vertically until it reaches a point of discharge, which can be to a man-made well or to surface waters. This is the natural course of water on, and beneath, the land surface.

Groundwater

Surface waters (streams, lakes, wetlands, etc.) are easier for a layperson to understand, as they can be seen, and are more easily monitored and tested. Whereas, groundwater lies beneath the ground and is more difficult to visualize, monitor, or test. In addition, the layperson is likely not aware that the volume of freshwater in aquifers far exceeds the total volume of surface waters. Only 2.5% of all water on earth is fresh water; the other 97.5% is salt or saline water (the oceans, etc.). Of the 2.5% that is fresh water, two-thirds of that is ice, almost one-third exists as groundwater in aquifers, and less than 1.2% is present as surface waters (Figure 2). Thus, groundwater aquifers contain 100 times more fresh water than all the lakes, rivers, swamps, and marshes on earth.

Aquifers

Groundwater is water that completely fills the pores and other spaces (e.g., fractures) within sediments (clays, sands, and gravels) and rocks (Figure 3). Sediments or rock strata that contain significant quantities of groundwater, permit the flow of groundwater, and yield water to wells, are referred to as aquifers. Sediments or rock strata that restrict flow and yield little or no water to wells are referred to as aquitards. In any geographic area, a series of aquifers and aquitards exist beneath the land surface. Aquifers are of two types: (1) unconfined or water table aquifers, where there is no overlying confining aquitard, and (2) confined aquifers that underlie an aquitard (Figure 4). The aquifers may extend
thousands of feet below ground. Aquifers may also be localized or extend over thousands of square miles (Figure 5).

Pumping groundwater from aquifers provides a supply of reliable, high quality water for municipal, agricultural, and industrial purposes. Typically, where significant aquifers are present, strong agricultural economies have developed (e.g., the High Plains or Ogallala Aquifer, and the California Central Valley Aquifer system).

**Groundwater Flow**

As we know and can see, most surface waters (e.g., rivers, streams) flow downhill. In general, groundwater also flows downhill, away from areas of recharge, where precipitation infiltrates, to areas of discharge, such as surface waters. Specifically, groundwater flows from areas of high total head to low total head (Figure 6) down a hydraulic gradient. For groundwater in unconfined aquifers, the total head is simply the elevation of the water in the aquifer – usually measured as a water level in a well. For confined aquifers, total head is the elevation head plus the pressure head – how far the water will rise in a well above the top of an aquifer that is confined by an aquitard.

The direction and velocity of groundwater flow is controlled by numerous hydrogeologic factors, such as effective porosity ($n_e$), hydraulic conductivity ($K$), the volume of recharge, and the proximity of discharge. These factors need to be considered on a site-specific basis. However, nearly all groundwater must discharge at some point to a well or surface waters.

**Darcy's Law**

The volume of groundwater flow is defined by Darcy's Law:

$$Q = K_i A$$
Where:

- \( Q \) = volume of discharge
- \( K \) = hydraulic conductivity
- \( i \) = hydraulic gradient
- \( A \) = cross-sectional area of flow

To calculate flow volume, Henri Darcy envisioned groundwater flow in an aquifer as being through a conceptual sand-filled pipe (Figure 7). The hydraulic conductivity \( K \) is a term reflecting the ease by which the sediments in the conceptual pipe permit the flow of water (i.e., akin to a resistance or friction term). The gradient \( i \) is the difference in head across the pipe with a defined cross-sectional area \( A \). Thus, groundwater flow can be viewed as flow through a sand-filled pipe or flow through millions of tortuous pipes that run between the sediment grains. Given the resistance posed by the aquifer materials, groundwater flow is much slower than the flow in streams or rivers. Streams may flow many miles in a day; whereas, groundwater in an aquifer usually only flows at hundreds of feet per year. As noted, the parameters needed to determine groundwater velocities and flow volumes are site-specific and analysis of local conditions is required.

**Discharge to Surface Waters**

Stream flow consists of two elements: baseflow and storm flow (Figure 8). Baseflow is relatively constant and is sustained by the discharge of groundwater into the stream. Storm flow is intermittent and results from direct precipitation and overland runoff into the stream during a storm event.

In most settings, the hydraulic head for groundwater proximate to surface waters is higher than the water level in the adjacent stream or lake (Figure 9). Thus, groundwater flows from higher to lower hydraulic head and eventually discharges into the surface waters. In rivers, these surface waters are often referred to as gaining streams. In some instances, notably in arid climates where flow in a stream may be ephemeral, the groundwater level may be lower than the water level in the stream when there is stream flow. In these circumstances, water flows from the stream, downward through the streambed, and recharges groundwater. These are often referred to as losing streams. For any stream it may have both losing and gaining sections at various locations along its length, and it may be losing or gaining at various times of the year in any given location. For tidal water bodies, the streams may be
losing and gaining at different times of the day, resulting in what is referred to as tidal-pulsing of groundwater flow.

**CONTAMINATION OF GROUNDWATER**

**Types of Pollutants**

Pollutants can be divided by their chemical character: organic chemicals, inorganic chemicals, radionuclides, and bacteriological. A listing of common and emerging groundwater pollutants can be found at: [http://www.aquilologic.com/COCs.php](http://www.aquilologic.com/COCs.php), and includes:

- Petroleum Contaminants
- Fuel Oxygenates
- Oil Field Contaminants
- Coal Combustion Products
- Chlorinated Solvents
- 1,4-Dioxane
- Freon Compounds
- Agricultural Chemicals
- GenX
- DBCP and other soil fumigants
- 1,2,3-TCP
- Perchlorate
- NDMA
- Hexavalent Chromium
- Trace Metals
- Unregulated Chemicals
- PPCPs
- Perfluorinated Compounds
- Brominated Flame Retardants
- Wood Preservatives

A periodic table of common water pollutants is provided as Figure 10.

For water contamination, as in toxicology, dose makes the poison. Small releases of highly toxic chemicals, such as perfluorinated chemicals (PFCs), can create more water pollution than larger releases of less toxic chemicals, such as diesel fuels. The toxicity of a pollutant, when regulated, is reflected in the Federal maximum contaminant level goal (MCLG), MCL, or surface water quality standard. These levels are usually expressed as concentrations in parts per million, parts per billion, and in some cases, parts per trillion.
Regulatory Levels

The USEPA has adopted MCLs for 87 pollutants and surface water quality criteria for about 120 pollutants, and 109 pollutants are on the contaminant candidate list (CCL4). Most of these are organic chemicals, such as benzene and tetrachloroethene (i.e., PCE or dry cleaning solvent), inorganic elements, such as arsenic and nitrate, or different types of bacteria. However, according to the USEPA’s Toxic Substances Control Act (TSCA) inventory, there are over 95,000 chemicals in commercial use within the United States, as of April 2018. Therefore, more than 99% of all chemicals have not been regulated.

Many regulatory programs define violations and clean-up relative to these MCLs or similar standards; therefore, most pollutants are inadequately addressed. Whereas, some regulatory actions, such as those under the Clean Water Act, define violations and clean-up above a background concentration. Thus, they address any pollutant above its natural concentration, rather than just those with established Federal standards.

Sources of Pollution

Nearly all sources of water contamination are located on land, and are usually underlain by groundwater. Whereas, not all sources of contamination are located immediately proximate to surface waters. Thus for pollutant releases distant from surface waters, the pollutant will impact groundwater long before it ever reaches surface waters, if it ever does. Even proximate to surface waters, releases of pollutants are more likely to impact groundwater before they impact surface waters.

Pollutant sources can be divided into two broad categories: point source pollutants and non-point source pollutants. Point sources of pollution include refineries, chemical plants, aerospace facilities, metal platers, dry cleaners, service stations, mines, landfills, cattle feedlots, sewage lagoons, and coal ash impoundments. Releases at these facilities can result from the storage, use, transport, and disposal of chemicals or wastes, and are often associated with leaks from tanks, sumps, pipes, pits, impoundments, landfills, etc. Non-point sources are dispersed over wide areas, such as the agricultural application of fertilizers or pesticides, urban runoff, or atmospheric deposition of airborne pollutants.
CONTAMINANT MIGRATION

Once pollutants mix with the flowing groundwater, they will move with that groundwater (Figure 11). As noted, groundwater flow is quite slow compared to surface water; therefore, contaminant migration will also be relatively slow. Over years (or even decades), many inorganic pollutants (e.g., perchlorate) and some organic pollutants (e.g., TCE, PFCs, MTBE) may form contaminant plumes that are many miles long (Figures 12 and 13). However, most pollutants are unlikely to migrate great distances in groundwater (i.e., many miles) due to natural physical, chemical and biological processes in the subsurface that retard their transport, notably dilution and dispersion. This is referred to as natural attenuation.

The distribution of contaminant concentrations in groundwater, the rate of migration, the total distance of migration, and the persistence of the contaminant plume, are dependent on numerous factors, including the location, size and timing of the pollutant release, the hydrogeologic conditions (e.g., groundwater flow direction and velocities), the chemical properties of the pollutants (e.g., solubility, adsorption coefficient), and the effectiveness of various natural attenuation processes. Given the complexity of hydrogeologic and contaminant conditions, the migration of pollutants in groundwater, and their discharge to proximate surface waters, has to be evaluated on a site-specific basis.

CONTAMINANT DISCHARGE

As noted, in general, groundwater proximate to surface waters will discharge to those waters. Also, as noted, any pollutant dissolved into groundwater will migrate with the groundwater. For many pollutants, the distance migrated by the contaminant plume will be limited by natural attenuation. Therefore, in general, only releases of pollutants into groundwater proximate to surface waters, migrate all the way to, and discharge to, the surface waters (Figure 14).

The discharge of contaminated groundwater to surface waters can occur via two primary mechanisms: seeps along the banks of the surface water body, and bed seepage through the bottom of the surface
water body (Figure 15). Seeps occur above the surface water line; whereas, bed seepage occurs below the surface water line.

INVESTIGATION OF DISCHARGE

An assessment of the discharge of pollutants dissolved in groundwater into surface waters requires a site-specific investigation. Where the pollutants are detected in surface water samples adjacent to, and/or downstream of the contaminated groundwater, but not upstream in the surface waters, it is clear that the pollutant is discharging to surface waters from the groundwater. Where pollutants are not detected in surface water samples due to dilution resulting from the mixing of groundwater and the surface water flows, it can still be reasonably inferred that the pollutant in groundwater is discharging to surface waters, when:

- The groundwater level in monitoring wells installed proximate to the surface waters is higher than the surface water level and the groundwater contains pollutants, or
- The pollutants are detected in water-saturated sediments along the surface water bank or in the bed of the surface water body, or
- The pollutants are detected in sediment “pore water” adjacent to, or below, the surface water body (i.e., groundwater in the sediments)

REMEDIAN, RESTORATION AND MITIGATION

Remediation refers to the clean-up of pollution to a water quality standard or criterion, such as an MCL, or a risk-based level. These standards or levels may be above background concentrations. Restoration refers to the clean-up of pollution to background concentrations or a pre-discharge condition. Mitigation refers to the prevention of discharge rather the remediation or restoration of the contamination.

Remediation and restoration usually include a source clean-up in the area where the release occurred, and plume clean-up and/or plume control; whereas, mitigation may only include plume control. The most effective source clean-up is the complete removal of the contaminated source area; however, other approaches can also be used for certain pollutants and contaminant sources (e.g., soil vapor
extraction for volatile pollutants). Plume clean-up can be accomplished by ex-situ (out of the ground) technologies (e.g., pump-and-treat) or in-situ (in the ground) technologies (e.g., in-situ chemical oxidation). Likewise, plume control can also be accomplished using ex-situ technologies (e.g., pump-and-treat) and in-situ technologies (e.g., permeable reactive barriers).

**REGULATORY CLEAN-UPS**

Clean-up of contaminated groundwater is often directed using one of four statutory authorities:

- The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or State equivalents
- The Resource Conservation and Recovery Act (RCRA) or State equivalents
- The Federal leaking underground storage tank (LUST) Trust Fund Program, or State equivalents
- A natural resource damage assessment (NRDA) and associated mitigation and/or restoration

Clean-ups under the first three statutory authorities are usually remediation programs with a defined remediation goal based on a regulatory standard/criterion or a risk-based level. These clean-ups target the groundwater contamination itself rather than the discharge of that contamination to surface waters. However, for a variety of reasons, there are still tens of thousands of groundwater contaminant plumes across the nation that have yet to be fully remediated under these enforcement mechanisms. For example, numerous states have filed state-wide claims for MTBE contamination that still persists more than a decade after the use of this chemical was banned by many States. These state-wide claims include thousands of release sites and associated groundwater contaminant plumes. As a further example, investigation and remediation actions are still ongoing at hundreds of Federal Superfund sites many decades after these sites were included on the National Priorities List.

Clean-ups under an NRDA are often restoration programs with a restoration goal established at background concentrations or pre-discharge conditions. Under most circumstances, the trustees (Federal and/or State regulatory agencies) direct the NRDA; however, given the costs associated with the NRDA investigation, NRDA directed clean-ups are rare.
Court rulings have found that discharges of pollutants from point sources to surface waters that travel via hydrologically connected groundwater are a violation of the Clean Water Act. Therefore, while the Clean Water Act may not provide statutory authority to require remediation or restoration of the groundwater contaminant plume, it clearly does require the remediation of the discharge to surface waters. However, the removal of the source, and plume remediation, may be the best way to remediate the discharge.

CURRENT EXAMPLES OF POLLUTANT DISCHARGE TO SURFACE WATERS

The following are some recent news articles about pollutants migrating with groundwater and discharging to surface waters (Figure 16):

Testimony of Anthony Brown on the Appropriate Role of States and the Federal Government in Protecting Groundwater, April 28, 2018

CONCLUSION

In most situations, groundwater will discharge to proximate surface waters. If pollutants are released and impact groundwater proximate to the surface waters, then the pollutants will be transported via groundwater where they will subsequently discharge to the surface waters. Court rulings have found that these types of discharges are a violation of the Clean Water Act when they fall within the Act’s terms and must be remedied.

Thank you for the opportunity to testify. I am happy to answer any of your questions.
ACCOMPANYING FIGURES
The Water Cycle

- Sun
- Condensation
- Evaporation
- Atmosphere
- Precipitation
- Sublimation
- Infiltration
- Volcanic and snow
- Ocean currents
- Groundwater flow
- Groundwater storage
- Oceans
- vapors

https://water.usgs.gov/edu/watercycle.html

NOTE: Numbers are rounded, so percent summations may not add to 100.
\[ Q = K \times (\Delta h/L) \times A \]
Sticky piles of toxic PFAS foam plaguing Michigan lake
Feb 4, 2018
Residents near the former Wurtsmith Air Force Base in Ossola Township have become increasingly concerned over the past year as toxic fluorocarbons leaking through the groundwater have generated white foam that’s washing ashore on public beaches and private waterways around the picturesque Iron River Lake. http://www.mlive.com/news/index/sf/2018/02/wurtsmith_plasfoam_michigan.html

Extremely high PFAS levels found at Wolverine tannery site
November 9, 2017
"Extremely high levels of toxic fluorocarbons once used to waterproof shoe leather are in groundwater at Wolverine World Wide’s former tannery property and lower levels have been found in the Rogue River north and south of Rockford." http://www.mlive.com/news/grand-rapids/index/sf/2017/11/extremely_high_plasfoam_levels.html

City wants to ensure Coolidge isn’t poisoning anyone
Apr 3, 2018
"Nearby Berry’s throttle has high levels of PFAS in its surface water and DEQ officials have said it needs to be cleaned and warned against people eating fish caught in the brook." http://www.wwmt.com/news/2018/04/03/mygco-city-wants-to-ensure-coolidge-aint-poisoning-anyone.html

Firefighting foam used by unit of Johnson Controls poses toxic threat to Green Bay
March 29, 2018
"An underground plume of contamination from a firefighting training facility in Manitowoc has spread from the site and could be seeping into Lake Michigan’s Green Bay, a little more than a mile away." http://www.journaltimes.com/story/news/politics/2018/03/29/firefighting-foam-used-unit-johnson-controls-poses-toxic-threat-green-bay/422678802

Environmental groups continue fight against Kinder Morgan after 4th Circuit revives lawsuit
Apr 13, 2018
"Pumping oil into the wells and then bubbling the steam is not doing the job," Robbins said. "Unless effective additional action is taken, this spill will be polluting the river system for years to come."

Carcinogenic Chemical Spreads Beneath American Town
Sept 3, 2013
"The plume — now polluting 12 million gallons of groundwater—is advancing northeast at a rate of about 300 feet per year. It has reached the Cedar River, which flows to a chain of lakes that wash into Lake Michigan." https://www.scientificamerican.com/article/carcinogenic-chemical-spreads-beneath-american-town/

PGE Begins Pumping Toxic Groundwater Away from Colorado River
Mar 8, 2004
"The NWDO operates the Colorado River Aqueduct—a major source of Los Angeles’ drinking water—and NWDO officials say a plume of at least 10 billion gallons of tainted water is on course to reach the river at a point 42 miles upstream from intakes for both the NWDO’s aqueduct and the Central Arizona Project—an agricultural and urban water delivery system."
https://www.waterboards.ca.gov/06_factsheets/06_2009_03/26_PGE_begins_pumping_toxic_groundwater_Away_from_Colorado_River.pdf

Ossola toxic PFAS groundwater plumes approaching Lake Huron
September 13, 2016

Radioactive Waste Still Flooding Columbia River, EPA Says
June 8, 2017
"Groundwater contaminated with radioactive waste from the decommissioned Hanford nuclear facility in Washington state is still "flowing freely" into the Columbia River, a program manager with the U.S. Environmental Protection Agency said at a meeting of the Hanford Advisory Board."

Pollution plumes stopped by drought but how much longer for cleanup?
Apr 22, 2017
"It was a 300-acre plume of highly volatile gasoline, diesel and some cracks oil that had leaked onto the ground for so long it had reached depths of 200 feet in some places. And, as I said, it was moving toward the Kern River (the Bakerfield’s main recharge channel for the groundwater that we all rely on to live)."

Colorado River at Risk
May 27, 2007
"Atrain was not only worried about the Plume affecting the river water, which would be shipped to Phoenix and Tucson, but about it travelling under the river and contaminating ground water in the river village of Topock, which, like Pinhke, uses well water for drinking."
APPENDIX A: BIOGRAPHICAL SKETCH FOR ANTHONY BROWN
Ranking Member Carper

1. You said in your testimony that “there are thousands of contaminant pollutants in groundwater currently in the United States that have yet to be fully addressed. That is a function of a variety of factors, notably, in some cases, the polluter makes no attempt to address these and tries to obstruct it. But, also, we have a registry structure in some States that is overburdened.”

   a. Other than the CWA (for hydrologically connected groundwater), do you have suggestions for what the federal government could do to assist states cleaning up these groundwater sites more quickly? Please elaborate on the burden state regulators are currently under.

Answer:

In most States, the majority of groundwater contamination is associated with the following:

- Fuel oxygenates, notably methyl tertiary butyl ether (MTBE), and aromatic compounds (i.e., BTEX) associated with releases at petroleum facilities between about 1978 and 2003
- Chlorinated solvents (e.g., TCE, PCE) at dry cleaners, military installations, aerospace manufacturing facilities, and other industrial sites, usually associated with past operational practices
- Perflourinated compounds (e.g., PFOS/PFOA) used in fire-fighting foam, as flame retardants and non-stick surfaces, and for water-proofing at a multitude of industrial sites, military installations, and airports
- Heavy metals (e.g., hexavalent chromium, arsenic) and anions (e.g., sulfate) associated with past and current industrial and mining activity, especially associated with acid mine drainage (AMD)
- Agricultural chemicals, notably pesticides, herbicides, soil fumigants (e.g., DBCP) and fumigant constituents (1,1,3-TCP) associated with former agricultural practices
- Nitrate loading from agricultural practices (e.g., cattle feedlots) and wastewater disposal practices
- Ammonia and other chemicals leaking from sewers in urban settings and landfills

Almost every State has hundreds if not thousands of groundwater plumes from the above chemicals. Often tens of thousands of private (domestic) wells and hundreds of large municipal water supply wells have been impacted by these polluters.

In most States, individual regulators often oversee more than 100 contaminated sites. While they may have one “problem site” that takes up 30% or more of their time, they rarely have more than one day
per year to devote to nearly every other site. Whereas, the responsible party usually has a dedicated in-house project engineer supported by a consulting company. In addition, the regulator may be dealing with an issue for which the Federal government has failed to provide any guidance (e.g., emerging contaminants), and the only guidance available may have been developed by the industry manufacturing or using the chemical. Therefore, the regulator is out-gunned and can do little more than rubber-stamp the approach advocated by the responsible party (RP). This approach is far too often 3D – deny, delay, defer.

Given the above types of pollution problems, I could envision the Federal government providing greater assistance to the States in the following areas:

**Orphan Sites**

In many situations, the regulator is trying to address a contaminant plume for which there is no financially-viable responsible party. Most States have created funds to address petroleum contamination at leaking underground storage tanks (USTs). However, few have funds to address former dry cleaner sites, bankrupt industrial operations, historical mining operations, or other such polluted sites. The Federal government could develop a national program to address these orphan sites through fees charged to current mining activity, chemical manufacturers and users, and other parties. Alternatively, the Federal government could assist States that want to develop such funds.

**Environmental Bonds**

There is a risk that current operators could create future orphan sites through financial insolvency or restructuring to place environmental liabilities in a shell company that files for bankruptcy. To address such risks, the Federal government could require that an environmental bond be posted by businesses that manufacture or use chemicals that could create water pollution problems. In the event of insolvency, the government could use the bond to implement clean-up. Alternatively, the Federal government could assist States that want to require such bonds.

**Annual Operating Permits**

For facilities that manufacture or use chemicals that could create water pollution problems, the Federal government could require more stringent environmental permits (with permit fees). These permits would require annual inspections (and inspection fees) to identify potential pollution issues. They would also have the authority to require the installation of soil vapor and/or groundwater monitoring as sentry wells for the early detection of contaminant problems. Alternatively, the Federal government could assist States that want to require such bonds.

**Licensed Facility Environmental Managers (LFEM)**

As an alternative to environmental operating permits and inspection fees (and possibly environmental bonds), the Federal government could establish a program to certify licensed facility environmental managers (LFEM). Certain industrial operations would be required to hire such individuals. However, the LFEM would report directly to Federal or State regulators. Any failings on the part of the LFEM could result in loss of license, fines for the facility, or other regulatory actions. Alternatively, the Federal government could assist States that want to require such bonds.
Expedited Investigation/Clean-up Programs

Current regulatory processes often take far too long to implement effective contaminant investigation and clean-up (e.g., CERCLA). Under such programs, many groundwater contaminant plumes have persisted for decades. The Federal government could define criteria that would allow and/or require the process to be expedited. This could include a redefinition of removal actions under CERCLA to include groundwater source area remediation that is currently addressed through interim remedial action plans.

Emerging Pollutants

Many of the most significant and numerous groundwater contaminant problems are caused by chemicals for which there is little or no Federal guidance (e.g., perfluorinated compounds). The Federal government has established maximum contaminant levels (MCLs) for about 100 chemicals. However, there are over 85,000 chemicals in the stream of commerce in the United States. Many of these unregulated chemicals are already impacting groundwater. The Federal government needs to develop MCLs in a more expeditious manner (and for more chemicals), or develop interim MCLs that are enforceable. The Federal government must also develop more robust guidance to address the investigation and clean-up of these emerging chemicals.

Technology Innovation (especially for emerging contaminants)

Existing technologies are often not applicable for the clean-up of emerging contaminants. The Federal government should encourage the development of new treatment technologies through research grants, tax incentives, or other means.

Non-point Source Pollutants

These problems are often associated with wide-scale agricultural or mining activities. These pollution problems encompass many of the issues identified above: a lack of a financially viable responsible party, lack of guidance on investigation/clean-up, and a lack of clean-up technologies. Thus, in addressing the above issues, many of the issues associated with non-point source pollution can be addressed. However, additional Federal guidance specifically focused on non-point source pollutants would be beneficial.

Supporting Citizen Suits

As noted, State regulators are over-burdened and thousands of groundwater contamination plumes have yet to be fully addressed. In addition, the Federal government may not have the resources to address these problems. However, local citizens or citizen groups could use existing statutes to enforce clean-up through the courts if they had financial or other support. Firstly, the Federal government should not try to make it more difficult for citizens to successfully pursue such suits. Further, the Federal government should look into ways to support such actions through grants, tax incentives, as well as legal and technical advice.

Beyond these topics, clearly Federal support is needed for pollution issues that cross State-lines (e.g., contamination of streams and rivers, air pollution) or are of national or global reach (e.g., global climate change). Finally, Federal support is needed on wide-scale, industrial practices with unknown, long-term, environmental consequences (e.g., fracking).
Senator BARRASSO. Well, thank you very much, Mr. Brown. Thank you to all of you who have testified today.

We will now start with some questions, and I would like to start with you, Mr. Guild.

Western farmers and cattle ranchers like you face many unique water related challenges. Could you describe how a massive expansion of Federal control over groundwater would affect how you and other western farmers and ranchers—certainly ones in Wyoming—how you carry out routine activities like irrigation?

Mr. GUILD. Thank you for the question, Senator Barrasso. Joe Guild, for the record.

Currently, under the Clean Water Act, there are agricultural exemptions, so grazing my cattle on grass, feeding my cattle crops that I have grown are exempted as normal agricultural practices. We irrigate portions of the ranch with groundwater that we raise out of the ground and spread on the crops.

As I see this expansion, that water eventually percolates into the soil, and in some cases, is nearly adjacent or certainly in the hydrologic basin of waters of the United States and could, through that percolation, reach the surface waters, and therefore be jurisdictional under the Clean Water Act.

So, if I have to get a permit for all of these operations, to answer your question, it would change the way I do things. It might change what I did when I went and got an EQIP grant from NRCS and spent some of my own money to put my own irrigation system in a more efficient way.

Hope that answers your question.

Senator BARRASSO. Thank you; it certainly does.

Ms. Mettler, this new hydrologic connection theory appears to create really duplicative regulations, not only with our Federal laws, but also with State laws that already protect groundwater, which is what you are doing in Indiana.

As a State regulator, do you feel that States are doing a good job protecting their groundwater resources?

Ms. METTLER. Yes. Yes, I do. A lot of the members of ACWA who are responsible for implementing the Clean Water Act are also responsible in their States for implementing the Safe Drinking Water Act, so it is in our best interest to protect groundwater.

As a State regulator, do you feel that States are doing a good job protecting their groundwater resources?

Ms. METTLER. No, duplicative is never helpful. For anyone that has ever done a do it yourself home improvement project, which my husband and I have done a few times, we have learned by experience that having the right tool is the key, and having the selection and the opportunity to pick the right tool is key for success.

Senator BARRASSO. Ms. Waters, your written testimony discussed the implementation of water recharge and green infrastructure projects. Could you explain a little bit about how an expanded interpretation of the Clean Water Act could impact the viability of these types of projects?

Ms. WATERS. Thank you, yes. So, the types of projects I am referring to are groundwater recharge. There is also injection of treated
wastewater for seawater intrusion barriers and land subsidence issues, so this happens a lot in Florida and California.

Those operations currently are permitted under the Safe Drinking Water Act underground injection control provisions, so they already have to meet certain requirements. If you have an NPDES overlay, then the entire cost-benefit of doing those projects could be brought into question. It is not like you just flip a switch and you can suddenly comply with a new permitting scheme. If there are more stringent parameters in the NPDES, then you may not have the infrastructure in place and the processes to comply with that.

So, what it will do is, if you are doing it based on a cost-benefit analysis, and the costs then exceed the benefits, then you won't have people performing these types of beneficial projects.

Senator BARRASSO. Mr. Guild, she just talked about cost-benefit analysis. In your testimony you discussed the practical implications of requiring Federal discharge permits for routine farming and ranching activities. How significant of a burden would this additional permitting be for you and for the ranchers you represent for the National Cattlemen's Beef Association?

Mr. GUILD. Well, taken by itself, Senator Barrasso, I can't argue that it would be a great burden; I mean, permitting is what we do. But as you add permitting processes and requirements to particularly an agricultural operation, I think it would impact greatly, negatively impact all across the West, thousands of ranchers. And here is the point. Our margins are so tight in agriculture that any additional burden really cuts right into that bottom line. I mean, the ranches I operate, if we get a 1.5 percent profit margin, we have had a great year.

Senator BARRASSO. I appreciate it.

Ms. Mettler, the same question. From your perspective, how burdensome would the additional federally mandated permitting be on States' resources?

Ms. METTLER. Well, I think each State will have to evaluate, but there definitely will be an additional burden, particularly if we try to do effective cross-program coordination to try to reduce redundancy in our regulatory structures.

Senator BARRASSO. Thank you.

They are huddling.

Senator CARPER. Let me just say I am a recovering Governor and recovering State treasurer. I go home to Delaware almost every night. I will go to Salisbury, Maryland, tonight. I will go to every county in Delaware tonight, just in one night. Every one, south to north. I try to stay really in touch with my State.

One out of every six families in Delaware gets their drinking water from a private well—one out of six. In northern Delaware, a lot of us get our drinking water from surface water. There is a river called Brandywine, which flows from Pennsylvania down into Delaware, and that is where the water comes from for the city of Wilmington. We have water that comes out of Pennsylvania—the Christina River—that is a source of drinking water for folks as well in my State.

Currently, if an entity—I don't care if it is a utility or company, business, whatever—that puts pollution into the Brandywine River or the Christina River in Pennsylvania, and it comes down, and we
end up having to clean it up because it is bad for us to drink, we have a remedy for that. We have a remedy for that.

However, under what I think is before us, and I want to ask Frank and Anthony to tell us, but what I understand is before us, if that polluter in Pennsylvania decides not to put the pollution in the Brandywine or in the Christina, but to put it, like, 100 feet away, and the pollution travels underground and ends up in the Brandywine or the Christina River, then we are, pardon my French, screwed. Am I reading this right or wrong?

Mr. Holleman.

Mr. Holleman. You are absolutely right. I mean, that is what they are proposing. They are proposing that if it travels any distance with groundwater, the Clean Water Act doesn't cover it. And the discharge point has to be literally in the river or right on top of it, right above it.

In that famous Rapanos decision, this is one thing every justice agreed on, including Justice Scalia, that that is not the law. Instead, the Clean Water Act protects any pollution that comes from a point source. And if this interpretation were adopted, we roll the clock back on these protections that we have enjoyed, and hopefully will enjoy more in the future from the Clean Water Act.

Senator Carper. Let me say to my colleagues, these two fellows love their States. They are great States, and they are wonderful servants for their States. Not every State has people who are going to be running their Department of Natural Resources and Environmental Control, Environmental Protection who has the kind of commitment that I think those on this panel have to clean air, clean water, and the enforcements.

There is a great temptation when a polluter is in violation of State laws, and it could be a utility, it could be a large company that has a lot of employees, when they are confronted by State legislators, and say you have to stop what you are doing, and the polluter could say, I could be doing this business in some other State. I could be running my business in some other State and push back. And I don't care if it is a utility, I don't care if it is a major employer, you have regulatory agencies that basically use kid gloves on these folks.

Am I reading this wrong? The question is don't we have State laws that protect us? We do have State laws, but a lot of them, frankly, are not very well enforced by the regulatory agencies.

Am I wrong, Mr. Brown?

Mr. Brown. Yes, as I mentioned during my testimony, there are thousands of contaminant pollutants in groundwater currently in the United States that have yet to be fully addressed. That is a function of a variety of factors, notably, in some cases, the polluter makes no attempt to address these and tries to obstruct it. But also we have a registry structure in some States that is overburdened.

There are numerous projects that regulators have to address, and they have to direct their resources, so therefore, some pollutants do not get appropriately addressed. And the regulatory tools they have, such as CERCLA, are very arduous and burdensome processes that take a very long time to actually institute any kind of restoration or remediation. It may take many years, if not decades, to actually achieve restoration under such programs.
Senator CARPER. One more, if I could, for Mr. Holleman, and I will ask you to be brief in your response.

Didn't the Fourth Circuit hold that the groundwater itself is the point source, or was the point source the ruptured pipeline that spilled several hundred thousand gallons of gasoline? Would you elaborate on the distinction there, please?

Mr. HOLLEMAN. Yes. As you know, the Fourth Circuit is a Court of Appeals, it covers the southeast, including where I live, and the Fourth Circuit clearly held groundwater is not a point source; it is not a water of the United States.

The point source was the pipe that broke 1,000 feet uphill from a stream and dumped 369,000 gallons of gasoline, which flowed and is still flowing into that creek. That is what the Fourth Circuit held. The pipe was the point source, but it was discharging into that tributary of the Savannah River.

Senator CARPER. Just for clarification, would you agree, then, that Mr. Guild's fears about the “lost progress” from the recent court decisions concerning the waters of the U.S. are misplaced?

Mr. HOLLEMAN. Yes. I am sympathetic to my friend here because my wife and I also own a farm with cows on it, cattle on it, and we have also done NRCS program.

Senator CARPER. I like the cows. I like when you say cows.

Mr. HOLLEMAN. Cattle. Well, there are cattle, these aren't cows; nobody milks them.

So, I am sympathetic to his work, but I do not think the fears expressed are real. In fact, on my farm or his, what he just described, we don't have anything to fear.

Senator CARPER. All right.

I would just say, Mr. Chairman, and to Senator Inhofe, a couple days ago I had the privilege of being on a farm in southern Delaware, and we were there, and the NRCS was there as well, and they weren't raising cattle on the farm; I think they were raising some grain crops and chickens. But they are doing great work without the NRCS, the funding that you mentioned, with the buffers and all kinds of stuff.

So, I applaud you, Mr. Guild, for taking advantage of those wonderful programs.

Mr. Chairman, I ask unanimous consent to submit for the record several documents that support the proposition that pollution from a discrete point source traveling through groundwater that is hydrologically connected to regulated water or surface water is covered by the Clean Water Act.

Senator BARRASSO. Without objection.

[The referenced information follows:]
PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 17-1640

UPSTATE FOREVER; SAVANNAH RIVERKEEPER,

Plaintiffs - Appellants,

v.

KINDER MORGAN ENERGY PARTNERS, L.P.; PLANTATION PIPE LINE
COMPANY, INC.,

Defendants - Appellees.

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ANDERSON COUNTY, SOUTH CAROLINA; PIPELINE SAFETY TRUST,

Amici Supporting Appellant,

AMERICAN PETROLEUM INSTITUTE; ASSOCIATION OF OIL PIPE
LINES; GPA MIDSTREAM ASSOCIATION; TEXAS PIPELINE
ASSOCIATION; NATIONAL ASSOCIATION OF COUNTIES; NATIONAL
LEAGUE OF CITIES; NATIONAL ASSOCIATION OF CLEAN WATER
AGENCIES; AMERICAN FOREST AND PAPER ASSOCIATION;
AMERICAN IRON AND STEEL INSTITUTE; EDISON ELECTRIC
INSTITUTE; NATIONAL MINING ASSOCIATION; UTILITY WATER ACT
GROUP; STATE OF WEST VIRGINIA; STATE OF SOUTH CAROLINA;
STATE OF ALABAMA; STATE OF ARKANSAS; STATE OF INDIANA;
STATE OF KANSAS; STATE OF LOUISIANA; STATE OF MISSOURI;
STATE OF OKLAHOMA; STATE OF UTAH; STATE OF WISCONSIN;
GOVERNOR PHIL BRYANT

Amici Supporting Appellee.
Appeal from the United States District Court for the District of South Carolina, at Anderson, Henry M. Herlong, Jr., Senior District Judge. (8:16-cv-04003-HMH)

Argued: December 7, 2017  Decided: April 12, 2018

Before GREGORY, Chief Judge, and KEENAN and FLOYD, Circuit Judges.

Vacated and remanded by published opinion. Judge Keenan wrote the majority opinion, in which Chief Judge Gregory joined. Judge Floyd wrote a dissenting opinion.

BARBARA MILANO KEENAN, Circuit Judge:

In late 2014, several hundred thousand gallons of gasoline spilled from a rupture in a pipeline owned by Plantation Pipe Line Company, Inc., a subsidiary of Kinder Morgan Energy Partners, LP (collectively, Kinder Morgan), near Belton, South Carolina. It is undisputed that the gasoline has seeped into nearby waterways, and the plaintiffs allege that the gasoline has continued to travel a distance of 1000 feet or less from the pipeline to those “navigable waters.”

Two plaintiff conservation groups brought a “citizen suit” under the Clean Water Act (the CWA, or the Act), 33 U.S.C. §§ 1251–1387, alleging that Kinder Morgan was in violation of the Act for polluting navigable waters without a permit and seeking relief to remediate the ongoing pollution. This case requires us to determine whether citizens may bring suit alleging a violation of the CWA when the source of the pollution, the pipeline, is no longer releasing the pollutant, but the pollutant allegedly is passing a short distance through the earth via ground water and is being discharged into surface waterways.

The district court held that it lacked subject matter jurisdiction under the CWA, because the pipeline has been repaired and the pollutants currently pass through ground water to reach navigable waters. We conclude that the district court erred in holding that it lacked jurisdiction, because citizens may bring suit under 33 U.S.C. § 1365(a) for discharges of pollutants that derive from a “point source” and continue to be “added” to navigable waters. We further hold that the plaintiffs have stated a valid claim for a discharge under the CWA. Accordingly, we vacate the district court’s judgment, and remand for further proceedings consistent with this opinion.
I.

A.

In 1972, Congress enacted the CWA to eliminate the discharge of certain pollutants or “effluents” into the “navigable waters” of the United States. See S. Appalachian Mountain Stewards v. A & G Coal Corp., 758 F.3d 560, 563 (4th Cir. 2014); Piney Run Pres. Ass’n v. Cty. Comm’rs of Carroll Cty., 268 F.3d 255, 264–65 (4th Cir. 2001). The CWA’s stated purpose is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). The federal government’s prior regime of water pollution control focused primarily on measuring direct injuries to the Nation’s waters using water quality standards. Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 151 (4th Cir. 2000) (en banc) [Friends of the Earth II]. In the CWA, however, Congress shifted its regulatory focus for water pollution from water quality standards to limiting discharges of pollutants. See id. One of the CWA’s central provisions establishes that “the discharge of any pollutant by any person shall be unlawful.” 33 U.S.C. § 1311(a).

The Act authorizes exceptions to this general prohibition in the form of permits issued in accordance with the National Pollutant Discharge Elimination System (NPDES), which allows limited discharges. See 33 U.S.C. §§ 1311(a), 1342; S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 102 (2004) (“[T]he NPDES requires dischargers to obtain permits that place limits on the type and quantity of pollutants.”); Friends of the Earth II, 204 F.3d at 151. Both the Environmental Protection Agency (EPA) and state environmental control agencies may issue NPDES
permits. See Friends of the Earth II, 204 F.3d at 152. However, consistent with the CWA’s general prohibition, a polluter does not violate the statute only when it exceeds limitations in its permit. Instead, a polluter also may be in violation of the statute due to a discharge for which the polluter could not have obtained any permit. See Sierra Club, Lone Star Chapter v. Cedar Point Oil Co., 73 F.3d 546, 561 (5th Cir. 1996) (“Nothing in the CWA limits a citizen’s right to bring an action against a person who is allegedly discharging a pollutant without a permit solely to those cases where EPA has promulgated an effluent limitation or issued a permit that covers the discharge.”).

The CWA authorizes both citizens and government agencies to enforce the Act’s provisions. Citizen suits under the CWA have the “central purpose of permitting citizens to abate pollution when the government cannot or will not command compliance.” Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc., 484 U.S. 49, 62 (1987).

The Act contains the following citizen suit provision:

[A]ny citizen may commence a civil action on his own behalf—

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of... an effluent standard or limitation under this chapter....

33 U.S.C. § 1365(a) (emphasis added). An “effluent standard or limitation” is defined to include the Act’s central prohibition on the “discharge of any pollutant” without a permit. See 33 U.S.C. §§ 1365(f), 1311(a).

The Act sets forth a technical definition of the term “discharge of a pollutant,” which is defined expansively to include “any addition of any pollutant to navigable
waters from any point source.” 33 U.S.C. § 1362(12)(A). A “point source” in turn is defined as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, [or] container . . . .” 33 U.S.C. § 1362(14). The term “navigable waters” is defined in the CWA as “the waters of the United States.” 33 U.S.C. § 1362(7). The Supreme Court has interpreted the term “navigable waters” to mean more than waters that are navigable-in-fact, and to include, for example, wetlands and related hydrological environs. See, e.g., Rapanos v. United States, 547 U.S. 715, 730–31, 735 (2006) (plurality opinion) (observing that navigable waters include more than traditionally navigable waters and may include certain wetlands); United States v. Riverside Bayview Homes, Inc., 474 U.S. 121, 133 (1985) (“Congress chose to define the waters covered by the Act broadly.”).

B.

The plaintiffs Upstate Forever and the Savannah Riverkeeper2 (collectively, the plaintiffs) allege that in late 2014, over 369,000 gallons of gasoline spilled from Kinder Morgan’s underground pipeline, which extends over 1100 miles through parts of the eastern United States. In December 2014, citizens in Anderson County, South Carolina,

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1 Although Section 1311(a) refers to the “discharge of any pollutant” and Section 1362(12)(A) defines “discharge of a pollutant,” we construe these two terms to be substantively identical and refer to the “discharge of a pollutant.”

2 Upstate Forever and the Savannah Riverkeeper are non-profit public interest organizations that operate in Anderson County, South Carolina, where the spill occurred. Upstate Forever has stated goals of developing clean water in the Upstate region of South Carolina, and the Savannah Riverkeeper works to restore the lakes and tributaries in the Savannah River watershed.
discovered dead plants, a petroleum odor, and pools of gasoline in the vicinity of the pipeline. The plaintiffs allege that gasoline and gasoline toxins have seeped and continue to seep into ground water, wetlands, and waterways in Anderson County and the Savannah River watershed. They allege that although a reported 209,000 gallons were recovered by the end of 2015, no significant amount of contaminants has been removed since that time. Consequently, at the time that the plaintiffs filed their complaint, at least 160,000 gallons allegedly remained unrecovered. Kinder Morgan repaired the pipeline shortly after the initial spill.

When Kinder Morgan’s pipeline broke six to eight feet underground, gasoline and related contaminants spilled out into soil and ground water. The plaintiffs allege that these contaminants are seeping into two nearby tributaries of the Savannah River, Browns Creek and Cupboard Creek, and their adjacent wetlands. The pipeline broke less than 1000 feet from Browns Creek and its adjacent wetland, and 400 feet from Cupboard Creek and a second wetland. Both waterways and the wetlands are downgradient from the spill site. The plaintiffs allege that gasoline pollutants from the pipeline are seeping into navigable waters as defined by the CWA, including the above two creeks in Anderson County, Broadway Lake, Lake Secession, Lake Russell, and the Savannah River.³

³ Kinder Morgan does not challenge the plaintiffs’ allegation that these waters, including Browns Creek, Cupboard Creek, and their adjacent wetlands, constitute navigable waters as defined by the CWA. 33 U.S.C. § 1362(7).
The plaintiffs allege that a "plume" of petroleum contaminants continues to migrate into these waterways years later through ground water and various natural formations at the spill site, including "seeps, flows, fissures, and channels." Hazardous gasoline contaminants have been detected on several occasions at the spill site in ground water wells. Contaminants were also detected in Browns Creek as early as January 2015, and additional tests in Browns Creek have reported high levels of contaminants on several later dates in 2015 and in 2016.

Kinder Morgan has implemented certain remediation and recovery measures under the guidance of the South Carolina Department of Health and Environmental Control (DHEC). DHEC is the agency authorized to issue NPDES permits and oversee water quality in South Carolina. See Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 629 F.3d 387, 390 (4th Cir. 2011) [Friends of the Earth III]; S.C. Code § 48-1-100(B).

The plaintiffs allege that Kinder Morgan has failed to comply fully with DHEC's abatement instructions. They claim that although DHEC instructed Kinder Morgan to test for pollution in March 2016, Kinder Morgan only began that additional testing after the plaintiffs made their own visit to the spill site in August 2016. The plaintiffs further allege that their testing conducted in August 2016 revealed that the levels of gasoline contaminants in Browns Creek actually were increasing almost two years after the spill. During their August 2016 visit to the area, oil sheens were visible on the surface of Browns Creek, and devices used to absorb the oil had not been maintained and were saturated with oil.
Kinder Morgan allegedly delayed by six months its submission to DHEC of the required site remediation plan and site assessment, and also refused to comply with another of DHEC's water sampling requests. Publicly available data on DHEC's website indicate that DHEC sampled surface waters at Browns Creek in February 2017 and found pollutants at three locations, each of which is being remediated. South Carolina Department of Health and Environmental Control, Surface Water Sampling Event, http://www.scdhec.gov/HomeAndEnvironment/Pollution/CleanUpPrograms/OngoingProjects/Updates/PlantationPipeline/SurfaceWaterSamplingEvent/ (last visited Apr. 11, 2018).

The plaintiffs filed this suit in December 2016, alleging discharges of gasoline and gasoline pollutants without a permit, in violation of the CWA under 33 U.S.C. § 1311(a). The complaint includes allegations that the pipeline ruptured and caused a discharge that has polluted, and continues to pollute, navigable waters by seeping from a point source over a distance of 1000 feet or less through soil and ground water to nearby tributaries and wetlands. The plaintiffs thus allege in their complaint two interrelated violations of the CWA: (1) that Kinder Morgan has caused discharges of pollutants from point sources to navigable waters without a permit; and (2) that Kinder Morgan has caused discharges of pollutants that continue to pass through ground water with a "direct hydrological connection" to navigable waters. The plaintiffs also allege that the remediation actions taken to date by Kinder Morgan have been insufficient to abate the

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4 Kinder Morgan does not contend that gasoline and related contaminants are not pollutants under the CWA. See United States v. Hamel, 551 F.2d 107, 110-11 (6th Cir. 1977) (holding that the CWA definition of "pollutant" covers gasoline discharges).
pollution, and seek damages, declaratory relief, and injunctive relief requiring that Kinder Morgan take further measures to control and abate the spill.

Kinder Morgan moved to dismiss the plaintiffs’ complaint under Rules 12(b)(1) and 12(b)(6) of the Federal Rules of Civil Procedure, contending both that the district court lacked subject matter jurisdiction and that the plaintiffs had failed to state a claim for relief. Addressing first the sufficiency of the plaintiffs’ pleadings, the district court held that the plaintiffs had failed to state a claim because the pipeline had been repaired and no longer was discharging pollutants “directly” into navigable waters. The court also held that it lacked subject matter jurisdiction over the complaint, stating that the CWA did not encompass the movement of pollutants through ground water that is hydrologically connected to navigable waters. Accordingly, the court dismissed the plaintiffs’ complaint on both grounds. The plaintiffs timely noted this appeal.

II.

On appeal, the plaintiffs contend that the district court erred in determining that the continuing addition of pollutants to navigable waters is not an ongoing violation of the CWA because the pipeline has been repaired. According to the plaintiffs, a claim for a discharge of a pollutant, in violation of 33 U.S.C. § 1311(a), need not allege that the pollutant is being discharged directly from the point source into navigable waters. They assert that the CWA also prohibits the discharge of pollutants from a point source through ground water that has a direct hydrological connection to navigable waters.
In response, Kinder Morgan contends that the district court did not err because the violation ceased once the pipeline was repaired. Alternatively, Kinder Morgan asserts that if seepage is ongoing, the pollution is seeping from nonpoint sources, namely, from natural formations at the spill site. Kinder Morgan also argues that discharges into navigable waters from hydrologically connected ground water do not fall within the CWA’s definition of a “discharge of a pollutant” in 33 U.S.C. § 1362(12)(A). We disagree with Kinder Morgan’s position.

A.

We review de novo the district court’s dismissal of the complaint under Federal Rules of Civil Procedure 12(b)(1) and 12(b)(6). Greenhouse v. MCG Capital Corp., 392 F.3d 650, 655 (4th Cir. 2004); Richmond, Fredericksburg & Potomac R.R. Co. v. United States, 945 F.2d 765, 768–69 (4th Cir. 1991). A district court should grant a motion to dismiss for lack of subject matter jurisdiction under Rule 12(b)(1) “only if the material jurisdictional facts are not in dispute and the moving party is entitled to prevail as a matter of law.” Evans v. B.F. Perkins Co., a Div. of Standex Int’l Corp., 166 F.3d 642, 647 (4th Cir. 1999) (citation omitted). To survive a motion to dismiss under Rule 12(b)(6), a plaintiff must “provide[] sufficient detail [ ] to show that he has a more-than-conceivable chance of success on the merits.” Owens v. Balt. City State’s Attorneys Office, 767 F.3d 379, 396 (4th Cir. 2014) (citation omitted).

As a threshold matter, a court first must determine whether it has jurisdiction to entertain a claim. Steel Co. v. Citizens for a Better Env’t, 523 U.S. 83, 88–89 (1998). A court’s determination of subject matter jurisdiction addresses whether the court has the
authority to entertain a particular kind of case, not whether a claim for relief is viable under a particular construction of a statute. See id. at 89. Unless Congress has “clearly state[d] that [a statutory limitation] is jurisdictional . . . courts should treat the restriction as nonjurisdictional in character.” Sebelius v. Auburn Reg’l Med. Ctr., 568 U.S. 145, 153 (2013) (citations and internal quotation marks omitted).

In the present case, the primary issue we consider is whether an indirect discharge of a pollutant through ground water, which has a direct hydrological connection to navigable waters, can support a theory of liability under the CWA. Because our answer to this question largely depends on our construction of the statutory term “discharge of a pollutant,” the question ordinarily would not be jurisdictional in nature.3 However, because courts have “jurisdiction” over CWA citizen suits only if the complaint alleges an ongoing violation, Gwaltney, 484 U.S. at 64, we must address the question of an ongoing violation before proceeding further in this case. Accordingly, we first address whether the plaintiffs have alleged an ongoing violation and, if so, whether they sufficiently have alleged a nexus between the source of the pollution and navigable waters to state a claim for discharge of a pollutant under the CWA. See Steel Co., 523 U.S. at 88–90.

3 Had the plaintiffs alleged that ground water, of itself, falls within the meaning of navigable waters under the CWA, we would be confronting a distinctly different question here. See Solid Waste Agency of N. Cook Cty. v. U.S. Army Corps of Engrs, 531 U.S. 159, 180 (2001) (referring to “navigable waters” as a “traditional jurisdictional term”). However, in this case, the plaintiffs have alleged only that Kinder Morgan discharged pollutants “via hydrologically connected groundwater to surface waters” (emphasis added).
B.

The CWA authorizes citizens to seek injunctive relief only to abate a “continuous or intermittent” violation. Gwaltney, 484 U.S. at 64; Friends of the Earth, Inc. v. Laidlaw, 528 U.S. 331, 351 at 342 (“We have instructed that a citizen plaintiff can prove an ongoing violation . . . by proving violations that continue on or after the date the complaint is filed.” (citation omitted)). Conversely, when a violation of the CWA is “wholly past,” the federal courts do not have jurisdiction to entertain a citizen suit, even if the past discharge violated the CWA. Gwaltney, 484 U.S. at 64. As we already have noted, the CWA’s citizen suit provision is intended primarily to allow citizens “to abate pollution when the government cannot or will not command compliance.” Id. at 62; cf. Middlesex Cty. Sewerage Auth. v. Nat’l Sea Clammers Ass’n, 453 U.S. 1, 17 n.27 (1981) ("[P]rivate enforcement suits were intended [often] to be limited to [ ] injunctive relief."). The citizen suit provision thus enables citizens to seek abatement of polluting discharges to further the CWA’s central purpose, namely, “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a).

In Gwaltney, the Supreme Court emphasized that the CWA, like other environmental statutes, authorizes “prospective relief” that only can be attained while a violation is ongoing and susceptible to remediation. 484 U.S. at 57; see also, e.g., 15 U.S.C. § 2619(a)(1) (authorizing citizen suits against persons “alleged to be in violation of the statute); 42 U.S.C. § 6972 (same). We applied the principles of Gwaltney in our decision in Goldfarb v. Mayor of Baltimore, holding that a claim of an ongoing violation supported a citizen suit under the Resource Conservation and Recovery Act of 1976.

The plaintiffs in Goldfarb alleged that the City of Baltimore had stored hazardous chemicals, which had leaked from the point of storage and had continued to migrate through the soil in violation of the RCRA’s permitting standards. Id. at 512. In response to the City’s contention that any RCRA violations were wholly past under the rationale of Gwaltney, we observed that “although a defendant’s conduct that is causing a violation may have ceased in the past . . . what is relevant is that the violation is continuous or ongoing.” See id. at 511–13 (citing S. Rd. Assocs. v. IBM Corp., 216 F.3d 251, 255 (2d Cir. 2000)). Accordingly, we held that the plaintiffs had alleged an ongoing violation of the RCRA. Id.

Our analysis in Goldfarb regarding an ongoing violation is equally applicable here.6 Nothing in the language of the CWA suggests that citizens are barred from seeking injunctive relief after a polluter has repaired the initial cause of the pollution. When interpreting a statute, we attend first to the statute’s plain language. United States v. Ide, 624 F.3d 666, 668 (4th Cir. 2010). Like the RCRA, the CWA’s plain language requires only that the citizen allege that the polluter “be in violation of” an “effluent standard or limitation” under the Act. 33 U.S.C. § 1365(a); see Goldfarb, 791 F.3d at

6 We disagree with the dissent’s view that our decision in Goldfarb is not helpful. We held in Goldfarb under an identical citizen suit provision that conduct causing a violation need not be ongoing to state a claim, so long as the violation itself is ongoing. 791 F.3d at 513.
512–13. As noted above, an “effluent limitation” of the CWA includes any unpermitted “discharge of a pollutant.” 33 U.S.C. §§ 1365(f), 1311(a). Accordingly, the relevant violation here is the discharge of a pollutant, defined in the Act as “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12)(A).

Kinder Morgan’s gasoline pipeline unambiguously qualifies as a point source.7 33 U.S.C. § 1362(14) (defining a point source to include a “pipe” or “conduit”). The plaintiffs claim that pollutants originating from this point source continue to be “added” to bodies of water that allegedly are navigable waters under the Act, including the two creeks in Anderson County, adjacent wetlands, Broadway Lake, Lake Seccession, Lake Russell, and the Savannah River watershed. The CWA’s language does not require that the point source continue to release a pollutant for a violation to be ongoing. The CWA requires only that there be an ongoing “addition . . . to navigable waters,” regardless whether a defendant’s conduct causing the violation is ongoing. 33 U.S.C. §

7 Under the dissent’s view, pollution becomes “nonpoint source pollution” not covered by the CWA at the moment when the point source no longer actively releases the pollutant. See, e.g., ONRC Action v. U.S. Bureau of Reclamation, 798 F.3d 933, 936 (9th Cir. 2015) (noting that the CWA provides no direct mechanism for regulating “nonpoint source pollution”). We are not persuaded by this argument, because the plaintiffs adequately have alleged that the pipeline is a point source of the discharge, which satisfies the CWA’s requirement that the alleged pollution be “from any point source.” See 33 U.S.C. § 1362(12)(A) (emphasis added). Moreover, the cases relied on by the dissent show that nonpoint source pollution arises from “dispersed activities over large areas, and is not traceable to any single discrete source.” See, e.g., League of Wilderness Defs./Blue Mountains Biodiversity Project v. Forsgren, 309 F.3d 1181, 1184 (9th Cir. 2002); see also 33 U.S.C. 1314(f) (providing examples of nonpoint source pollution, including “agricultural and silvicultural activities”). The plaintiffs here allege that the pollution is traceable not to dispersed activities and nonpoint sources but to Kinder Morgan’s pipeline, a discrete source.
1362(12)(A). See Goldfarb, 791 F.3d at 513; IBM Corp., 216 F.3d at 254 (noting under identical RCRA citizen suit provision that “defendant’s current activity at the site is not a prerequisite for finding a current violation”).

The CWA’s term “discharge of a pollutant” is a statutory term of art precisely defined in the CWA. Cf. Riverside Bayview Homes, Inc., 474 U.S. at 133 (noting that statutory definition of “navigable waters” in CWA makes ordinary meaning of those words less important). The definition does not place temporal conditions on the discharge of a pollutant from a point source. Nor does the definition limit discharges under the Act to additions of pollutants to navigable waters from a point source that continues actively to release such pollutants. Instead, the precondition for alleging a cognizable discharge of a pollutant is only that the plaintiff allege an ongoing addition to navigable waters originating from a point source. 33 U.S.C. § 1362(12)(A). Moreover, as we explain below, the CWA is not limited to discharges of pollutants “directly” from the point source to navigable waters. See, e.g., Hawai‘i Wildlife Fund v. Cty. of Maui, No. 15-17447, 2018 WL 1569313, at *7--*8 (9th Cir. Feb. 1, 2018). Necessarily, when a discharge is indirect, there will be a delay between the time at which pollution leaves the point source and the time at which it is added to navigable waters. However, nothing in the CWA’s language indicates that such a delay prevents the pollution from constituting an ongoing violation for purposes of a citizen suit, as long as pollutants continue to be “added” to navigable waters. See 33 U.S.C. § 1362(12)(A). The plaintiffs have alleged such an ongoing addition here.
The CWA is a strict liability statute. *Friends of the Earth II*, 204 F.3d at 151. As noted above, Congress set forth in the Act its intention that “the discharge of pollutants into the navigable waters be eliminated,” 33 U.S.C. § 1251(a)(1), not that the originating source of pollutants be corrected. Thus, remedial efforts taken in good faith “do[] not *ipso facto* establish the absence of federal jurisdiction over a citizen suit.” *Am. Canoe Ass’n v. Murphy Farms*, 412 F.3d 536, 540 (4th Cir. 2005). To protect the nation’s waters under the CWA, abatement of a pollutant requires more than the repair of a pipeline, and the need for such abatement continues so long as the contaminant continues to flow into navigable waters. See *Gwaltney*, 484 U.S. at 62 (explaining that CWA’s citizen suit provision has “the central purpose of permitting citizens to abate pollution”). Thus, the fact that a ruptured pipeline has been repaired, of itself, does not render the CWA violation wholly past.\(^1\)

Our conclusion is not altered by Kinder Morgan’s citation to cases from other circuits. Those decisions were based on materially different facts. For example, in *Hankler v. Diamond Shamrock Chemical Co.*, the Fifth Circuit examined a complaint containing allegations of a discharge of oil into ground water from the defendant’s pipe, rather than a discharge reaching navigable waters. See 756 F.2d 392, 397 (5th Cir. 1985).

\(^1\) The dissent relies on *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133 (10th Cir. 2005), for its conclusion that this is an “ongoing migration” case that does not fall under the CWA’s citizen suit provision. However, that court did not hold that an ongoing migration of pollutants cannot constitute a continuing violation of the CWA, but rather noted that the case before the court did not involve a simple ongoing migration of pollutants. *Id.* at 1140.
As the court observed, the complaint alleged only that the discharged oil was "leaking into ground water" and "grasslands," not into navigable waters.\textsuperscript{9} \textit{Id.} Likewise, the Second Circuit held that continuing decomposition of "lead shot" in the Long Island Sound is not a "present violation" of the CWA. \textit{Conn. Coastal Fishermen's Ass'n v. Remington Arms Co.}, 989 F.2d 1305, 1312–13 (2d Cir. 1993). That holding pertained to whether the continuing effects of pollutants already "deposited" into a navigable water constituted a continuing violation. \textit{Id.} at 1313. In contrast, the plaintiffs allege here that pollutants \textit{continue to be added to} navigable waters, a violation encompassed within the Act's statutory definition. Accordingly, we conclude that the plaintiffs have alleged an ongoing violation of 33 U.S.C. § 1311(a), and that the district court erred in dismissing their complaint for lack of subject matter jurisdiction.

C.

i.

We turn to consider the question of first impression in this Circuit whether a discharge of a pollutant that moves through ground water before reaching navigable waters may constitute a discharge of a pollutant, within the meaning of the CWA. Initially, we observe that a discharge of a pollutant under the Act need not be a discharge "directly" to a navigable water from a point source. In \textit{Rapanos v. United States}, the

\textsuperscript{9} Moreover, to the extent that \textit{Hamker}'s reasoning suggests that an ongoing violation requires that the point source continually discharge a pollutant, \textit{Hamker} contravenes our decision in \textit{Goldfarb}, and we decline to adopt the Fifth Circuit's approach. See \textit{Goldfarb}, 791 F.3d at 513.
Supreme Court considered the kinds of connected waters covered by the CWA. See 547 U.S. at 732–38. Justice Scalia, writing for a plurality of four Justices, concluded that certain wetlands and intermittent streams did not themselves fall within the meaning of navigable waters under the CWA. See id. at 739. However, when analyzing the kinds of connected waters that might fall under the CWA, Justice Scalia observed that "[t]he Act does not forbid the 'addition of any pollutant directly to navigable waters from any point source,' but rather the 'addition of any pollutant to navigable waters.'" Id. at 743 (quoting 33 U.S.C. § 1362(12)(A)). Accordingly, he observed that federal courts consistently have held that a discharge of a pollutant "that naturally washes downstream likely violates § 1311(a)." Id. (emphasis removed) (citing United States v. Velcicol Chem. Corp., 438 F. Supp. 945, 946–47 (W.D. Tenn. 1976)).

The plain language of the CWA requires only that a discharge come from a "point source." See 33 U.S.C. § 1362(12)(A). Just as the CWA's definition of a

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10 The district court here rejected the plaintiffs' argument that the CWA covers a discharge through soil and ground water, because the court concluded that such an argument relies on an impermissible "Land is Waters" approach to CWA jurisdiction. In reaching this conclusion, the district court relied on the plurality opinion in Rapanos, which characterized the plaintiffs' theory there that "intermittent streams" were navigable waters as a so-called "Land is Waters" approach, and rejected that approach. 547 U.S. at 732–34. However, Justice Kennedy's controlling concurrence in Rapanos did not join the plurality in rejecting the plaintiffs' theory as a "Land is Waters" approach to CWA jurisdiction. 547 U.S. at 768–70; United States v. Robertson, 875 F.3d 1281, 1292 (9th Cir. 2017) (holding that Justice Kennedy's "significant nexus" test controls after Rapanos). Moreover, the "Land is Waters" theory in Rapanos involved whether certain bodies of water themselves qualified as navigable waters, which is not at issue here. 547 U.S. at 739 (plurality opinion). Thus, irrespective whether a "Land is Waters" approach remains viable under the CWA following Rapanos, the plaintiffs' theory in the present case does not rely on such an approach.

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discharge of a pollutant does not require a discharge directly to navigable waters, \textit{Rapanos}, 547 U.S. at 743, neither does the Act require a discharge directly from a point source,\textsuperscript{11} see 33 U.S.C. § 1362(12)(A). The word “from” indicates “a starting point: as (1) a point or place where an actual physical movement . . . has its beginning.” Webster’s Third New International Dictionary 913 (Philip Babcock Gove et al. eds., 2002) (emphasis added); see also The American Heritage Dictionary of the English Language 729 (3d ed. 1992) (noting “from” indicates a “starting point” or “cause”). Under this plain meaning, a point source is the starting point or cause of a discharge under the CWA, but that starting point need not also convey the discharge directly to navigable waters.

To hold otherwise effectively would require that any discharge of a pollutant cognizable under the CWA be seamlessly channeled by point sources until the moment the pollutant enters navigable waters. The Second Circuit rejected such an interpretation of the CWA, and we agree with that court’s reasoning. In \textit{Waterkeeper Alliance, Inc. v.}

\textsuperscript{11} The dissent relies on cases that include language stating that a point source must “convey” or “introduce” pollutants to navigable waters. \textit{See, e.g., Miccosukee, 541 U.S. at 105 (observing that “a point source . . . need only convey the pollutant to ‘navigable waters’”); Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of N.Y., 273 F.3d 481, 491 (2d Cir. 2001) (stating that a “point source must introduce the pollutant into navigable water” (emphasis omitted) (citation omitted)). We disagree with any suggestion that these cases support the conclusion that the CWA requires a discharge from the point source directly to navigable waters. First, these cases simply did not confront the question of an indirect discharge of pollutants through land or ground water over time. Second, many of these cases were decided before \textit{Rapanos} clarified that the CWA’s language does not require a direct discharge. \textit{See 547 U.S. at 743; Hawai’i Wildlife Fund, 2018 WL 1569313, at *7–*8}. Finally, as we explain below, the point source here allegedly is “conveying” and “introducing” pollutants to the navigable waters, albeit indirectly, because it is the undisputed cause of the addition.
EPA, the Second Circuit held that if courts required both the cause of the pollution and any intervening land to qualify as point sources, such an interpretation would, in practice, "impose a requirement not contemplated by the Act: that pollutants be channelized not once but twice before the EPA can regulate them." 399 F.3d 486, 510-11 (2d Cir. 2005); see also Concerned Area Residents for Env't v. Southview Farm, 34 F.3d 114, 119 (2d Cir. 1994) (holding that liquid manure that passed from tankers through intervening fields to nearby waters constituted a discharge from a point source). The Ninth Circuit likewise rejected the theory that the CWA creates liability for discharges "only . . . where the point source itself directly feeds into the navigable water—e.g., via a pipe or a ditch." Hawai'i Wildlife Fund, 2018 WL 1569313, at *7.

The logic of Waterkeeper Alliance and Hawai'i Wildlife Fund is equally applicable here. The plaintiffs have alleged that the pipeline is the starting point and cause of pollution that has migrated and is migrating through ground water to navigable waters. Accordingly, we hold in agreement with the Second and Ninth Circuits that to qualify as a discharge of a pollutant under the CWA, that discharge need not be channeled by a point source until it reaches navigable waters.

ii.

Although we conclude that an indirect discharge may fall within the scope of the CWA, such discharges must be sufficiently connected to navigable waters to be covered under the Act. As the Ninth Circuit recently held, a discharge that passes from a point source through ground water to navigable waters may support a claim under the CWA. Hawai'i Wildlife Fund, 2018 WL 1569313, at *8. However, a discharge through ground
water does not always support liability under the Act. Id. Instead, the connection
between a point source and navigable waters must be clear.

The EPA has developed the term “direct hydrological connection” to identify for
purposes of the CWA whether there is a clear connection between the discharge of a
pollutant and navigable waters when the pollutant travels through ground water. The
EPA consistently has taken the position that the Act applies to discharges “from a point
source via ground water that has a direct hydrologic connection to surface water.”
National Pollutant Discharge Elimination System Permit Regulation and Effluent
Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66
Fed. Reg. 2960, 3015 (proposed Jan. 12, 2001) [CAFOs Standards]; see also
Amendments to the Water Quality Standards Regulation That Pertain to Standards on
Indian Reservations, 56 Fed. Reg. 64,876, 64,892 (Dec. 12, 1991) (“[T]he Act requires
NPDES permits for discharges to groundwater where there is a direct hydrological
connection between groundwaters and surface waters.”). The assessment of the
directness of a hydrological connection is a “factual inquiry,” in which “time and
distance” are relevant, as well as factors such as “geology, flow, and slope.” CAFOs
Standards, 66 Fed. Reg. at 3017. This interpretation by the EPA of its statutory authority
“warrants respectful consideration,” especially in the context of a “complex and highly
technical regulatory program.” Wis. Dep’t of Health & Family Servs. v. Blumer, 534
(1994)); see also Riverside Bayview Homes, Inc., 474 U.S. at 131.
In light of the above considerations, we hold that a plaintiff must allege a direct hydrological connection between ground water and navigable waters in order to state a claim under the CWA for a discharge of a pollutant that passes through ground water. This determination necessarily is fact-specific. In the present case, the plaintiffs have alleged that pollutants are seeping into navigable waters in Anderson County about 1000 feet or less from the pipeline. This extremely short distance, if proved, provides strong factual support for a conclusion that Kinder Morgan’s discharge is covered under the CWA. See Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133, 1137, 1148–50 (10th Cir. 2005) (holding that a discharge that passed through a 2.5-mile tunnel between mine shaft and navigable water could be covered under CWA).

Also as a matter of undisputed fact, the ruptured pipeline caused the pollution at issue here. Kinder Morgan does not assert that the pollutants found in the creeks and wetlands have an independent or contributing cause. And this is not a case in which pollutants are diluted while passing through a labyrinth of underground “tunnel geology,” El Paso Gold Mines, 421 F.3d at 1150, or are otherwise diverted from their natural course, see Sierra Club v. Abston Constr. Co., 620 F.2d 41, 45 (5th Cir. 1980) (holding that natural flow of “[g]ravity . . . resulting in a discharge into a navigable body of water.

12 The Ninth Circuit has held that an indirect discharge must be “fairly traceable” from the point source to navigable waters. Hawai’i Wildlife Fund, 2018 WL 1569313, at *8 n.3. We see no functional difference between the Ninth Circuit’s fairly traceable concept and the direct hydrological connection concept developed by EPA that we adopt today, which as we explain below includes a concept of traceability. In fact, the direct hydrological connection concept may be viewed as a narrower application of the same principle, addressing point source discharges through ground water.
may be part of a point source discharge if the [polluter] at least initially collected or channeled the water and other materials”).

Additionally, the plaintiffs have alleged a traceable discharge from the ruptured pipeline. The traceability of a pollutant in measurable quantities is an important factor in the determination whether a particular discharge is covered by the CWA. See Hawai’i Wildlife Fund, 2018 WL 1569313, at *8 (holding that claim for indirect discharge must show that pollution is “fairly traceable” to the point source); El Paso Gold Mines, 421 F.3d at 1140 n.4 (noting that pollution that is “not traceable to a single, identifiable source or conveyance” is nonpoint source pollution). And Kinder Morgan does not dispute that pollutants originating from the gasoline pipeline already have been detected in the waters of Anderson County.

As we have noted, the CWA’s stated purpose is “to restore . . . the chemical, physical, and biological integrity of the Nation’s waters,” 33 U.S.C. § 1251(a), and the statute establishes a regime of zero tolerance for unpermitted discharges of pollutants, 33 U.S.C. § 1311(a). In contrast, if the presence of a short distance of soil and ground water were enough to defeat a claim, polluters easily could avoid liability under the CWA by ensuring that all discharges pass through soil and ground water before reaching navigable waters. Such an outcome would greatly undermine the purpose of the Act. Thus, we hold that the plaintiffs plausibly have alleged a direct hydrological connection between the ground water and navigable waters to state a claim for a discharge of a pollutant under 33 U.S.C. § 1311(a).
We find no merit in Kinder Morgan’s concern that our holding will result in unintended coverage under the CWA of any discharge of a pollutant into ground water. We do not hold that the CWA covers discharges to ground water itself. Instead, we hold only that an alleged discharge of pollutants, reaching navigable waters located 1000 feet or less from the point source by means of ground water with a direct hydrological connection to such navigable waters, falls within the scope of the CWA.\(^{13}\) Accordingly, the plain language and purpose of the Clean Water Act direct our conclusion in the present case that the district court has jurisdiction to entertain the plaintiffs’ claim under 33 U.S.C. § 1365(a), and that the plaintiffs have stated a claim for a violation of the Act’s prohibition of the “discharge of any pollutant.” 33 U.S.C. § 1311(a).

III.

For these reasons, we vacate the district court’s decision and remand the case for further proceedings consistent with this opinion.

\textit{VACATED AND REMANDED}

FLOYD, Circuit Judge, dissenting:

Based on allegations that pollutants are being added into navigable waters, the majority concludes that the Appellants have adequately alleged a cognizable and ongoing Clean Water Act ("CWA") violation. Maj. Op. at 19. While this conclusion may seem intuitive at first glance, close examination of the text, history, and structure of the CWA reveals that not every addition of pollution amounts to a CWA violation—much less an ongoing CWA violation. Congress precisely defined a CWA violation as the addition of pollutants from a point source, and for there to be an ongoing CWA violation, there must be an ongoing addition of pollutants from a point source into navigable waters. See 33 U.S.C. § 1362(12). Here, the only point source at issue—Kinder Morgan’s pipeline—has been repaired and is not currently adding any pollutants into navigable waters, thus negating a necessary element of a CWA violation. Because there is no ongoing violation under the meaning of the CWA, I would affirm the district court’s dismissal of the complaint for lack of subject matter jurisdiction and for failure to state a claim upon which relief can be granted. I respectfully dissent.

I.

A.

The parties’ pleadings and briefs reveal the following facts. In late 2014, residents of Belton, South Carolina, discovered that Kinder Morgan’s pipeline released a large amount of gasoline and contaminated the nearby ground ("spill site"). Kinder Morgan repaired the pipeline within a few days of discovering the leak and began remediation
efforts that are ongoing to this day under the supervision of the South Carolina Department of Health and Environmental Control (DHEC). Kinder Morgan has recovered over 209,000 gallons of gasoline, but over 160,000 gallons of gasoline remain unrecovered at the spill site. Kinder Morgan’s repaired pipeline is not currently leaking any additional gasoline. Nevertheless, as the gasoline from the spill site gets washed off by ground water or seeps through the ground from the spill site, gasoline is being introduced to navigable waters. In December 2016, the environmental groups Upstate Forever and Savannah Riverkeeper (collectively, “Appellants”) initiated a citizen suit against Kinder Morgan, alleging an ongoing CWA violation. After full briefing on the matter, on April 20, 2017, the district court dismissed the Appellants’ complaint for lack of subject matter jurisdiction and failure to state a claim.

B.

We review a district court’s order dismissing a complaint for lack of subject matter jurisdiction and for failure to state a claim de novo. Goldfarb v. Mayor & City Council of Balt., 791 F.3d 500, 505 (4th Cir. 2015). Rule 12(b)(1) of the Federal Rules of Civil Procedure allows a party to move to dismiss a plaintiff’s complaint for lack of subject matter jurisdiction. Fed. R. Civ. P. 12(b)(1). To determine whether subject matter jurisdiction exists, courts are “to regard the pleadings’ allegations as mere evidence... and may consider evidence outside of the pleadings without converting the proceeding to one for summary judgment.” Richmond, Fredericksburg & Potomac R. Co. v. United States, 945 F.2d 765, 768 (4th Cir. 1991). The nonmoving plaintiff bears the burden of proving subject matter jurisdiction, and “the moving party should prevail
only if the material jurisdictional facts are not in dispute and the moving party is entitled to prevail as a matter of law.” *Id.*

Rule 12(b)(6) allows a party to move to dismiss the plaintiff’s complaint for failure to state a claim. Fed. R. Civ. P. 12(b)(6). When a complaint is attacked by a Rule 12(b)(6) motion, “a plaintiff’s obligation to provide the grounds of his entitlement to relief requires more than labels and conclusions ….” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (internal quotation marks omitted). “Factual allegations must be enough to raise a right to relief above the speculative level.” *Id.*

II.


First, Congress concentrated the federal regulatory effort on curtailing point source pollution—that is, pollution from “discernible, confined and discrete conveyance[s].” 33 U.S.C. § 1362(14)—“which tended to be more notorious and more easily targeted,” *Or. Nat. Desert Ass’n v. U.S. Forest Serv.*, 550 F.3d 778, 780 (9th Cir. 2008). Second, Congress established the National Pollution Discharge Elimination System (NPDES) which “requires dischargers to obtain permits that place limits on the type and quantity of pollutants that can be released into the Nation’s waters.” *S. Fla.

While the CWA includes other important features, it bears explaining these three central features in detail, as they are critical to this appeal.

A.

In drafting the CWA, Congress focused the federal regulatory effort on reducing point source pollution by making the existence of, and the addition of pollutants from, a point source a sine qua non element of a CWA violation. The text and structure of the CWA unambiguously lead to this conclusion.

At the outset, it is important to note that “Congress consciously distinguished between point source and nonpoint source discharges.” Appalachian Power Co. v. Train, 545 F.2d 1351, 1373 (4th Cir. 1976). Point source pollution is pollution from “any discernible, confined and discrete conveyance.” 33 U.S.C. § 1362(14). The non-exhaustive list of examples of a point source in the CWA includes “pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft.” Id. All other sources of pollution—namely, those that are not “discernible, confined and discrete,” id.—are considered
nonpoint sources. *Or. Nat. Desert Ass’n*, 550 F.3d at 780. In other words, nonpoint source pollution “is defined by exclusion and includes all water quality problems” that are not from a point source. *Nat’l Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 166 (D.C. Cir. 1982).

Unlike point source pollution, nonpoint source pollution “arises from many dispersed activities over large areas, and is not traceable to any single discrete source.” *League of Wilderness Defs./Blue Mts. Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1183 (9th Cir. 2002). “Congress had classified nonpoint source pollution as runoff caused primarily by rainfall around activities that employ or create pollutants.” *Cordiano v. Metacomet Gun Club, Inc.*, 575 F.3d 199, 220 (2d Cir. 2009) (internal quotation marks omitted). Indeed, a common example of nonpoint source pollution is rain washing pollution off the highway and carrying it along “by runoff in a polluted soup[] to] creeks, rivers, bays, and the ocean.” *Forsgren*, 309 F.3d at 1183. The EPA guidance on nonpoint source pollution similarly confirms that “[i]n 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.” *Cordiano*, 575 F.3d at 220 (quoting EPA Office of Water, Nonpoint Source Guidance 3 (1987)).

That Congress intended to target point source pollution, rather than nonpoint source pollution, is evident from the text of the CWA, which makes the existence of a point source a required element of a CWA violation. 33 U.S.C. § 1311(a) provides that “[e]xcept as in compliance with [the various section in the CWA], the discharge of any
pollutant by any person shall be unlawful." "Discharge of a pollutant" is a term of art under the CWA, with a more precise meaning than under ordinary parlance. Cf. Burgess v. United States, 553 U.S. 124, 129 (2008) ("Statutory definitions control the meaning of statutory words . . . in the usual case." (internal quotation marks omitted)). Congress defined "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source." 33 U.S.C. § 1362(12) (emphasis added).

In summarizing the requirements under these two statutory provisions, 33 U.S.C. §§ 1311(a), 1362(12), courts have consistently restated the elements of a CWA violation as "(1) discharg[ing] (2) a pollutant (3) into navigable waters (4) from a point source (5) without a [NPDES] permit." Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133, 1142 (10th Cir. 2005) (emphasis added); see also Parker v. Scrap Metal Processors, Inc., 386 F.3d 993, 1008 (11th Cir. 2004); Comm. To Save Mokelumne River v. E. Bay Mun. Util. Dist., 13 F.3d 305, 309 (9th Cir. 1993); Nat'l Wildlife Fed'n v. Consumer Power Co., 862 F.2d 580, 583 (6th Cir. 1988) ("[F]or NPDES requirements to apply to any given set of circumstances, 'five elements must be present: (1) a pollutant must be (2) added (3) to navigable waters (4) from (5) a point source.'" (quoting Gorsuch, 693 F.2d at 165)); Avoyelles Sportsmen's League, Inc. v. Marsh, 715 F.2d 897, 922 (5th Cir. 1983).

The "point source need not be the original source of the pollutant; it need only convey the pollutant to 'navigable waters[. . .]'" Miccosukee Tribe, 541 U.S. at 105. For there to be a conveyance or "addition" of pollutants under the meaning of the CWA, "a 'point source must introduce the pollutant into navigable water from the outside world[,] . . . [that is,] any place outside the particular body of water to which pollutants
are introduced.” *Catskill Mtts. Chapter of Trout Unlimited, Inc. v. City of New York*, 273 F.3d 481, 491 (2d Cir. 2001) (quoting *Gorsuch*, 693 F.2d at 165). As these definitions unambiguously show, a critical element of a CWA violation is that the pollutant comes from a point source.

Furthermore, the general structure of the CWA confirms that Congress sought to focus on point source pollution. “A central provision of the [CWA] is its requirement that individuals, corporations, and governments secure [NPDES] permits before discharging pollution from any point source into the navigable waters….” *Decker v. Nw. Envtl. Def. Ctr.*, 568 U.S. 597, 602 (2013). Under the CWA, point source pollution is regulated by the EPA through the NPDES permitting program, see 33 U.S.C. § 1342, and nonpoint source pollution is regulated by the states, see 33 U.S.C. § 1329; *Cordiano*, 575 F.3d at 219–220; *Gorsuch*, 693 F.2d at 165–66. Based on this structure, courts have consistently recognized that “nonpoint sources of pollution have not generally been targeted by the CWA….” *Or. Nat. Desert Ass’n*, 550 F.3d at 785. In drafting the CWA, “[w]hile Congress could have defined a ‘discharge’ to include generalized runoff,… it chose to limit the permit program’s application to the… [point source] category.” *Id.* (quoting William L. Andreen, *Water Quality Today—Has the Clean Water Act Been A Success?*, 55 Ala. L. Rev. 537, 562 (2004)). In sum, the fact that “the [CWA] assigns the primary responsibility for regulating point sources to the EPA and nonpoint sources to the states,” *Am. Farm Bureau Fed’n v. EPA*, 792 F.3d 281, 299 (3d Cir. 2015), plainly shows that Congress’s main focus in enacting the CWA was the reduction of point source pollution.
A careful review of the CWA’s text and structure reveals that Congress sought to target point source pollution and thus included point source as an indispensable element of a CWA violation.\footnote{1}{While the text and structure speak unambiguously, for those who may find legislative history persuasive, the CWA’s legislative history similarly confirms Congress’s focus on point source pollution. Congress added the term “point source” “as a means of identifying industrial polluters” to narrow and clarify the scope of the CWA. United States v. Pluta Health Labs., Inc., 3 F.3d 643, 647 (2d Cir. 1993). The Senate Report for the CWA explains: In order to further clarify the scope of the regulatory procedures in the Act [sic] the Committee has added a definition of point source to distinguish between control requirements where there are specific confined conveyances, such as pipes, and control requirements which are imposed to control runoff. The control of pollutants from runoff is applied pursuant to Section 209 and the authority resides in the State or local agency. S. Rep. No. 92-414 (1972), as reprinted in 1972 U.S.C.C.A.N. 3668, 3744. The narrowing of Congress’s regulatory focus resulted “in part because nonpoint sources were far more numerous and more technologically difficult to regulate,” whereas “point sources . . . tended to be more notorious and more easily targeted.” Or. Nat. Def. Ass’n, 550 F.3d at 780; see also S. Rep. No. 92-414, at 39 (“[M]any nonpoint sources of pollution are beyond present technology of control”). Whatever the reason, the legislative history confirms that Congress intended to focus on point source pollution in enacting the CWA.}

B.

Congress chose the NPDES permitting program as a central means of controlling point source pollution. “[I]ndividuals, corporations, and governments [must] secure [NPDES] permit[s] before discharging pollution from any point source into the navigable waters of the United States.” Decker, 568 U.S. at 602.

Under the CWA, the state and federal governments act as partners in administering the NPDES program and issuing the permits. Arkansas v. Oklahoma, 503
U.S. 91, 101 (1992). An NPDES permit can be issued by either the EPA or a state agency. The EPA “initially administers the NPDES permitting system for each State, but a State may apply for a transfer of permitting authority to state officials.” Nat’l Ass’n of Home Builders v. Deft. of Wildlife, 551 U.S. 644, 650 (2007). “If authority is transferred, then state officials—not the federal EPA—have the primary responsibility for reviewing and approving NPDES discharge permits, albeit with continuing EPA oversight.” Id.

An NPDES permit “place[s] limits on the type and quantity of pollutants that can be released into the Nation’s waters,” Miccosukee Tribe, 541 U.S. at 102, and “defines, and facilitates compliance with, and enforcement of, . . . a discharger’s obligations under the [CWA].” California ex rel. State Water Res. Control Bd., 426 U.S. at 205. The EPA promulgates the “effluent limitations” that “restrict the quantities, rates, and concentrations of specified substances which are discharged.” Arkansas, 503 U.S. at 101; see also 33 U.S.C. §§ 1311, 1314. The states, with substantial guidance from EPA, promulgate the “water quality standards” that express the states’ “desired condition of a waterway . . . so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.” Id. (internal quotation marks); see also 33 U.S.C. § 1313. In addition to listing the effluent limitations and water quality standards, NPDES permits also require “compliance with the inspection, reporting and monitoring requirements of the [CWA] as outlined in 33 U.S.C. § 1318.” Menzel v. City Util. Corp., 712 P.2d 91, 94 (4th Cir. 1983). To the benefit of NPDES permit holders, the CWA “shields NPDES permit holders from liability if their discharges comply with their permits.” Ohio Valley Envtl.

NPDES permitting is, however, not only ill-equipped to address, but also inapplicable to, nonpoint source pollution. Unlike a point source, nonpoint source pollution "arises from many dispersed activities over large areas, and is not traceable to any single discrete source." \textit{Forsgren}, 309 F.3d at 1184. And for that reason, nonpoint source pollution “is very difficult to regulate through individual permits.” \textit{Id}. More specifically, it would be difficult to mandate compliance with inspection, reporting, and monitoring requirements given that nonpoint source pollution cannot be traced to discrete sources. Thus, sensibly, the CWA does not attempt to regulate nonpoint source pollution through the NPDES permitting. \textit{See El Paso}, 421 F.3d at 1140 n.4 (observing that “[g]roundwater seepage that travels through fractured rock would be nonpoint source pollution, which is not subject to NPDES permitting”); \textit{Forsgren}, 309 F.3d at 1183 (stating that nonpoint source pollution “is regulated in a different way and does not require [an NPDES] permit”); \textit{Gorsuch}, 693 F.2d at 166 (accepting the EPA’s explanation of the CWA that nonpoint source pollution “includes all water quality problems not subject to § 402 [NPDES permit program]”).

In sum, Congress chose the NPDES permitting scheme as the primary means of controlling point source pollution, which is the focus of the CWA regulatory scheme.
C.

Congress also instituted a comprehensive enforcement scheme to ensure compliance with the CWA, in which the state and federal governments bear the primary responsibility for enforcement, but private citizens have limited supplementary enforcement authority.

Under the CWA, “the primary responsibility for enforcement rests with the state and federal governments . . .” The Pinney Run, 523 F.3d at 456 (quoting Sierra Club v. Hamilton Cty. Bd. of Cty. Comm’rs, 504 F.3d 634, 637 (6th Cir. 2007)). 33 U.S.C. § 1319 vests the EPA with a broad range of enforcement tools—criminal, civil, and administrative. See, e.g., Sackett v. EPA, 566 U.S. 120, 122 (2012) (“If the EPA determines that any person is in violation of [the CWA], the Act directs the agency either to issue a compliance order or to initiate a civil enforcement action.”); United States v. Schettino, 998 F.2d 196, 198 (4th Cir. 1993) (per curiam) (affirming a criminal conviction for discharging pollutants without a permit in violation of 33 U.S.C. § 1319(c)(2)). The EPA may initiate administrative and civil proceedings for both present and past CWA violations. See Gwaltney, 484 U.S. at 58.

The CWA also includes a citizen suit provision, 33 U.S.C. § 1365(a), under which “private citizens provide a second level of enforcement and can serve as a check to ensure the state and federal governments are diligent in prosecuting [CWA] violations.” The Pinney Run, 523 F.3d at 456 (quoting Hamilton Cty. Bd. of Cty. Comm’rs, 504 F.3d at 637). Under the citizen suit provision, “any citizen may commence a civil action . . . against any person . . . who is alleged to be in violation of” the CWA. 33 U.S.C.
§ 1365(a)(1). However, "the citizen suit is meant to supplement rather than to supplant governmental action," Gwaltney, 484 U.S. at 60, and, therefore, Congress limited a citizen's ability to enforce the CWA in various ways.2

One important jurisdictional limit on a citizen's ability to enforce the CWA is that she may only bring a suit for an ongoing CWA violation but not for a past violation. Id. at 57. The text of the CWA authorizes a citizen suit only against someone "alleged to be in violation of" the CWA. 33 U.S.C. § 1365(a)(1). The Supreme Court concluded that "[t]he most natural reading of 'to be in violation' is a requirement that citizen-plaintiffs allege a state of either continuous or intermittent violation—that is, a reasonable likelihood that a past polluter will continue to pollute in the future." Gwaltney, 484 U.S. at 57 (emphasis added). The Gwaltney Court further stated that "Congress could have phrased its requirement in language that looked to the past ("to have violated"), but it did not choose this readily available option." Id. In other words, Congress did not authorize a citizen to enforce the CWA for "wholly past violations." Id. The Supreme Court observed that allowing citizens to pursue wholly past violations "could undermine the

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2 A citizen invoking the CWA citizen suit provision must first show that she has Article III and statutory standing to bring the suit. See 33 U.S.C. § 1365(g); Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 152 (4th Cir. 2000) (en banc). Moreover, the citizen may not commence suit prior to 60 days after giving notice of the alleged violation to the appropriate governmental authority and the alleged polluter. 33 U.S.C. § 1365(b)(1)(A). Lastly, 33 U.S.C. § 1365(b)(1)(B) "bars a citizen from suing if the EPA or the State has already commenced, and is 'diligently prosecuting,' an enforcement action." Friends of the Earth, Inc. v. Laidlaw Envtl. Servs., Inc., 528 U.S. 167, 175 (2000). Congress instituted these restrictions on the CWA citizen suit provision "to strike a balance between encouraging citizen enforcement of environmental regulations and avoiding burdening the federal courts with excessive numbers of citizen suits." \textit{Hallstrom v. Tillamook Cty.}, 493 U.S. 20, 29 (1989).
supplementary role envisioned for the citizen suit.” *Id.* at 60. Thus, a citizen seeking to commence a citizen suit “must show that the defendant’s violations of the CWA are ongoing at the time of suit.” *Am. Canoe Ass’n v. Murphy Farms, Inc.*, 326 F.3d 595, 521 (4th Cir. 2003).

Therefore, although Congress envisioned private citizens playing an important role in the CWA enforcement by providing supplementary enforcement, it also placed jurisdictional limitations on citizen suits by requiring the existence of an ongoing violation.

III.

The threshold jurisdictional question in this appeal is whether there is a cognizable and ongoing CWA violation such that the Appellants’ citizen suit may proceed. *See Gwaltney*, 484 U.S. at 57. In my view, the Appellants have failed to show that the CWA violation is ongoing, because there is no ongoing discharge of pollutants from a point source. *Cf. Am. Canoe Ass’n*, 326 F.3d at 521. Instead, the facts presented to us in the record demonstrate that there is an ongoing groundwater migration from the spill site, which does not amount to a CWA violation and cannot support a citizen suit. *See Or. Nat. Desert Ass’n*, 550 F.3d at 785 (noting that Congress chose not to include generalized runoff within the definition of “discharge”).
A.

In my view, there is no ongoing CWA violation. The Appellants cannot show that there is an ongoing discharge of pollutants from a point source, because the only point source at issue—the pipeline—is not currently leaking or releasing any pollutants.

A CWA violation is defined as an unpermitted “discharge of any pollutant by any person.” 33 U.S.C. § 1311(a). “Discharge of a pollutant” is defined as “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12). For there to be an “addition . . . from a point source,” id., the point source must convey, transport, or introduce the pollutant to navigable waters. See Mischenek Tribe, 541 U.S. at 105 (observing that “a point source . . . need only convey the pollutant to ‘navigable waters’ ” and that the examples of point sources in 33 U.S.C. § 1362(12) are objects that “transport” pollutants); Catskill Mts., 273 F.3d at 491 (“[A] point source must introduce the pollutant into navigable water from the outside world.” (quoting Gormuch, 693 F.2d at 165)). In other words, to constitute a CWA violation, a point source must have been involved in the discharging activity.

Thus, for there to be an ongoing CWA violation, a point source must currently be involved in the discharging activity by adding, conveying, transporting, or introducing pollutants to navigable waters. See El Paso Gold Mines, 421 F.3d at 1140 (summarizing the “ongoing migration cases” in which there was “an identifiable discharge from a point source that occurred in the past . . .,” but “[a]t the time of suit, the discharging activity from a point source . . . had ceased,” and citizen suits were dismissed). The majority notes that “[t]he CWA’s language does not require that the point source continue to
release a pollutant for a violation to be ongoing.” Maj. Op. at 16. It is difficult to see how there could be an ongoing CWA violation—defined as “any addition of pollutants . . . from any point source”—without an ongoing discharging activity from a point source. In my view, to constitute an ongoing CWA violation (i.e., ongoing point source pollution), the point source’s discharging, adding, conveying, transporting, or introducing of pollutants must be continuous.

Kinder Morgan’s pipeline is not presently leaking or releasing gasoline; therefore, the only relevant point source is not currently discharging—adding, conveying, transporting, or introducing—pollutants to navigable waters. Cf. Miccosukee Tribe, 541 U.S. at 105; Caskill Mts., 273 F.3d at 491. Thus, in my view, there is no ongoing violation under the meaning of the CWA. This should therefore end the Appellants’ citizen suit, which requires an ongoing CWA violation. See 33 U.S.C. §§ 1362(12); 1365(a); Gwaltney, 484 U.S. at 57. The majority also seemingly recognizes that pollutants must be actively “originating from a point source.” Maj. Op. at 17 (emphasis added). However, the majority’s theory is that since the pollutants in the spill site once came from the pipeline, the continuing addition from the spill site is thus a continuing discharge from a point source. But accepting this position would effectively erase the phrase from any point source out of the CWA, 33 U.S.C. § 1362(12), and find an ongoing CWA violation even though no pollutant is originating or being added from a point source any longer. Thus, in my view, the majority disregards point source as an element of a CWA violation and invents a violation not cognizable under the CWA.
Because the pipeline is not actively and continuously discharging pollutants, there is no ongoing violation, but only a wholly past violation, under the meaning of the CWA.

B.

In my view, this is an ongoing migration case, which does not amount to an ongoing CWA violation and cannot support a citizen suit. Kinder Morgan is a past violator—that is, it indirectly added pollutants to navigable waters from its point source when its pipeline leaked and released a large amount of gasoline that reached navigable waters. Although Kinder Morgan’s pipeline itself is not currently leaking, the effects of Kinder Morgan’s past violation continue. The spill site continues to introduce gasoline into navigable waters as gasoline migrates through the ground or as ground water washes off and carries gasoline to navigable waters. This Court has not addressed whether a past discharge with lasting effects—through an ongoing migration of pollutants through groundwater movement—can support a citizen suit. See Ohio Valley Envtl. Coal., Inc. v. Hershaw Partners, LLC, 984 F. Supp. 2d 589, 597 (S.D. W. Va. 2013) (observing there is no Fourth Circuit precedent directly on point).

Given similar circumstances, however, several federal courts have concluded that ongoing migration of pollutants from a past discharge does not amount to an ongoing discharge necessary to support a citizen suit under the CWA. Conn. Coastal Fishermen’s Ass’n v. Remington Arms Co., 989 F.2d 1305, 1312–13 (2d Cir. 1993) (finding no ongoing CWA violation because the alleged polluter had “ceased operation of the Gun Club” that deposited lead shot and clay target debris into navigable waters “by the time plaintiff filed suit”); Pawtuxet Cove Marina v. Ciba-Geigy Corp., 807 F.2d 1089, 1094
(1st Cir. 1986) (finding no ongoing CWA violation because “[a]t the time plaintiffs brought suit, . . . defendant had ceased operating”); *Hamker v. Diamond Shamrock Chem. Co.*, 756 F.2d 392, 397 (5th Cir. 1985) (finding no ongoing CWA violation because “the complaint alleges . . . only that there are continuing effects from the past discharge, and such an allegation is insufficient for the purposes of section 1365.”); *Aiello v. Town of Brookhaven*, 136 F. Supp. 2d 81, 120–21 (E.D.N.Y. 2001) (concluding that the ongoing migration of residual leachate plume from a past violation is not an ongoing CWA violation), *Wilson v. Amoco Corp.*, 33 F. Supp. 2d 969, 975–76 (D. Wyo. 1998); *Friends of Santa Fe Cty. v. LAC Minerals, Inc.*, 892 F. Supp. 1333, 1354 (D.N.M. 1995) (“Migration of residual contamination resulting from previous releases is not an ongoing discharge within the meaning of the Act.”); *Brewer v. Ravan*, 680 F. Supp. 1176, 1183 (M.D. Tenn. 1988); *cf. El Paso*, 421 F.3d at 1140.

Like those courts, I would conclude that the lasting effects of Kinder Morgan’s past violation cannot give rise to a citizen suit under the CWA for two reasons. First, ongoing migration does not involve a point source, thus negating an essential element of a CWA violation. Second, ongoing migration is, by definition, nonpoint source pollution, which is outside of the CWA’s reach.

i.

Ongoing migration from a site contaminated by a past discharge does not involve a point source and is thus not a cognizable violation under the CWA. *See* 33 U.S.C. § 1362(12). Indeed, the lack of a discharging activity from a point source was the
decisive factor for many courts in concluding that ongoing migration cannot support a CWA citizen suit. As the Tenth Circuit has summarized:

The ongoing migration cases [in which the courts dismissed the citizen suits] . . . all involve an identifiable discharge from a point source that occurred in the past, whether it be a spill, Wilson, 989 F. Supp. at 1163, the accidental leakage at a chemical plant, Hamker, 756 F.2d at 394, the discharge of lead shot and clay targets at a firing range, Remington Arms, 989 F.2d at 1309, or dumping of waste rock at a mine, LAC Minerals, 892 F. Supp. at 1337. At the time of suit, the discharging activity from a point source in all of these cases had ceased; all that remained was the migration, decomposition, or diffusion of the pollutants into a waterway.

El Paso, 421 F.3d at 1140. Likewise, at the time of the Appellants’ suit, the discharging activity from Kinder Morgan’s point source (i.e., the gasoline leak) had ceased, and all that remained was migration of gasoline from the spill site to navigable waters.

"Migration of residual contamination resulting from previous releases is not an ongoing discharge within the meaning of the [CWA],” LAC Minerals, 892 F. Supp. at 1354, because the point source itself is not conveying or introducing a pollutant into navigable waters, see Missaukee Tribe, 541 U.S. at 105; Gorsuch, 693 F.2d at 175.

The majority attempts to distinguish one of these migration cases from the Fifth Circuit, Hamker, 756 F.2d at 397, by observing that Hamker only dealt with an alleged discharge into groundwater and not navigable waters. See Maj. Op. at 19. But the court’s analysis in Hamker did not turn on the issue of navigable waters; rather, it turned on the fact that the continuing addition of pollutants did not come from any point source. Hamker, 756 F.2d at 397. The majority further states in a footnote that “to the extent that Hamker’s reasoning suggests that an ongoing violation requires that the point source continually discharge a pollutant, Hamker contravenes our decision in Goldforb.” Maj.

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Op. at 19 n.9. The majority misplaces reliance on Goldfarb. This Court in Goldfarb observed that, under the Resource Conservation and Recovery Act’s (RCRA) citizen suit provision, 42 U.S.C. § 6972(a)(1)(A), “although a defendant’s conduct that is causing a violation may have ceased in the past . . . what is relevant is that the violation is continuous or ongoing.” Goldfarb, 791 F.3d at 513. The statement in Goldfarb presumes that there already is an ongoing violation, does not help us in determining whether a polluter’s past action with lasting effects should be viewed as past or ongoing violation, and is inapplicable to Kinder Morgan’s situation because Kinder Morgan’s CWA violation had ceased when its point source ceased discharging pollutants.

Moreover, migration of pollutants from the spill site amounts to an ongoing nonpoint source pollution. As discussed above, Congress chose not to regulate nonpoint source pollution through the NPDES permitting program. See, e.g., El Paso, 421 F.3d at 1140 n.4; Forsgren, 309 F.3d at 1183; Gorsuch, 693 F.2d at 166; Appalachian Power, 545 F.2d at 1373–74. Nonpoint source pollution is commonly caused by the natural movements of rainfall or groundwater that wash off and carry pollutants from a large, diffuse area to navigable waters. Codiam, 575 F.3d at 220 (“[N]onpoint source pollution . . . generally results from land runoff, precipitation, atmospheric deposition, or percolation.”); El Paso, 421 F.3d at 1140 n.4 (“Groundwater seepage that travels through fractured rock would be nonpoint source pollution, which is not subject to NPDES permitting.”); Sierra Club v. Abston Constr. Co., Inc., 620 F.2d 41, 44 (5th Cir. 1980) (“The focus of [the CWA] is on the ‘discernible, confined and discrete’ conveyance of
the pollutant, which would exclude natural rainfall drainage over a broad area.”); *Tr. for Alaska v. EPA*, 749 F.2d 549, 558 (9th Cir. 1984) (“Congress had classified nonpoint source pollution as runoff caused primarily by rainfall around activities that employ or create pollutants.”). Nonpoint source pollution—caused by movements of rain or groundwater—“is very difficult to regulate through individual [NPDES] permits” because it “arises from many dispersed activities over large areas, and is not traceable to any single discrete source.” *Forsgren*, 309 F.3d at 1184.

Here, the Appellants have alleged ongoing migration from the spill site, which does not amount to a CWA violation. The Appellants have alleged that the groundwater flow from the spill site is introducing pollutants to navigable waters. Appendix (“App.”)

8. Indeed, the Appellants’ CWA case is built on the novel theory that the introduction of pollutants through the movement of hydrologically connected *groundwater* amounted to a CWA violation. Appellant Br. 26. As the record plainly shows, groundwater is carrying gasoline from the spill site, which spans in three different directions from the pipeline and covers a vast area. App. 99, 173. This kind of migration of pollutants through the natural movements of groundwater amounts to nonpoint source pollution. *El Paso*, 421 F.3d at 1140 n.4; see also *Forsgren*, 309 F.3d at 1184. While there is no doubt this kind of nonpoint source pollution affects the quality navigable waters, Congress deliberately chose not to place nonpoint source pollution within the CWA’s reach.3 *See*,

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3 An exception to this general rule is that the “*gravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the pollutant at least initially collected or channeled the water and other materials.*” *Abston* (Continued)
e.g., Abston Constr., 620 F.2d at 44. In my view, therefore, because ongoing migration of pollutants is nonpoint source pollution, it is not cognizable under the CWA.

In sum, I would conclude that ongoing migration of pollutants from a past discharge does not amount to an ongoing CWA violation.

C.

I do not take lightly the allegations of the severe environmental harm caused by Kinder Morgan. The Appellants have alleged facts suggesting a serious environmental disaster that cannot be easily overlooked as a mere peccadillo on the part of Kinder Morgan’s operation and management. The allegations indicate that a full restoration will take many years and require tremendous resources.

The severity of the situation alone, however, does not and cannot give rise to a citizen suit under the CWA. “Federal courts are courts of limited jurisdiction. They possess only that power authorized by Constitution and statute.” Kokkonen v. Guardian Life Ins. Co. of Am., 511 U.S. 375, 377 (1994). In creating a citizen suit provision under the CWA, Congress deliberately limited federal courts’ jurisdiction such that they may entertain citizen suits only for allegations of ongoing CWA violations. 33 U.S.C. §

Contr., 620 F.2d at 45. This is because, once a polluter attempts to channel, collect, or otherwise redirect the flow of water, such an effort becomes a “discernible, confined and discrete” conveyance. 33 U.S.C. § 1362(14); see also Sierra Club v. Va. Elec. Power Co., 247 F. Supp. 3d 753, 763 (E.D. Va. 2017) (“Dominion built the piles and ponds to concentrate [pollutants] in one location . . . [which] channels and conveys [pollutants] directly into groundwater and thence into the surface waters. Essentially they are discrete mechanisms . . . .”). The Appellants have not alleged that Kinder Morgan has at all attempted to channel, collect, or redirect the free flow of groundwater. See App. 419.
1365(a); Gwaltney, 484 U.S. at 57. And Congress precisely defined a CWA violation as
a point source discharge without an NPDES permit. The critical element—the addition
from a point source—cannot be satisfied here because Kinder Morgan has repaired its
pipeline and the pipeline is not currently leaking or adding pollutants to navigable waters.
The Appellants can only point to nonpoint pollution from the spill site or the past
violation, which cannot give rise to a citizen suit under the CWA.

Barring the Appellants’ citizen suit would not necessarily mean that Kinder
Morgan will evade accountability. Under the CWA, the primary responsibility for
enforcement rests with the state and federal governments. The Piney Run, 523 F.3d at
456. In fact, the State of South Carolina, through DHEC, has stepped in and is actively
overseeing the remediation efforts. DHEC has directed Kinder Morgan to investigate the
impact of the spill and implement corrective action plans. After a series of back and forth
revisions between DHEC and Kinder Morgan, on March 1, 2017, DHEC approved the
“Startup Plan for Surface Water Protection Measures” that was meant to implement
additional remedial measures in the spill site. App. 351. Thus, even without a CWA
citizen suit, the State of South Carolina is protecting and remediating the waters and
natural resources within its borders. In addition to ordering Kinder Morgan to remediate
the spill site, the state and federal governments are also empowered to use criminal, civil,
and administrative enforcement actions for even for past violations of the CWA.

Moreover, if a CWA citizen suit fails for lack of subject matter jurisdiction, other
state and federal laws may provide actionable claims against Kinder Morgan. South
Carolina state law may provide a more encompassing response. As the amici States have
pointed out, Brief of the Amici States 22–23, South Carolina law provides for the state to recover monetarily from polluters for violations that includes even nonpoint source pollution, see S.C. Code § 48-1-90(a)(1). In addition to the enforcement mechanism under state law, other federal laws could provide recourse. In response to Kinder Morgan’s past spill, a federal citizen suit may perhaps be more appropriate under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9001 et seq., which is “designed to effectuate the cleanup of toxic waste sites” and to impose cleanup costs, *Meghrig v. KFC W. Inc.*, 516 U.S. 479, 483 (1996) (citations omitted), or under the RCRA, 42 U.S.C. § 6901 et seq., which concerns with the disposal of hazardous waste, *Aiello*, 136 F. Supp. 2d at 121 (“It is RCRA, rather than the CWA, that appropriately addresses liability for ongoing contamination by past polluters.”).

The Appellants have raised serious allegations but, in my view, the CWA citizen suit is not the proper mechanism to seek redress. Therefore, the district court lacked subject matter jurisdiction and the complaint failed to state a claim upon which relief can be granted.

IV.

For the reasons above, I would affirm the district court’s dismissal of the Appellants’ complaint. I respectfully dissent.
No. 17-6155

IN THE UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

TENNESSEE CLEAN WATER NETWORK AND
TENNESSEE SCENIC RIVERS ASSOCIATION,

Plaintiffs-Appellees,

v.

TENNESSEE VALLEY AUTHORITY,

Defendant-Appellant.

On Appeal from the United States District Court for the
Middle District of Tennessee

BRIEF OF THE STATES OF MARYLAND, CALIFORNIA, AND
WASHINGTON AND THE COMMONWEALTH OF MASSACHUSETTS
AS AMICI CURIAE IN SUPPORT OF PLAINTIFFS-APPELLEES

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INTEREST OF AMICI CURIAE

The States of Maryland, California, and Washington and the Commonwealth of Massachusetts file this brief as amici curiae pursuant to Rule 29(a)(2) of the Federal Rules of Appellate Procedure. Amici have a substantial interest in the appropriate application of the Clean Water Act’s National Pollutant Discharge Elimination System (“NPDES”) program and prohibition against unauthorized discharges of pollutants into navigable waters. In particular, amici rely on the Act’s safeguards as a means of protecting their surface waters against pollution flowing downstream from states with less restrictive controls on discharges of pollutants. See generally Int’l Paper Co. v. Ouelette, 479 U.S. 481, 489-91 (1987). Amici rely on the Act’s cooperative federalism framework to ensure that discharges to navigable waters are monitored and comply with permits that take into account the capabilities of treatment technologies, impacts on water quality, and the Act’s overall goal of protecting the nation’s waters. Amici believe that reversal of the district court’s decision, or embrace of the arguments made by the Tennessee Valley Authority (“TVA”) and its amici concerning the scope of the Clean Water Act’s prohibition on unauthorized point source discharges into navigable waters, would threaten the Act’s proper application and give polluters an incentive to skirt regulation by rerouting discharges.

1 See Fed. R. App. P. 29(a)(2) (providing that “a state may file an amicus-curiae brief without the consent of the parties or leave of court”).
to nearby groundwater. Amici therefore file this brief to urge the Court to uphold the district court’s decision that the Act prohibits unauthorized point source discharges to navigable waters via a direct and immediate groundwater connection.

INTRODUCTION

This is a straightforward Clean Water Act case in which pollutants from a point source—here, unlined impoundments used for the disposal of coal ash—are discharged into an adjacent navigable waterway via a “direct, traceable connection” that is “anything but remote.” Findings of Fact and Conclusions of Law (“FFCL”), RE258, PageID 10531. Those impoundments are on the banks of the Cumberland River, as the extensive factual record below reflects. But the pollutants at issue must travel briefly through groundwater before reaching the river itself—and it is principally on that basis that the TVA and its amici argue against application of the Clean Water Act’s prohibition on unpermitted point source discharges.

Those arguments lack merit. The ruling below applies a principle that multiple courts have accepted without controversy: an unpermitted point source discharge into navigable waters via a direct groundwater connection is unlawful. In this case, for instance, abundant scientific evidence demonstrated that pollutants befouling the Cumberland River had in fact originated at TVA’s adjacent coal ash impoundments, traveling only a short distance through the groundwater before reaching the river.
The district court’s decision does not reflect an assertion of jurisdiction over discharges into groundwater as such, nor does it raise the specter of unfettered liability for groundwater discharges. And it certainly does not call for a ruling that discharges into navigable waters, no matter how traceable to a point source, are exempt from the Clean Water Act as long as they pass through groundwater first.

BACKGROUND

This case is about TVA’s coal ash discharges into the Cumberland River. Coal ash is a byproduct of burning coal for electricity generation. It contains a number of toxic substances, including arsenic, lead, and mercury, and is disposed of at sites throughout the country. Two such sites are TVA’s unlined Non-Registered Site and Ash Pond Complex (collectively “the impoundments”), which are immediately adjacent to the Cumberland River at TVA’s Gallatin coal-fired power plant. FFCL, RE258, PageID 10427. The Non-Registered Site is a closed, unlined, and leaking impoundment that stores coal ash. Id. at PageID 10427, 10519-20. The Ash Pond Complex is an active series of unlined and leaking ponds that likewise store coal ash. Id. at PageID 10427, 10436-39.

Based on the evidence at trial, the district court found that the impoundments were point sources within the meaning of the Clean Water Act. The court found that

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they were discernible, discrete, and confined—as required by the statutory definition of “point source”—because the very purpose of a coal ash pond is to concentrate coal ash and its pollutants in one location. See id. at PageID 10505-11; 33 U.S.C. § 1362(14) (defining “point source”). The court also found that the impoundments were “conveyances”—again, as required by the statutory definition—as they were unlined and leaking coal ash pollutants. FFCL, RE258, PageID 10506-07, 10511.

The court further concluded that the impoundments discharge coal ash pollutants to the Cumberland River through a direct and immediate groundwater connection. See id. at PageID 10444, 10504-05, 10510, 10519, 10521, 10531. The Ash Pond Complex impoundment was built upon “terrain riddled with potential karst-related leaks,” with karst terrain prone to the development of sinkholes and other drainage features. Id. at PageID 10526; see id. at PageID 10433 (describing evidence that karst features are fractures that gradually grow larger, such that “an underground drainage system begins to develop,” and that “in karst landscapes, tributary networks combine with one another, leading to larger and larger flows”). Coal ash pollutants, the court found, have escaped this unlined impoundment through the porous and drainage-prone karst formation and have taken a short, direct path through groundwater to the adjacent Cumberland River. Id. at PageID 10531.
TVA’s unlined Non-Registered Site impoundment, meanwhile, was built on porous, alluvial formations. *Id.* at PageID 10494. This impoundment has also historically leaked. *Id.* at PageID 10519-21. Although this impoundment was closed in 1998, aerial photography in 2015 showed coloration indicative of coal ash in the Cumberland River adjacent to the impoundment, suggesting that the closure had not stopped the leaks. *Id.* at PageID 10450, 10520-21. Indeed, TVA’s own expert conceded that seeps from the impoundment have continued after 1998. *Id.* at PageID 10521. Additionally, a “highly credible” witness for the plaintiffs concluded that the impoundment was discharging pollutants into the groundwater and the navigable water. *Id.* at PageID 10467-48. This evidence led the district court to conclude as a factual matter that, like the Coal Ash Complex, the leaking and unlined Non-Registered Site impoundment was adding coal ash pollutants to the Cumberland River. *Id.* at PageID 10521.

**SUMMARY OF ARGUMENT**

The district court was correct to hold that discharges such as those here are prohibited unless authorized by an NPDES permit. The coal ash impoundments fit comfortably within the Clean Water Act’s definition of a “point source,” because they are discrete and confined containers that convey pollutants through their unlined and leaking bottoms. And they discharge those pollutants to navigable waters via a direct and immediate groundwater connection.
That the point source discharge reaches navigable waters via a brief groundwater connection does not exempt it from the Clean Water Act’s prohibition on unauthorized point source discharges. The Act broadly prohibits the unauthorized addition of pollutants to navigable waters, without any requirement that the point source add the pollutants directly to those waters. Indeed, EPA has repeatedly acknowledged that a polluter may violate the Clean Water Act by discharging pollutants into navigable waters through a sufficiently proximate groundwater connection. Multiple courts, moreover, have made clear that discharges to navigable waters via such a connection fall within the scope of the Clean Water Act, and thus are prohibited unless authorized by a permit. Far from amounting to the federal regulation of discharges to groundwater as such, this principle ensures that navigable waters are protected against discharges, such as those in this case, that can readily be traced to particular point sources. The district court’s decision should be affirmed.

ARGUMENT

Discharges to Navigable Waters Via a Direct and Immediate Groundwater Connection Are Subject to NPDES Permitting.

A. The District Court’s Findings Established that the Coal Ash Impoundments Are Point Sources Adding Pollutants to Navigable Waters.

The Clean Water Act prohibits “the discharge of any pollutant,” defined to include “any addition of any pollutant to navigable waters from any point source,”
without an NPDES permit. 33 U.S.C. §§ 1311, 1342(a), 1362(12). A “point source,” in turn, is “any discernible, confined and discrete conveyance”—including, by way of example, any “ditch,” “well,” or “container”—“from which pollutants are or may be discharged.” Id. § 1362(14).

The district court’s factual findings amply established that the impoundments are “point sources.” As the court found, the impoundments are “discernible, confined, and discrete” containers for coal ash. FFCL, RE258, PageID 10506, 10508-09. And the impoundments act as “conveyances” of pollutants by virtue of discharges that emanate from their unlined sides and bottom. Id. at PageID 10508-09, 10511.³

The court’s factual findings likewise established that the impoundments “add[...] pollutant[s] to navigable waters.” 33 U.S.C. § 1362(12). The court found that coal ash and its constituents are “pollutants” and the Cumberland River is a “navigable water.” FFCL, RE258, PageID 10520. In addition, the court found that the impoundments conveyed coal ash into the adjacent river, and did so via a direct

³ Courts have held that point sources need not discharge pollutants from a single exit point or limited geographical area. See Parker v. Scrap Metal Processors, Inc., 386 F.3d 993, 1009 (11th Cir. 2004) (multiple piles of debris served as point sources discharging pollutants); Washington Wilderness Coalition v. Hecla Min. Co., 870 F. Supp. 983, 988 (E.D. Wa. 1994) (rejecting the argument that a thirty-eight-acre manmade pond was too large to qualify as a point source, and stressing that the “touchstone for finding a point source is the ability to identify a discrete facility from which pollutants have escaped”).
groundwater connection. See id. at PageID 10444, 10504-05, 10510, 10519, 10521, 10531

B. Passage Through a Direct and Immediate Groundwater Connection Does Not Defeat Clean Water Act Liability for Discharging Pollutants to Navigable Waters.

TVA and its amici do not seem to dispute that the discharges at issue would have been prohibited had they gone directly into the Cumberland River through a pipe, ditch, or other manmade conveyance. Instead, they maintain that, because the pollutants traveled briefly through groundwater before reaching the Cumberland River, they fall outside the Clean Water Act’s scope. See Brief of Defendant-Appellant TVA at 24-35 (“TVA Br.”); Brief of Amici Curiae Chamber of Commerce of the United States of America et al. in Support of Defendant-Appellant at 4-28 (“Chamber Br.”); Brief of State of Alabama et al. as Amici Curiae in Support of Appellant TVA at 4-16 (“Alabama Br.”). That argument is inconsistent with both the statutory text and the EPA’s longstanding interpretation of it.

To begin, the Clean Water Act’s text defeats the idea that the Act does not cover discharges that pass through groundwater to reach navigable waters. The Act categorically proscribes the unpermitted “addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12). On its face, that broad language encompasses both direct and indirect additions of pollutants to navigable waters. Justice Scalia’s plurality opinion in Rapanos v. United States, 547 U.S. 715 (2006),
acknowledged as much, in responding to arguments that a narrow construction of “waters of the United States” would “significantly affect[]” enforcement of the NPDES program:

The Act does not forbid the “addition of any pollutant directly to navigable waters from any point source,” but rather the “addition of any pollutant to navigable waters.” Thus, from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates § 1311(a), even if the pollutants discharged from a point source do not emit “directly into” covered waters, but pass “through conveyances” in between.

Id. at 743 (emphasis in original; citations omitted). Yet the position taken by TVA and its amici would effectively rewrite the statute to forbid the unpermitted “addition of any pollutant directly to navigable waters from any point source”—exactly what the Rapanos plurality made clear that the statute does not say.

Indeed, reading in a requirement that pollutants be discharged “directly” to navigable waters would create an easy way to skirt federal prohibitions on unpermitted discharges from point sources. Instead of discharging directly into a river, a polluter might move its discharge pipe a short distance away from the river, even though its pollutants are sure to reach those waters, and thus evade Clean Water Act point source regulation altogether. See Hawai’i Wildlife Fund v. County of Maui, 881 F.3d 754, 768 (9th Cir. 2018) (“The County could not under the CWA build an ocean outfall to dispose of pollutants directly into the Pacific Ocean without an
NPDES permit. It cannot do so indirectly either to avoid CWA liability. To hold otherwise would make a mockery of the CWA’s prohibitions.”). Remarkably, TVA’s amici concede that this is the upshot of their position (although they do note the potential for liability if the “momentum from the pipe release” carries the pollutants into the river). Chamber Br. 8 n.5. TVA’s amici do not explain why it would be sensible to give polluters a road map to evade liability while threatening the integrity of the nation’s waters. See N. Cal. River Watch v. Mercer Fraser Co., No. C-04-4620 SC, 2005 WL 2122052, at *2 (N.D. Cal. Sept. 1, 2005) (“[I]t would hardly make sense for the CWA to encompass a polluter who discharges pollutants via a pipe running from the factory directly to the riverbank, but not a polluter who dumps the same pollutants into a man-made settling basin some distance short of the river and then allows the pollutants to seep into the river via the groundwater.”).4

Alternatively, TVA’s amici attempt to deny that their position—that a groundwater intermediary forecloses point source liability—requires reading the word “directly” into the statute. Chamber Br. 6 n.3. Amici argue that “a pollutant discharged

4 TVA and its amici cannot reach the same result by suggesting that the unlined and leaking impoundments somehow are not point sources in the first place. See TVA Br. 25; Chamber Br. 5-7. A point source need only be a “discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). Under the district court’s factual findings, the manmade coal ash impoundments plainly are “discernible,” “confined,” and “discrete” containers of pollutants; additionally, they “convey[]” and “discharge” those pollutants via their leaking, unlined bottoms. FFCL, RE258, PageID 10505-11; 33 U.S.C. § 1362(14).
by a point source may ‘indirectly’ reach navigable waters, if it has ‘passed through conveyances in between’ and is added to those navigable waters by a point source.”

Id. (brackets omitted). But groundwater that flows to navigable waters is a conveyance, and the impoundments here are the point sources adding pollutants to navigable waters via that conveyance. If there truly is no need for a “direct” discharge from a point source to navigable waters, then a groundwater intermediary cannot vitiate liability.

In all events, liability for discharges to navigable waters via a direct and immediate groundwater connection, such as that in this case, is consistent with EPA’s view. Contrary to amici’s suggestion (Chamber Br. 12-16), EPA does not have a longstanding position that the presence of a groundwater connection removes Clean Water Act point source jurisdiction. Rather, as the United States explained in a recent amicus brief, “EPA’s longstanding position has been that point-source discharges of pollutants moving through groundwater to a jurisdictional surface water are subject to CWA permitting requirements if there is a ‘direct hydrological connection’ between the groundwater and the surface water.” Brief for the United States as Amicus Curiae in Support of Plaintiffs-Appellees, Hawai’i Wildlife Fund v. County of Maui, No. 15-17447, at 22-23 (9th Cir. May 31, 2016) (“U.S. Hawai’i Wildlife Fund Br.”).
Indeed, EPA’s regulatory preambles have stressed—at least since 1990—that the Act’s point source provisions apply where groundwater directly connects the point source and nearby navigable waters. See id. at 22-25. Specifically, in the preamble to its 1990 NPDES storm water discharge regulations, EPA stated that its rulemaking addressed only “discharges to waters of the United States,” so that “discharges to ground waters are not covered by this rulemaking (unless there is a hydrological connection between the ground water and a nearby surface water body).” National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges, 55 Fed. Reg. 47,990, 47,997 (Nov. 16, 1990) (emphasis added). In the years since, EPA has repeatedly made a similar point. See Amendments to the Water Quality Standards Regulation that Pertain to Standards on Indian Reservations, 56 Fed. Reg. 64,876, 64,892 (Dec. 12, 1991) (discharges to groundwater with a direct hydrological connection to surface water “are regulated because such discharges are effectively discharges to the directly connected surface waters”); Reissuance of NPDES General Permits for Storm Water Discharges from Construction Activities, 63 Fed. Reg. 7,858, 7,881 (Feb. 17, 1998) (“EPA interprets the CWA’s NPDES permitting program to regulate discharges to surface water via groundwater where there is a direct and immediate hydrologic connection . . . between the groundwater and the surface water.”); National Pollutant Discharge Elim-
ination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2,960, 3,017 (Jan. 12, 2001) ("As a legal and factual matter, EPA has made a determination that, in general, collected or channeled pollutants conveyed to surface waters via groundwater can constitute a discharge subject to the Clean Water Act."); see also FFCL, RE258, PageID 10503-04 (citing EPA’s pronouncements).

The district court’s approach was faithful to these principles while preserving the states’ primary role in regulating groundwater as such. Under the district court’s decision, a discharge to navigable waters via groundwater is regulated under the Clean Water Act’s NPDES program as long as the groundwater connection is “real, direct, and immediate,” id. at PageID 10504-05—as it was in this case, where TVA’s impoundments are adjacent to the Cumberland River. See id. at PageID 10432, 10444, 10450, 10461-63, 10478, 10504-05, 10510, 10519, 10521, 10531. Where the groundwater connection is more attenuated, by contrast, a discharge is regulated—if at all—only as a discharge into groundwater, and not under the NPDES program. It is thus not true that, under the district court’s decision, point source discharges directly into groundwater are subject to Clean Water Act liability simply because pollutants might someday find their way into navigable waters. Compare Chamber Br. 6 and Alabama Br. 9, with FFCL, RE258, PageID 10504 (emphasizing that “a generalized assertion that covered surface waters will eventually be affected
by remote, gradual, natural seepage from the contaminated groundwater is insufficient to establish liability” (quoting Rice v. Harken Exploration Co., 250 F.3d 264, 272 (5th Cir. 2001)).

Similarly, many of amici’s arguments miss the mark because they rest on the premise that the district court’s decision is focused on discharges into groundwater. That premise is mistaken, for the court carefully explained that the issue is “not whether the CWA regulates the discharge of pollutants into groundwater itself but rather whether the CWA regulates the discharge of pollutants to navigable waters via groundwater.” FFCL, RE258, PageID 10503 (quoting Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC, 141 F. Supp. 3d 428, 445 (M.D.N.C. 2015)). Amici therefore are not helped by Congress’s rejection of an amendment that would have added “groundwater,” alongside “navigable waters,” as a category of waters to which an unpermitted discharge is barred. See Chamber Br. 11-12. That amendment would have broadly regulated discharges to groundwater qua groundwater—without any requirement of a subsequent connection to navigable waters. See Addendum to TVA Br. 97, 102. The district court’s decision, by contrast, confirms that discharges to navigable waters via groundwater are regulated as long as the connection is direct, immediate, and generally traceable, see FFCL, RE258, PageID 10504-05, and it is thus fully consistent with Congress’s rejection of the amendment. See Idaho Rural Council v. Bosma, 143 F. Supp. 2d 1169, 1180 (D. Ida. 2001) (agreeing with this
view of “Congress’s decision not to comprehensively regulate groundwater as part of the CWA”).

C. The District Court’s Decision Accords with Those of Other Courts.

The district court’s decision is consistent with numerous decisions holding that the NPDES program covers discharges to navigable waters via a sufficiently direct groundwater connection. For instance, in *Sierra Club v. Va. Elec. & Power Co.*, 247 F. Supp. 3d 753 (E.D. Va. 2017), *appeal docketed*, Nos. 17-1895 & 17-1952 (4th Cir. 2017) (oral argument heard Mar. 21, 2018), the court considered three ponds and a landfill used to store coal ash from a power plant surrounded by navigable waters. *Id.* at 756-57. Coal ash pollutants dissolved into the groundwater, which then carried them directly to the navigable waters. *Id.* at 758. The court concluded that Dominion’s ponds and landfills were point sources, for Dominion had built them to “concentrate coal ash, and its constituent pollutants, in one location.” *Id.* at 763. “That one location,” the court continued, “channels and conveys arsenic directly into the groundwater and thence into the surface waters.” *Id.* And the court further held that the discharges were covered by the Clean Water Act’s point source program even though they traveled to navigable waters through groundwater. *See id.* at 762. “Where the facts show a direct hydrological connection between ground water and surface water,” the court reasoned, denying liability would
defeat the Congress’s goal of “protect[ing] the quality of the nation’s surface water.”

Id.

The court in Yadkin reached a similar result. Yadkin concerned alleged discharges into the Yadkin River, via a groundwater connection, from three unlined coal ash lagoons at a power plant adjacent to the river. 141 F. Supp. 3d at 436-37, 443. The court concluded that the lagoons were “confined and discrete” because they were “designed to hold accumulated coal ash,” and that they were “conveyances” because they were “allegedly unlined and leaking pollutants into the groundwater.” Id. at 443-44. The discharges fell within Clean Water Act jurisdiction, moreover, because they allegedly reached navigable waters via a hydrologically connected groundwater conduit. See id. at 445 (noting the Act’s goal of “protect[ing] the quality of the nation’s waters,” and describing EPA’s statements on the issue).

A recent Ninth Circuit decision, postdating the district court’s decision here, is to similar effect. In Hawai‘i Wildlife Fund, the defendant injected wastewater into groundwater via disposal wells; the groundwater, in turn, conveyed much of that wastewater into the ocean. 881 F.3d at 758-60. The court held that the defendant’s unpermitted discharges of wastewater pollutants into the ocean, via a groundwater conduit, violated the Clean Water Act. Id. at 768. In reaching this conclusion, the court cited other cases in which pollutants were discharged from point sources into
protected waters “indirectly”—that is, via an intermediary conduit such as groundwater or rainwater. *Id.* at 763 (citing Peconic Baykeeper Inc. *v.* Suffolk County, 600 F.3d 180, 188 (2d Cir. 2010), which involved pesticides sprayed from trucks and helicopters that traveled through the air to reach protected water; *Concerned Area Residents for the Environment v.* Southview Farm, 34 F.3d 114, 119 (2d Cir. 1994), which concerned liquid manure discharged from tankers onto fields with a direct connection to navigable waters; and *Sierra Club v.* Abston Constr., 620 F.2d 41, 45 (5th Cir. 1980), which involved sediment discharged from collection basins via gravity flow of rainwater); see Hawai‘i Wildlife Fund, 881 F.3d at 765 (focusing on whether the pollutants are “fairly traceable” from the point source through the groundwater to the protected water).5

5 See also U.S. Hawai‘i Wildlife Fund Br. 14 (“This reading of ‘discharge of a pollutant’ has been applied in other similar contexts where discharges of pollutants have moved from a point source to navigable waters over the surface of the ground or by some other means.”). More generally, a long series of cases have held that industrial waste impoundments and pollutant piles are point sources when they add pollutants to protected water. See, e.g., *Parker*, 368 F.3d at 1009 (storm water collecting in piles of industrial debris that entered protected water); *Comm. to Save Mokelumne River v.* E. Bay Mun. Util. Dist., 13 F.3d 305, 306-09 (9th Cir. 1993) (facility designed to reduce mine runoff occasionally experienced spillover into navigable waters); *Trustees for Alaska v.* EPA, 749 F.2d 549, 552, 558 (9th Cir. 1984) (sluice boxes used for mining discharged wastewater); *Sierra Club*, 620 F.2d at 43, 45 (sediment basins to collect mine runoff failed to prevent discharging of acid material into navigable waters); *United States v.* Earth Scis. Inc., 599 F.2d 368, 374-75 (10th Cir. 1979) (pits or wells in the mining process discharged into navigable waters); *Residents Against Indus. Landfill Expansion (R.A.I.L.E.) v.* Diversified Sys., Inc., 804 F. Supp. 1026, 1038-39 (E.D. Tenn. 1992) (sediment pond collecting landfill waste discharged pollutants into navigable waters).
Indeed, even the Fifth Circuit’s decision in *Rice*, on which TVA’s amici rely, supports the district court’s decision here. TVA’s amici urge that *Rice* stands for the proposition that the Clean Water Act does not apply when pollutants discharged to groundwater reach and then contaminate navigable waters. Alabama Br. 22 n.15; Chamber Br. 17-18. Not so: the Fifth Circuit held only that a “generalized assertion that covered surface waters will eventually be affected by remote, gradual, natural seepage from . . . contaminated groundwater” will not establish liability. *Rice*, 250 F.3d at 272. And in so holding, the Fifth Circuit faulted the plaintiffs for not presenting evidence regarding, among other things, flow rates into navigable waters; “the level of threat to” those waters; or “any present or past contamination” of those waters. See id. Such evidence would be beside the point, of course, if amici were correct that a groundwater intermediary automatically vitiates Clean Water Act liability. And it is the exact sort of evidence that the plaintiffs presented here.

**D. Amici’s Remaining Arguments Fail.**

Amici make a smattering of other arguments for reversing the district court’s liability holding, but none is persuasive. First, amici are wrong to insist that the district court’s decision will unreasonably increase the burdens of compliance. See, e.g., Alabama Br. 12. The district held not that the Clean Water Act regulates all discharges to groundwater, but only that it regulates discharges to navigable waters via a direct and immediate groundwater connection. FFCL, RE258, PageID 10500-
For many sites, such as coal ash impoundments located (as they often are) immediately adjacent to navigable waters, the prospect of Clean Water Act liability should be clear. To the extent that a site’s operator has any doubt about the directness or immediacy of any groundwater connection, moreover, TVA and its amici provide no reason why it is sensible to require the public to tolerate the ensuing pollution, rather than require the operator to investigate the immediacy of the groundwater connection—as plaintiffs have done here—and either take the measures necessary to forestall any discharges to navigable waters or apply for an NPDES permit. And in all events, amici overlook a crucial point: as discussed above, a raft of decisions nationwide have been consistent with the district court’s decision here, see supra pp. 7 n.3, 15-18 & n.5, and there is no reason to think that the consequences have been grievous or destabilizing.

Second, the supposed difficulty of setting effluent limitations for discharges through a groundwater intermediary does not foreclose liability. To begin, the definition of “effluent limitation” includes “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

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6 TVA and its amici knock down a strawman, meanwhile, when they insist that groundwater cannot be a point source. See, e.g., Chamber Br. 7. The district court’s decision did not treat the groundwater at issue as a point source. Instead, it held TVA liable because its impoundments, which are point sources, discharge pollutants to navigable waters via a direct and immediate groundwater conduit.
waters.” 33 U.S.C. § 1362(11) (emphasis added). There is no requirement that the discharges go directly to navigable waters. And nothing in the definition of “effluent limitation” requires that compliance be assessed precisely where a pollutant leaves the point source, rather than being assessed by measuring water quality where the pollutant enters or affects navigable waters. See, e.g., Natural Res. Def. Council, Inc. v. County of Los Angeles, 725 F.3d 1194, 1199-200 (9th Cir. 2013).

Finally, there is no merit to the argument that other federal statutes are sufficient to guard against the harms threatened by discharges that reach navigable waters via groundwater. See Alabama Br. 13-14. The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6901 et seq., is broadly directed to the storage and disposal of solid and hazardous waste, and is not targeted towards protecting navigable waters. The coal combustion residuals (CCR) standards that amici cite (Alabama Br. 13-14), in turn, target contamination of groundwater itself, not contamination of navigable waters. See, e.g., 40 C.F.R. § 257.101. Not only that, but EPA has described the CCR standards in a manner that makes clear that they coexist with the Clean Water Act’s prohibition on discharges to navigable waters via groundwater: “For purposes of [RCRA’s exclusion of discharges covered by an NPDES permit],” the agency has written, “EPA considers the ‘actual point source discharge’ to be the point at which a discharge reaches the jurisdictional waters, and not in the ground-
water or otherwise prior to the jurisdictional water.” And the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., on which amici likewise rely (Alabama Br. 14), does not even prohibit discharges or contamination in the first instance—it just provides for cleanup of sites that have already been contaminated.

CONCLUSION

For the foregoing reasons, the district court’s decision should be affirmed.

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Dated: March 22, 2018

/s/ Leah J. Tulin
Leah J. Tulin
CERTIFICATE OF SERVICE

I certify that on March 22, 2018, I electronically filed this document through the Court’s CM/ECF system, which will serve an electronic copy on all registered counsel of record.

/s/ Leah J. Tulin
Leah J. Tulin
FOR PUBLICATION

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

HAWAII WILDLIFE FUND, a Hawaii non-profit corporation; SIERRA CLUB - MAUI GROUP, a non-profit corporation; SURFRIDER FOUNDATION, a non-profit corporation; WEST MAUI PRESERVATION ASSOCIATION, a Hawaii non-profit corporation, Plaintiffs-Appellees,

v.

COUNTY OF MAUI, Defendant-Appellant.

No. 15-17447

D.C. No. 1:12-cv-00198-SOM-BMK

OPINION

Appeal from the United States District Court for the District of Hawaii
Susan O. Mollway, Senior District Judge, Presiding

Argued and Submitted October 12, 2017
University of Hawaii Manoa

Filed February 1, 2018

Before: Mary M. Schroeder, Dorothy W. Nelson, and M. Margaret McKeown, Circuit Judges.

Opinion by Judge D.W. Nelson
SUMMARY

Environmental Law

The panel affirmed the district court's summary judgment rulings that the County of Maui violated the Clean Water Act when it discharged pollutants from its wells into the Pacific Ocean, and further finding that the County had fair notice of its violations.

The panel concluded that the County's four discrete wells were "point sources" from which the County discharged "pollutants" in the form of treated effluent into groundwater, through which the pollutants then entered a "navigable water," the Pacific Ocean. The wells therefore were subject to National Pollutant Discharge Elimination System regulation. Agreeing with other circuits, the panel held that the Clean Water Act does not require that the point source itself convey the pollutants directly into the navigable water. The panel held that the County was liable under the Act because it discharged pollutants from a point source, the pollutants were fairly traceable from the point source to a navigable water such that the discharge was the functional equivalent of a discharge into the navigable water, and the pollutant levels reaching navigable water were more than de minimis. The panel rejected the argument that the County's effluent injections were disposals of pollutants into wells and therefore exempt from the NPDES permitting requirements.

* This summary constitutes no part of the opinion of the court. It has been prepared by court staff for the convenience of the reader.
The panel also held that the Clean Water Act provided fair notice, as required by due process, of what conduct was prohibited.

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4 HAWAI’I WILDLIFE FUND V. CTY. OF MAUI

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OPINION

D.W. NELSON, Senior Circuit Judge:

The County of Maui ("County") appeals the district court's summary judgment rulings finding the County violated the Clean Water Act ("CWA") when it discharged pollutants from its wells into the Pacific Ocean, and further finding it had fair notice of its violations. Hawai‘i Wildlife Fund, Sierra Club - Maui Group, Surfrider Foundation, and West Maui Preservation Association ("Associations") urge us to uphold these rulings. For the reasons set forth below, we affirm the district court.

BACKGROUND

1. The Lahaina Wells and the Effluent Injections

The County owns and operates four wells at the Lahaina Wastewater Reclamation Facility ("LWRF"), the principal municipal wastewater treatment plant for West Maui. Wells 1 and 2 were installed in 1979 as part of the original 1975 plant design, and Wells 3 and 4 were added in 1985 as part of an expansion project. Although constructed initially to serve as a backup disposal method for water reclamation, the wells
have since become the County’s primary means of effluent disposal into groundwater and the Pacific Ocean.

The LWRF receives approximately 4 million gallons of sewage per day from a collection system serving approximately 40,000 people. That sewage is treated at the Facility and then either sold to customers for irrigation purposes or injected into the wells for disposal. The County disposes of almost all the sewage it receives—it injects approximately 3 to 5 million gallons of treated wastewater per day into the groundwater via its wells.

That some of the treated effluent then reaches the Pacific Ocean is undisputed. The County expressly conceded below and its expert confirmed that wastewater injected into Wells 1 and 2 enters the Pacific Ocean. The Associations submitted various studies and expert declarations establishing a connection between Wells 3 and 4 and the ocean. Although the County quibbles with how much effluent enters the ocean and by what paths the pollutants travel to get there, it concedes that effluent from all four wells reaches the ocean.

The County has known this since the Facility’s inception. The record establishes the County considered building an ocean outfall to dispose of effluent directly into the ocean but decided against it because it would be too harmful to the coastal waters. It opted instead for injection wells it knew would affect these waters indirectly. When the Facility underwent environmental review in February 1973, the County’s consultant—Dr. Michael Chun—stated effluent that was not used for reclamation purposes would be injected into the wells and that these pollutants would then enter the ocean some distance from the shore. The County further confirmed this in its reassessment of the Facility in 1991.
According to the County’s expert, when the wells inject 2.8 million gallons of effluent per day, the flow of effluent into the ocean is about 3,456 gallons per meter of coastline per day—roughly the equivalent of installing a permanently-running garden hose at every meter along the 800 meters of coastline. About one out of every seven gallons of groundwater entering the ocean near the LWRF is comprised of effluent from the wells.

2. The Tracer Dye Study

In June 2013, the U.S. Environmental Protection Agency (“EPA”), the Hawaii Department of Health (“HDOH”), the U.S. Army Engineer Research and Development Center, and researchers at the University of Hawaii conducted a study (the “Tracer Dye Study” or “Study”) on Wells 2, 3, and 4 to gather data on, among other things, the “hydrological connections between the injected treated wastewater effluent and the coastal waters.” The Study involved placing tracer dye into Wells 2, 3, and 4, and monitoring the submarine seeps off Kahekili Beach to see if and when the dye would appear in the ocean.

The Study concluded “a hydrogeologic connection exists between . . . Wells 3 and 4 and the nearby coastal waters of West Maui.” Eighty-four days after injection, tracer dye introduced to Wells 3 and 4 began to emerge “from very nearshore seafloor along North Kaanapali Beach,” near Kahekili Beach Park, about a half-mile southwest of the LWRF. According to the Study, the effluent travels in this southwesterly path “due to geologic controls that include a hydraulic barrier created by valley fills to the northwest.” The Study found “64 percent of the treated wastewater injected into [Wells 3 and 4] currently discharges [into the
ocean].” It further concluded “[t]he major discharge areas are confined to two clusters, only several meters wide, with very little discharge [occurring] in between and around them.”

Tracer dye from Well 2 was not detected in the ocean. But this was because Wells 3 and 4—located between Well 2 and the areas in the ocean where the wastewater discharges—“inject the majority of effluent,” which likely diverted the injected wastewater from Well 2 into taking “a different path other than directly towards the submarine springs” where the wastewater from Wells 3 and 4 discharges. If Well 2 were to receive most of the effluent at the Facility, that effluent would also take the southwesterly path taken by the wastewater from Wells 3 and 4. And “[b]ecause Well 1 is located in very close proximity to Well 2, . . . the [T]racer [S]tudy’s predictions for the fate of effluent from Well 2 can be used to predict the fate of effluent from Well 1,” according to the Associations’ expert Dr. Jean Moran.

3. The District Court’s Summary Judgment Rulings

The County appeals three of the district court’s summary judgment rulings. In the first, the district court found the County liable as to Wells 3 and 4 for discharging effluent through groundwater and into the ocean without the National Pollutant Discharge Elimination System (“NPDES”) permit required by the CWA. *Haw. Wildlife Fund v. Cty. of Maui*, 24 F. Supp. 3d 980, 1005 (D. Haw. 2014). The court based its decision on three independent grounds: (1) the County “indirectly discharge[d] a pollutant into the ocean through a groundwater conduit,” (2) the groundwater is a “point source” under the CWA, and (3) the groundwater is a “navigable water” under the Act. *Id.* at 993, 999, 1005.
In its second order, the district court held the County liable as to Wells 1 and 2 based largely on the same reasons it found the County liable on Wells 3 and 4. *Haw. Wildlife Fund v. Cty. of Maui*, Civil No. 12-00198 SOM/BMK, 2015 WL 328227, at *5–6 (D. Haw. Jan. 23, 2015). The court acknowledged that no study confirms the “point of entry into the ocean of flow from [W]ells 1 and 2.” *Id.* at *2. But it nonetheless held against the County after “repeatedly confirm[ing] at the [summary judgment] hearing . . . that the County was expressly conceding that pollutants introduced by the County into [W]ells 1 and 2 were making their way to the ocean.” *Id.*

Finally, the district court found the County could not claim a due process violation because it had fair notice under the plain language of the CWA that it could not discharge effluent via groundwater into the ocean.

This appeal followed.

**STANDARD OF REVIEW**

The Ninth Circuit “review[s] the district court’s grant or denial of motions for summary judgment de novo.” *Animal Legal Def. Fund v. U.S. Food & Drug Admin.*, 836 F.3d 987, 988 (9th Cir. 2016) (citation and internal quotation marks omitted). “Thus, on appellate review, [the] [Court] employ[s] the same standard used by the trial court under Federal Rule of Civil Procedure 56(c).” *Id.* “As required by that standard, [the Court] view[s] the evidence in the light most favorable to the nonmoving party, determine[s] whether there are any genuine issues of material fact, and decide[s] whether the district court correctly applied the relevant substantive law.” *Id.* at 989 (citation omitted).
DISCUSSION

The Clean Water Act is designed to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). To achieve this objective, the Act prohibits the “discharge of any pollutant by any person,” id. § 1311(a), and defines “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source,” id. § 1362(12) (internal quotation marks omitted). A “point source” is “any discernible, confined and discrete conveyance, including but not limited to any . . . well . . . from which pollutants are or may be discharged.” Id. § 1362(14) (internal quotation marks omitted). A party who obtains an NPDES permit is exempt from the general prohibition on point source pollution. Id. §§ 1311(a), 1342(a)(1). Under these provisions, a party violates the CWA when it does not obtain such a permit and “(1) discharge[s] (2) a pollutant (3) to navigable waters (4) from a point source.” Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526, 532 (9th Cir. 2001) (citation omitted).

1. Liability under the CWA

The County argues the district court erred in concluding it was liable under the CWA as to all four of its wells. We disagree.

a. Point Source Discharges

Neither side here disputes that each of the four wells constitutes a “point source” under the CWA. Given the wells here are “discernible, confined and discrete conveyance[s] . . . from which pollutants are . . . discharged,” and the plain
language of the statute expressly includes a “well” as an example of a “point source,” the County could not plausibly deny the wells are “point source[s]” under the statute. § 1362(14) (internal quotation marks omitted). The record further establishes that from these point sources the County discharges “pollutants” in the form of treated effluent into groundwater, through which the pollutants then enter a “navigable water[,]” the Pacific Ocean. See id. §§ 1362(7)–(8), (12), (14). As the pollutants here enter navigable waters and can be “traced [back] to . . . identifiable point[s] of discharge,” “[t]he wells are subject to NPDES regulation, as are all point sources” under the plain language of the CWA. Trs. for Alaska v. E.P.A., 749 F.2d 549, 558 (9th Cir. 1984) (citations omitted).

That the County’s activities constitute “point source” discharges becomes clearer once we consider our jurisprudence on “nonpoint source pollution”: “[Such] pollution . . . arises from many dispersed activities over large areas,” “is not traceable to any single discrete source,” and due to its “diffuse” nature, “is very difficult to regulate through individual permits.” Ecological Rights Found. v. Pac. Gas & Elec. Co., 713 F.3d 502, 508 (9th Cir. 2013) (citations omitted). “The most common example of nonpoint source pollution is the residue left on roadways by automobiles” which rainwater “wash[es] off . . . the streets and . . . carrie[s] along by runoff in a polluted soup [to] creeks, rivers, bays, and the ocean.” Id. Our cases have consistently held that such runoff constitutes nonpoint source pollution unless it is later collected, channeled, and discharged through a point source. See, e.g., id. (citations omitted); Envtl. Def. Ctr., Inc. v. U.S. E.P.A., 344 F.3d 832, 841 n.8 (9th Cir. 2003) (citation omitted). Applying these principles in Ecological Rights, we held that rainwater runoff
carrying pollutants from the defendants’ utility poles to navigable waters constituted nonpoint source pollution under the CWA. 713 F.3d at 509 (citations omitted).

Ours is a different case entirely. Unlike the “millions of cars” discussed in Ecological Rights, here we have four “discrete” wells that have been identified and can be “regulate[d] through individual permits.” Id. at 508 (citations omitted). Furthermore, the automobiles and the utility poles discussed in Ecological Rights did nothing themselves to “discretely collect[] and convey[]” the pollutants to a navigable water, and hence could not constitute “point source[s]” under § 1362(14). Id. at 508–10 (citations omitted). The Lahaina Wells, by contrast, collect and inject pollutants in four discrete wells into groundwater connected to the Pacific Ocean, thereby “discretely collect[ing] and convey[ing]” pollutants to a navigable water. Id. at 509 (citations omitted); § 1362(14). The Tracer Dye Study confirms this connection as to Wells 3 and 4, and the County conceded as much as to Wells 1 and 2. Given the County knew of these effects well before the LWRF’s inception, the record further establishes it “constructed [the wells] for the express purpose of storing pollutants [and] moving them from [the Lahaina Facility] to [the Pacific Ocean].” Ecological Rights, 713 F.3d at 509 (citations omitted).\footnote{We do not mean to suggest that a CWA violation requires some form of intent. It does not. See Comm. to Save Mokelumne River v. East Bay Mun. Util. Dist., 13 F.3d 305, 309 (9th Cir. 1993) (recognizing CWA “categorically prohibits any discharge of a pollutant from a point source without a permit” (citations omitted)); accord Sierra Club v. ICG Hazard, LLC, 781 F.3d 281, 284 (6th Cir. 2015) (recognizing “regime of strict liability” under the CWA (citation and internal quotation marks omitted)); Pinney Run Pres. Ass'n v. Cnty. Comm'rs of Carroll Cty., 268 F.3d 255, 265 (4th Cir. 2001) (same). But the County’s purpose in constructing the}
not a case of “nonpoint source pollution . . . caused primarily by rainfall around activities that employ or create pollutants,” where the resulting “runoff [can] not be traced to any identifiable point of discharge.” Alaska, 749 F.2d at 558 (citing United States v. Earth Scis., Inc., 599 F.2d 368, 373 (10th Cir. 1979)). As the “[County’s] activities release[d] pollutants from . . . discernible conveyance[s]” to navigable waters, the County is liable under the CWA. Id. (citations omitted).

b. Indirect Discharges

The County contends, however, that under the CWA, it is not sufficient to focus exclusively on the original pollutant source to determine whether an NPDES permit is needed and that how pollutants travel from the original point source to navigable waters matters. More specifically, the County contends the point source itself must convey the pollutants directly into the navigable water under the CWA. As the wells here discharge into groundwater, and then indirectly into the Pacific Ocean, the County asserts they do not come within the ambit of the statute.²

The County first cites Alaska, where we held that point source pollution occurs when “the pollution reaches the water through a confined, discrete conveyance,” regardless of “the kind of pollution” at issue or “the activity causing [it].” Id. at

² We assume without deciding the groundwater here is neither a point source nor a navigable water under the CWA.
558 (citation omitted). As the effluent here reaches the Pacific Ocean “through” groundwater—a nonpoint source—the County contends it is not liable under the CWA. The County reads Alaska out of context. First, we never addressed in Alaska whether a polluter may be liable under the CWA for indirect discharges because the issue was not before us. See id. Furthermore, when we stated the “pollution [must] reach[] the water through a confined, discrete conveyance,” we were merely stating the pollution must come “from a discernible conveyance” as opposed to some “[un]identifiable point of discharge.” Id. (emphasis added) (citations omitted). As the “discharge water [there] [was] released from a sluice box, a confined channel within the statutory definition,” the activity came within the ambit of the CWA. Id. (emphasis added). This case is no different—the effluent comes “from” the four wells and travels “through” them before entering navigable waters. Id. It just also travels through groundwater before entering the Pacific Ocean.

A more recent case Greater Yellowstone Coalition v. Lewis supports the Associations’ contention that the CWA governs indirect discharges. We held there that precipitation flowing into pits containing “newly extracted waste rock,” “filter[ed]” hundreds of feet underground, and “eventually entering the surface water” did not constitute point source pollution under the CWA. 628 F.3d 1143, 1147, 1153 (9th Cir. 2010) (citation omitted). The “pits that collect[ed] the waste rock [did] not constitute point sources” because “there [was] no confinement or containment of the [polluted] water” before it entered navigable waters, as prohibited by the statute. Id. We also concluded, however, that precipitation flowing into a “stormwater drain system” before “enter[ing] the ground and, eventually, surface water” constituted a point
source discharge—the “stormwater system [was] exactly the type of collection or channeling contemplated by the CWA.” *Id.* at 1152.

The wells here are more akin to the stormwater drain system in *Greater Yellowstone* than they are to the pits that collected the waste rock. Unlike the pits that “[did] not constitute points sources within the meaning of the CWA,” the wells here “confine[,] [and] contain[,] . . . the [effluent]” before discharging it “[into] the ground and, eventually, surface water.” *Id.* at 1152–53. And it was of no import to us in *Greater Yellowstone* that the pollutants—as here—had to travel through the ground before “eventually, [entering] surface water.” *Id.* at 1152. The Court was only concerned with whether there was a point source from which the defendant discharged the pollutants. As the stormwater drain system constituted this point source, the Court concluded the defendant was required to “obtain[,] the requisite . . . certification for that system.” *Id.* at 1153. As the County also discharges its pollutants from a point source, it, too, must obtain an NPDES permit under the CWA.

Our sister circuits agree that an indirect discharge from a point source to a navigable water suffices for CWA liability to attach. In *Concerned Area Residents for Environment v. Southview Farm*, the Second Circuit held “[t]he collection of liquid manure into tankers and their discharge on fields from which the manure directly flows into navigable waters are point source discharges under the case law.” 34 F.3d 114, 119 (2d Cir. 1994). Regardless of whether the field itself was a point source, the court concluded there was a “point source discharge[ ]” under the CWA because (1) the pollutant itself was released from the tanker, a point source, and (2) there was a “direct[ ]” connection between the field and the
navigable water. See id. Both elements are present here. The wells are point sources under the statute, § 1362(14), and the Tracer Dye Study along with the County’s concessions establish an undeniable connection between the wells and the Pacific Ocean. The Study establishes effluent injected into the wells travels a southwesterly path from the Facility, appearing in submarine springs only a half-mile away.

Furthermore, in Sierra Club v. Abston Construction, the Fifth Circuit recognized that the “ultimate question [as to CWA liability] is whether pollutants [are] discharged from ‘discernible, confined, and discrete conveyance(s)’ either by gravitational or nongravitational means.” 620 F.2d 41, 45 (5th Cir. 1980). It went on to hold that “[s]ediment basins dug by the miners and designed to collect sediment are . . . point sources . . . even though the materials [are] carried away from the basins by gravity flow of rainwater.” Id. (emphasis added). “Gravity flow, resulting in a discharge into a navigable body of water, may be part of a point source discharge if the miner at least initially collected or channeled the water and other materials.” Id. (emphasis added). That is what occurred here. The County “initially collected [and] channeled” the pollutants in its wells and injected them into the ground, where they were “carried away from the [wells] by the gravity flow of [ground]water.” Id. And based on the overwhelming evidence in this case establishing a connection between the wells and the Pacific Ocean, it cannot be disputed the wells are “reasonably likely to be the means by which [the] [effluent] [is] ultimately deposited into a navigable body of water.” Id. Indeed, the County has known since the LWRF’s inception that effluent from the wells would eventually reach the ocean some distance from the shore. That the groundwater plays a role in delivering the
pollutants from the wells to the navigable water does not preclude liability under the statute. See id.

The Second Circuit further recognized the indirect discharge theory in Peconic Baykeeper, Inc. v. Suffolk County, where it rejected the district court’s conclusion that “because the trucks and helicopters discharged pesticides into the air, any discharge was indirect, and thus not from a point source.” 600 F.3d 180, 188 (2d Cir. 2010). As the pesticides there were “discharged ‘from’ the source, and not from the air,” the court concluded the “spray apparatus . . . attached to [the] trucks and helicopters” constituted a point source under the CWA. Id. at 188–89 (emphasis added). The Ninth Circuit has similarly held discharges through the air can constitute “point source pollution” under the statute. League of Wilderness Def./Blue Mountains Biodiversity Project v. Forsgren, 309 F.3d 1181, 1185, 1192–93 (9th Cir. 2002).

But accepting the County’s position—that pollutants must “travel via a ‘confined and discrete conveyance’” to navigable waters for CWA liability to attach—would necessarily preclude liability in cases such as Peconic Baykeeper and League of Wilderness. The pollutants in both cases traveled to navigable waters via the air, and not via the point sources from which they were released. See Peconic Baykeeper, 600 F.3d at 188; League of Wilderness, 309 F.3d at 1185. Taken to its logical conclusion, the County’s theory would only support liability in cases where the point source itself directly feeds into the navigable water—e.g., via a pipe or a ditch. That the circuits have recognized CWA liability where such a direct connection does not exist counsels against accepting the County’s theory.
Indeed, writing for the plurality in *Rapanos v. United States*, Justice Scalia recognized the CWA does not forbid the “‘addition of any pollutant directly to navigable waters from any point source,’ but rather the ‘addition of any pollutant to navigable waters.’” 547 U.S. 715, 743 (2006) (plurality opinion) (emphasis in original) (quoting §§ 1311(a), 1362(12)(A)). He further recognized that “from the time of the CWA’s enactment, lower courts have held that the discharge into intermittent channels of any pollutant that naturally washes downstream likely violates § 1311(a), even if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.” *Id.* (emphasis in original) (citations omitted). In support of his “‘indirect discharge’ rationale,” Justice Scalia cited *Concerned Area Residents*, where, as described above, the Second Circuit held the discharge of manure from point sources onto fields (which were not necessarily point sources themselves) and eventually into navigable waters constituted point source discharges under the CWA. *Id.* at 744.

Although the Court in *Rapanos* splintered on other issues, no Justice disagreed with the plurality opinion that the CWA holds liable those who discharge a pollutant from a defined point source to the ocean. Justice Kennedy’s opinion concurring in the judgment objected only to the plurality opinion’s creation of certain limitations on the Executive Branch’s authority to enforce the CWA’s environmental purpose and statutory mandate. *Id.* at 778. Similarly, the four-Justice dissent cited the CWA’s prohibition of “any addition of any pollutant to navigable waters from any point source” as strong evidence of the law’s wide sweep, and disagreed with the plurality opinion’s creation of two
limitations on CWA enforcement. *Id.* at 787, 800–06 (Stevens, J., dissenting).

In past cases, we have recognized Justice Kennedy's concurrence in *Rapanos*, not Justice Scalia's plurality opinion, as controlling. But we have only done so in the context of "determin[ing] whether a wetland that is not adjacent to and does not contain a navigable-in-fact water is subject to the CWA." *United States v. Robertson*, 875 F.3d 1281, 1288–89 (9th Cir. 2017) (citations omitted); *see also N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 995 (9th Cir. 2007). As this is not a case about wetlands, and we do not decide whether groundwater is a "navigable water" under the statute, we do not apply Justice Kennedy's concurrence here, and consider Justice Scalia's plurality opinion only for its persuasive value, *United States v. Brobst*, 558 F.3d 982, 991 (9th Cir. 2009) (citing *CTS Corp. v. Dynamics Corp. of Am.*, 481 U.S. 69, 81 (1987)) (internal quotation marks omitted). *See S.F. Baykeeper v. Cargill Salt Div.*, 481 F.3d 700, 707 (9th Cir. 2007) ("No Justice [in *Rapanos*], even in dictum, addressed the question whether all waterbodies with a significant nexus to navigable waters are covered by the Act.").

Justice Scalia's plurality opinion demonstrates the County is reading into the statute at least one critical term that does not appear on its face—that the pollutants must be discharged "directly" to navigable waters from a point source. As "the plain language of a statute should be enforced according to its terms," we therefore reject the County's reading of the CWA and affirm the district court's rulings finding the County liable under the Act. *ASARCO, LLC v. Celanese Chem. Co.*, 792 F.3d 1203, 1210 (9th Cir. 2015) (citations omitted).
We hold the County liable under the CWA 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*. The second point in particular is an important one. We therefore disagree with the district court that “liability under the Clean Water Act is triggered when pollutants reach navigable water, *regardless of how they get there*.” *Haw. Wildlife*, 24 F. Supp. 3d at 1000 (emphasis added). Here, the Tracer Dye Study and the County’s concessions clearly connect all four wells’ discharges to the consistently-emerging pollutants in the ocean. We leave for another day the task of determining when, if ever, the connection between a point source and a navigable water is too tenuous to support liability under the CWA.

**c. Disposals of Pollutants into Wells**

Finally, the County contends its effluent injections are not discharges into navigable waters but “disposal[s] of pollutants into wells,” and that the Act categorically excludes well disposals from the permitting requirements of § 1342. *See, e.g.*, § 1342(b)(1)(D). As the County urges a “construction that the statute on its face does not permit,” we “reject” it

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3 The EPA as *amicus curiae* proposes a liability rule requiring a “direct hydrological connection” between the point source and the navigable water. Regardless of whether that standard is entitled to any deference, it reads two words into the CWA (“direct” and “hydrological”) that are not there. Our rule adopted here, by contrast, better aligns with the statutory text and requires only a “fairly traceable” connection, consistent with Article III standing principles. *See, e.g.*, *Spokeo, Inc. v. Robins*, 136 S. Ct. 1540, 1547 (2016).
here. *Carson Harbor Vill., Ltd. v. Unocal Corp.*, 270 F.3d 863, 881 (9th Cir. 2001) (citation and internal quotation marks omitted).

The County first relies on § 1342(b), which permits the EPA to delegate CWA authority to “each State desiring to administer its own permit program for discharges into navigable waters within its jurisdiction.” So long as the State “submit[s] to the Administrator a full and complete description of [its] program” and “a statement . . . that the laws of [the] State . . . provide adequate authority to carry out the described program,” the State may “issue [NPDES] permits which[,] [among other things] control the disposal of pollutants into wells.” § 1342(b)(1)(D) (emphasis added). The County contends based on this language the NPDES permitting requirements do not apply at all to well dispositions. Not so. The plain language of the statute clearly permits States to issue NDPES permits for well dispositions, and such permits are required only for “discharges into navigable waters.” *Id.* § 1342(b); see also *id.* § 1342(a)(1). The provision furthermore makes no judgment about whether a “disposal” always constitutes a “discharge” requiring a NPDES permit. Indeed, only when a “disposal” is also a “discharge” is a permit required. *See Inland Steel Co. v. E.P.A.*, 901 F.2d 1419, 1422 (7th Cir. 1990) (noting § 1342(b)(1)(D) “was not intended to authorize [States to] regulat[e] . . . all wells used to dispose of pollutants, regardless of absence of any effects on navigable waters” (emphasis in original)).

The County also argues that under § 1342(b)(1)(D), only the *State*, not the EPA, has authority to regulate well dispositions. This Court, however, has already concluded the Act does not “expressly grant[] to the EPA or [the
administering] state agency the exclusive authority to decide whether [there is a CWA violation],” even while recognizing § 1342 “suspend[s] the availability of federal NPDES permits once a state-permitting program has been submitted and approved by the EPA.” Ass’n to Protect Hammersley, Eld, and Totten Inlets v. Taylor Res., Inc., 299 F.3d 1007, 1010–12 (9th Cir. 2002) (citing § 1342(c)(1)). That the administering state agency, HDOH, has “cho[sen] to sit on the sidelines . . . is not a barrier to a citizen’s otherwise proper federal suit to enforce the Clean Water Act” and does not somehow “divest [this Court] of jurisdiction” over this case. Id. at 1012; see also Cnty. Ass’n for Restoration of the Env’t v. Henry Bosma Dairy, 305 F.3d 943, 949–50 (9th Cir. 2002) (“Under the CWA[,] private citizens may sue any person alleged to be in violation of the conditions of an effluent standard or limitation under the Act or of an order issued with respect to such a standard or limitation by the Administrator of the [EPA] or any state.” (citation omitted)).

The County next relies on § 1314(f)(2)(D), which “directs the [EPA] to give States information on the evaluation and control of [nonpoint source] ‘pollution resulting from . . . [the disposal of pollutants in wells].’” S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 106 (2004) (citing and quoting § 1314(f)(2)). According to the County, § 1314(f)(2)(D) affirmatively establishes disposals into wells constitute nonpoint source pollution and that it need not obtain NPDES permits under the CWA. But the Supreme Court itself acknowledged in *South Florida* that while § 1314(f)(2) listed a variety of circumstances constituting “nonpoint source[,] [pollution]”—including well disposals—the provision “does not explicitly exempt [these] nonpoint pollution sources from the NPDES program if they also fall within the ‘point source’ definition.” Id. (emphasis
added). Consistent with our reading of § 1342(b)(1)(D), the implication here is that well disposals do not always constitute nonpoint source pollution. If pollutants from those wells are discharged into a navigable water from a discrete source, that is point source pollution, and the polluter must obtain an NPDES permit if it wants to avoid liability under the CWA. See §§ 1311(a), 1342(a)(1).

The CWA’s definition of “pollutant” also supports this reading. See § 1362(6)(B). Under the Act, “[t]his term [excludes] . . . water derived in association with oil or gas production and disposed of in a well, if [1] the well used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and [2] such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.” Id. (emphasis added). By contrast, pollutants “disposed of in . . . well[s]” that “alter the water quality” of “surface water[s]” are “subject to NPDES permitting requirements.” N. Plains Res. Council v. Fid. Expl. & Dev. Co., 325 F.3d 1155, 1161–62 (9th Cir. 2003) (citing § 1362(6)(B)). Section 1362(6)(B), therefore, confirms that contrary to the County’s contentions, the CWA does not categorically exempt all well disposals from the NPDES requirements. “Were we to conclude otherwise,” and create out of whole cloth a categorical exemption for well disposals, we would improperly amend the statute and “undermine the integrity of [the CWA’s] prohibitions.” Id. at 1162 (citation and internal quotation marks omitted). We decline to do so here.
2. Fair Notice

“Due process requires that [a statute] provide fair notice of what conduct is prohibited before a sanction can be imposed.” *United States v. Approximately 64,695 Pounds of Shark Fins*, 520 F.3d 976, 980 (9th Cir. 2008) (citation and internal quotation marks omitted). “To provide sufficient notice, a statute . . . must give the person of ordinary intelligence a reasonable opportunity to know what is prohibited so that he may act accordingly.” *Id.* (citing *Grayned v. City of Rockford*, 408 U.S. 104, 108 (1972)) (internal quotation marks omitted). If the “[p]lain [[language of the [s]tatute]” is “sufficiently clear to warn a party about what is expected,” a court may find the party had “fair notice” under the due process clause. *Id.; see also Garvey v. Nat’l Transp. Safety Bd.*, 190 F.3d 571, 584 (D.C. Cir. 1999) (finding the defendant had “fair notice” based on “plain language” of regulation).

In determining whether there has been fair notice, this Court must “first look to the language of the statute itself.” *Shark Fins*, 520 F.3d at 980 (citation omitted). Here, the Clean Water Act prohibits the “discharge of any pollutant by any person.” § 1311(a). The Act defines “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12) (internal quotation marks omitted). A “point source” is “any discernible, confined and discrete conveyance, including but not limited to any . . . well . . . from which pollutants are or may be discharged.” *Id.* § 1362(14) (internal quotation marks omitted). Finally, there is an exception to the general prohibition on point source pollution if a party obtains an NPDES permit. *Id.* §§ 1311(a), 1342(a)(1).
It is undisputed the County “add[s] . . . pollutants”—treated effluent—“to navigable waters”—the Pacific Ocean—“from . . . point source[s]”—its four injection wells. See id. §§ 1362(6), (12), (14). As its actions fall squarely within the “[p]lain [l]anguage of the [s]tatute,” we conclude the County had “fair notice” its actions violated the CWA. See Shark Fins, 520 F.3d at 980; Garvey, 190 F.3d at 584; Lee v. Enter. Leasing Co.-West, LLC, 30 F. Supp. 3d 1002, 1012 (D. Nev. 2014) (finding “reasonable reading of the statute . . . afforded [the] [d]efendants fair notice that their conduct was at risk”).

But the County contends it did not have “fair notice” because the statutory text can be fairly read to exclude the wells from the NPDES permit requirements. It argues again that pollution via its wells and the groundwater is nonpoint source pollution not subject to the CWA’s prohibitions. Even so, “due process does not demand unattainable feats of statutory clarity.” Planned Parenthood of Cent. and N. Ariz. v. State of Ariz., 718 F.2d 938, 948 (9th Cir. 1983) (citation and internal quotation marks omitted). That there is a “difference[] of opinion” on “the precise meaning of [the CWA]” is “[n]ot . . . enough to render [it]” violative of the due process clause. Id.

The County further contends it did not have “fair notice” because HDOH—the state agency tasked with administering the NPDES permit program—has maintained an NPDES permit is unnecessary for the wells. The County does not describe HDOH’s position accurately. As late as April 2014, HDOH stated in a letter to the County it was still “in the process of determining if an NPDES permit is applicable” to the wells. That HDOH has not solidified its position on the issue does not affirmatively demonstrate it believes the permits are unnecessary, as the County contends. And the
fact that the County “has been unable to receive an interpretation of the [CWA] from . . . [HDOH] officials administering the program” is also “[n]ot . . . enough to render [enforcement of the CWA]” unconstitutional. *Id.* As a “reasonable person would [have] understoo[d the [CWA]” as prohibiting the discharges here, enforcement of the statute does not violate the due process clause. *Id.* at 948–49; see *also Shark Fins*, 520 F.3d at 980 (holding liability would attach if “regulation is . . . sufficiently clear to warn a party about what is expected of it” (citation and internal quotation marks omitted)).

**CONCLUSION**

At bottom, this case is about preventing the County from doing indirectly that which it cannot do directly. The County could not under the CWA build an ocean outfall to dispose of pollutants directly into the Pacific Ocean without an NPDES permit. It cannot do so indirectly either to avoid CWA liability. To hold otherwise would make a mockery of the CWA’s prohibitions. Under the circumstances of this case, we therefore affirm the district court’s summary judgment rulings finding the County discharged pollutants from its wells into the Pacific Ocean, in violation of the CWA, and further finding the County had fair notice of what was prohibited.

**AFFIRMED.**
AFFIDAVIT OF MELANIE RUHLMAN

Melanie Ruhlman, being first duly sworn, deposes and says:

1. My name is Melanie Ruhlman. I have personal knowledge of the matters stated herein. I am 47 years of age. I live in Marietta, South Carolina, in Greenville County.

2. I am a member and serve on the Board of Directors of Save Our Saluda (SOS). I am also a member of Upstate Forever (UF). I also serve on the Board of Directors of the Friends of the Reedy River in Greenville, South Carolina.

3. I am a consultant with North Wind, Inc.

4. I have lived at my residence in Marietta, South Carolina, for a little over two years, but have lived in the area for over eight years. I live with my husband and my seven- and nine-year-old children.

5. Our property is situated on the North Saluda River, which is a tributary of the Saluda River, upstream of the W.S. Lee Steam Station, which is located approximately fifty miles south.

6. I visit the Saluda River multiple times each year for recreation. I am an avid paddler and enjoy both whitewater and flatwater paddling. I regularly paddle the North Saluda, where I reside, but have also paddled some of the lower sections of the river, including the section around the Lee facility.

7. In addition to paddling, my children and I also enjoy swimming, tubing, wading, and boating in the Saluda River. I would not allow my children to swim in the Saluda in the area immediately downstream of the Lee Steam Station due to the contaminants entering the river from the coal ash ponds.

1 of 4
13. I am concerned about pollution from the coal ash lagoons at the Lee Steam Station impacting the wildlife, habitat, and natural beauty of the river. I enjoy watching birds and other wildlife on the river, including near and downstream from the Lee site. I worry about the potential impacts of this pollution on the wide array of plants and animals associated with the ash ponds, downstream waters and their associated wetlands. I am concerned about the potential for bioaccumulation of coal ash toxins in area wildlife. There is an entire ecosystem at risk because of the coal ash that is stored on the banks of the Saluda River, and that is leaching and seeping into the river. Continued harm to the river's wildlife from coal ash pollution will damage the natural beauty I enjoy on this stretch of the river. My concerns about the coal ash pollution poisoning wildlife reduce my enjoyment of the river.

14. I am aware of the fact that the dams at the Lee facility do not meet minimum safety standards. When I first started hearing about coal ash ponds failing, I conducted research online to see if there are any coal ash ponds in my area and learned of the significant hazard rating given to the Lee Steam Station on the Saluda River. Dam failure at this facility would be truly catastrophic. It would impact communities downriver significantly. I am concerned about how such a spill would impact the regional water supply, the dependent ecosystem, the local economy, river recreation, and the Saluda’s natural beauty.

15. One of Save Our Saluda’s initiatives is promoting blue trails, which are pathways where people can boat from one point to another to enjoy the recreational benefits of the river. I am working with SOS on this initiative. The coal ash stored at the Lee Facility impacts our organization and its public education activities related to recreational use of the river. It is hard to promote recreational use of the Saluda when we know of a huge source of contamination on the river. The Upstate South Carolina Saluda River Blue Trail is a 127-mile blue trail that flows
AFFIDAVIT OF TERRI BURNHAM

Terri Burnham, being first duly sworn, deposes and says:

1. My name is Terri Burnham. I have personal knowledge of the matters stated herein. I am over 18 years of age. I live in Rowan County, North Carolina.

2. I am a retired small business owner.

3. I have lived on High Rock Lake on the Yadkin River since 1977. I first lived on the Davidson County side of High Rock Lake, and have lived on the Rowan County side since approximately 1978. My home is approximately 6-8 miles southeast of the Buck Power Plant.

4. I am a member of Yadkin Riverkeeper, Inc. I am not currently a member of any other environmental organization, but I used to be on the Rowan County High Rock Lake Committee and was a member of the High Rock Lake Association. I was a member of the committee that successfully opposed a hazardous waste facility on the Yadkin River in the 1990s.

5. For the past 35 years I have recreeted regularly in the Yadkin River at High Rock Lake, where my home is located. I am concerned about the seepage of pollutants from the coal ash ponds at the Buck facility into the Yadkin River and the impact that is having on water quality in the river. I worry about the impacts to my health and to the health of others who recreate in this river. I would spend more time on the Yadkin River if it were not polluted.

6. I am concerned about the injuries I may incur as a result of my use of the river. I understand and am concerned about the negative health effects of exposure to high levels of toxins such as mercury and PCBs, which are contained in the coal ash being held upstream at the Buck facility.
Subscribed and sworn to before me, a notary public, this the 25th day of September, 2013.

Notary Public

My commission expires: June 3, 2014
AFFIDAVIT OF CHARLES WADE MELTON

Charles Wade Melton, being first duly sworn, deposes and says:

1. My name is Charles Wade Melton. I have personal knowledge of the matters stated herein. I am over 18 years of age. I live in Lexington, North Carolina.

2. I am a software developer, specializing in transportation software. I have owned my own company for almost thirty years.

3. I have lived on High Rock Lake since 1995. My home is on Waterford Pointe Road, on the Waterford Pointe shore of High Rock Lake downstream from the Buck facility. I share my home with my wife.

4. I have been an active member of the Yadkin Riverkeeper since 2011. I joined the group due to my interest in issues facing High Rock Lake. The Yadkin Riverkeeper is the only environmental group of which I am a member.

5. I have actively worked with the Yadkin Riverkeeper since becoming a member. In particular, I regularly speak publically about issues facing High Rock Lake, including water quality.

6. I personally use the waterways downstream from the Buck site.

7. I chose to purchase my home on High Rock Lake specifically because I wanted to make use of and enjoy proximity to the lake.

8. My wife and I make daily use of the lake when the weather is nice. We enjoy using our pontoon boat on the lake and enjoying the scenery and wildlife.

9. I have two grown children and three grandchildren (ages 13, 11, and 7) who regularly visit our home. We enjoy taking them out on the lake as well. We regularly take them to coves along the lake to swim and fish. We also often take them water skiing.
15. I am concerned that the streams of water flowing from the berms of the coal ash impoundments at the Buck facility could weaken the berms and increase the chances of a major spill into the Yadkin River and High Rock Lake.

16. I am concerned about the possible negative impacts of such a dike failure, which could greatly affect my property value as well as my use and enjoyment of the lake.

17. My interests are fully and adequately represented by the Yadkin Riverkeeper in this proceeding.

I swear/affirm that the foregoing is true and correct to the best of my knowledge, information, and belief. Executed on \( \text{September} 16, 2013 \).

\[ \text{[Signature]} \]
Charles Wade Melton

Subscribed and sworn to before me, a notary public, this the 26th day of \( \text{September} \) 2013.

\[ \text{[Notary Public Signature]} \]

My commission expires: 3/30/15.
DECLARATION OF DAVID HAIRSTON

I, David Hairston, under penalty of perjury, declare as follows:

1. My name is David Hairston. I have personal knowledge of the matters stated herein. I am 57 years of age.

2. I live at 1125 Adams Ridge Road in Walnut Cove, North Carolina, which is in Stokes County. I have lived at this address for 18 years, and have lived in Walnut Cove my entire life.

3. My home is approximately 4 miles west of Duke Energy’s Belews Creek Steam Station.

4. I am a member of Appalachian Voices, the North Carolina NAACP, and the Stokes County Branch of the NAACP.

5. I am concerned about the seepage of pollutants from the coal ash ponds at the Belews Creek facility into Little Belews Creek and Belews Lake and the impact that is having on water quality in the Dan River.

6. I first became concerned about ash from the Belews Creek Steam Station around 1975, after the power plant came online and I saw ash flying all over the place in the air near my home. I have followed this issue closely since then.

7. I am concerned about the impact of pollution from the Belews Creek facility on groundwater. In particular, I am concerned about the impact on drinking my water, which comes from a private well. I have a filtration system in my well. I have had my well tested, with the filters off, and the results came back high for copper. I feel comfortable drinking from my well only because of the filtration system. I understand that the coal ash at Belews Creek has
that the water pollution from Belews Creek has led to their illnesses and deaths, because they couldn't afford to leave.

13. I own the house that I live in as well as the house in Walnut Tree that my mother lived in with my sister. I am very concerned about impact of the pollution from the Belews Creek plant on the property values of the houses I own. No one wants to buy a house with polluted water. A lot of people just leave. They let their homes go into foreclosure because no one will buy them at a reasonable price. There are nice little homes for sale in Walnut Cove, but no one will buy them for what they are worth. I know of one house near the coal ash pond that recently sold for a fraction of its tax value.

14. In the past, I enjoyed boating and swimming in Belews Lake, but I do not ever get in the water now. I am aware of the pollution in the lake as a result of the Belews Creek power plant and the coal ash ponds located on the banks of the lake.

15. If the lake were not polluted, I would still enjoy boating and swimming there. I quit going into the lake 25-30 years ago. I caution my friends who are going there with their kids to boat and swim. I beg them not to do it. All I can do is make them aware of the danger.

16. I used to enjoy fishing on Belews Lake, and would eat the fish I catch. I would also fish and swim in the creeks that feed into Belews Lake and the Dan River. I no longer do that, because I am concerned about exposure to pollutants if I were to eat the fish in Belews Lake downstream of the Belews Creek facility. I would eat the fish from Belews Lake if it were not polluted.

17. I have been fighting against the pollution coming from the Belews Creek Steam Station for years. I have talked to officials at Duke Energy. I have signed petitions, marched,
AFFIDAVIT OF MICHAEL DOGGETT

Michael Doggett being first duly sworn, deposes and says:

1. My name is Michael Doggett. I have personal knowledge of the matters stated herein. I am 47 years of age. I live in Raleigh, North Carolina in Wake County with my wife and three children.

2. I have lived at my current address in Raleigh for 11 years.

3. I own lakefront property in the Oak Point subdivision at Hyco Lake in Semora, NC (Person County). My family uses this property as a vacation home. I have owned the property since 2006.

4. I am a member of the Roanoke River Basin Association ("RRBA"). I am also a member of the National Rifle Association.

5. My wife, children, and I visit Hyco Lake at least once a month, and more frequently in the summer. We love to visit the lake, and would be there every weekend if our schedules allowed. While there, we swim, fish, power boat, ski, and wake board.

6. My property at Hyco Lake is located on the lakefront, approximately one mile from the Roxboro power plant operated by Duke Energy.

7. I am aware that coal ash from the Roxboro plant is stored in unlined pits on the banks of Hyco Lake. I am aware of the contaminants in the coal ash that are leaching and seeping into the groundwater and into Hyco Lake from the coal ash ponds. I am concerned about the impact that these toxins are having on the lake and groundwater.

8. I do not eat the fish that I catch in Hyco Lake, nor do I allow my children to eat them, because of my concern about the pollutants that are leaking into Hyco Lake from the coal ash pond. If Hyco Lake were not polluted, my family and I would enjoy eating the fish we catch.
family's use and enjoyment of Hyco Lake and the vacation home where we spend time together as a family. Such a spill would also be devastating to the local economy around Hyco Lake. The area is dependent on tourists visiting the lake and the local marina to recreate. A spill like that at the Dan River would destroy our tourist economy.

13. My interests are fully and adequately represented by the Roanoke River Basin Association in this proceeding.

I swear/affirm that the foregoing is true and correct to the best of my knowledge, information, and belief. Executed on May 19, 2014.

Michael Doggett

Subscribed and sworn to before me, a notary public, this the 19 day of May, 2014.

NIKISH PATEL
Notary Public
Wake Co., North Carolina
My Commission Expires Feb. 21, 2018
AFFIDAVIT OF DOYLE PEEED

Doyle Peed, being first duly sworn, deposes and says:

1. My name is Doyle Peed. I have personal knowledge of the matters stated herein. I am 62 years old, and I live in Roxboro, North Carolina, in Person County.

2. I am a retired engineer. I specialized in Electromagnetic Field Theory and Communications, Navigation and Surveillance. I studied at North Carolina State University (undergraduate) and Duke University (graduate). I worked at the MITRE Corporation, a company chartered by Congress in 1958 to interface between government and industry, for over 28 years, where I most recently held the title of Principal Multi-Disciplinary Systems Engineer. I have worked on projects for the Federal Aviation Administration, the Department of Homeland Security, the Marine Corps, the Navy, and the Air Force; including Afghanistan and Iraq. I also worked for USAID on projects in China. Years ago, as a consultant, I developed and built a mid-air retrieval system for cruise missiles. Also, I developed the first microprocessor controlled amino acid analyzer while working in the Duke University Medical Center. I have a Commercial Pilot’s license and I am rated in single and multi-engine land airplanes, single engine seaplanes and rotorcraft helicopters.

3. I have lived at 428 Bethel Hill School Road in Roxboro, North Carolina since 2006. My family moved into the house in which I currently live when I was 5 or 6 years old. I lived there until I went to college, and again starting in 2006.

4. I submitted comments on N.C. Department of Environmental Quality’s proposed classifications for the Mayo ash basin at the public hearing in Roxboro, N.C. on March 16, 2016.
of my family land, I questioned whether it was a good idea to store coal waste on a flowing stream. As long as the ash remains where it is, it will continue to leach whatever contaminants it contains into the water table and the Crutchfield Branch. That is a scientific fact, not an unsubstantiated fear.

9. My property on Mayo Lake Road is currently used to grow timber, and some is leased to a neighboring farmer who grows corn and other grains. I am concerned that the pollutants in the water can and will get into the crops, whether they are feedstock for animals or food for humans. Given where humans are on the food chain, the pollutants will eventually get to them regardless of the path taken. Given that, it may be irresponsible to continue to grow and sell crops from this area as contaminants spread in the future.

10. The property is also leased for hunting. I am concerned about cumulative impact of pollutants on wildlife. When the pollutants in the water are thousands of times over the background levels, there will certainly be an impact, either directly or through bioaccumulation. I am concerned about the pollution stored in the coal ash pond at the Mayo plant potentially impacting the value of my land for leasing for agriculture and hunting.

11. I enjoy walking my land and spending time on my property. I am concerned about the impact of the coal ash that is sitting in the Crutchfield Branch, which flows through my property, impacting the wildlife, the plants, the birds, and all of the other natural elements that make my land special to me.

12. In the future I would like to leave this land to my brother and his children to develop. Due to the lack of any nearby municipal water source, development of the property would require wells for drinking water. Given the possibility of current and future contamination of the water table, the property value has already been damaged in terms of future development.
April 17, 2018

RE: 40+ Groups Oppose Attacks on Vital Clean Water Act safeguard

Dear Chairman Barrasso and Ranking Member Carper,

On behalf of our millions of members and supporters and in light of the hearing today entitled, "The Appropriate Role of States and Federal Government in Protecting Groundwater," the undersigned groups urge the Environment and Public Works Committee to strongly consider the harmful impacts that weakening the Clean Water Act's application to discharges to groundwater via a hydrological connection could have on human health and water quality of our nation's vital rivers, lakes, and bays.

The Clean Water Act was passed into law with bipartisan support because Congress recognized the need to ensure fishable, swimmable, and drinkable water for all people across the country. For decades, the law has been understood to require National Pollutant Discharge Elimination System (NPDES) permits under the Clean Water Act for pollution discharged into groundwater that flows into surface waters. The plain language of the Act bans unpermitted discharges and contains no exclusions for pollution traveling through groundwater to reach a protected river, lake, bay, or other waterway. Any attempt by EPA to exempt pollution traveling through groundwater with a hydrological connection would be nothing more than a loophole by EPA to weaken vital safeguards for the benefit of polluters.

Contrary to the claims in the notice for public comment circulated by EPA, this position has been overwhelmingly supported for decades by federal court decisions, including a recent unanimous decision by the Ninth Circuit Court of Appeals that was just reaffirmed. For decades, the county of Maui has injected three to five million gallons of treated sewage into groundwater each day that could be traced to the Pacific Ocean, where the sewage was linked to harmful algal blooms that smothered coral reefs and caused serious harm to the marine ecosystem. As the panel stated, "At bottom, this case is about preventing the County from doing indirectly what it cannot do directly." The panel further stated that, "The County could not under the CWA build an ocean outfall to dispose of pollutants directly into the Pacific Ocean without an NPDES permit. It cannot do so indirectly either to avoid CWA liability. To hold otherwise would make a mockery of the CWA's prohibitions."

In another case in Tennessee, a United States District Court in 2017 found that the Tennessee Valley Authority (TVA) has for years violated the Clean Water Act at its Gallatin coal-fired plant by polluting the Cumberland River with coal ash and heavy metals that flow into the river with groundwater through sinkholes, seeps, and leaks in its coal ash lagoons on the river's banks. The recent notice is clearly nothing more than another attempt by Scott Pruitt’s EPA to further undercut bedrock protections for our rivers, lakes, and bays for the benefit of polluting industries. Across the country, too many communities are forced to deal with polluted water sources from leaking coal ash impoundments, bursting pipelines, unpermitted flows of harmful contaminants, large-scale industrial animal waste, and other polluting facilities. Instead of addressing these

Pressing issues, EPA rolled out a request for comments with very little outreach and no scheduled stakeholder meetings. The timing and motivation behind this request, given the decisions from the courts requiring accountability from polluters, is questionable, and the lack of serious outreach and stakeholder involvement from the agency on what would potentially be a significant reinterpretation of the Clean Water Act is very concerning.

People across the country rely on the Clean Water Act to guard their communities and drinking water sources from harmful pollution and count on the EPA to hold polluters accountable. As Congress stated, the goal of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." An exclusion for pollution being dumped via a hydrological connection would create a glaring loophole in the Clean Water Act, would undercut EPA's mission to protect public health and the environment, and would expose waters to unchecked pollution.

We urge the committee to consider these important factors in its hearing today.

Sincerely,

National Groups
Alaska Wilderness League
American Rivers
Center for Biological Diversity
Clean Water Action
Earthjustice
Endangered Species Coalition
Environment America
Green For All
GreenLatinos
Hip Hop Caucus
League of Conservation Voters
National Latino Farmers & Ranchers Trade Association
National Wildlife Federation
Natural Resources Defense Council
PolicyLink
River Network
Rural Coalition
Save EPA
Sierra Club
Waterkeeper Alliance

Regional & State/Local Groups
Environmental Law & Policy Center, Great Lakes
Gulf Restoration Network, Gulf region
Southern Environmental Law Center, Southeast
Alabama Rivers Alliance, Alabama
Cahaba River Society, Birmingham, Alabama
Arkansas Citizens First Congress, Arkansas
Endangered Habitats League, *Southern California*
Natural Heritage Institute, *California*
Idaho Rivers United, *Boise, Idaho*
Illinois Council of Trout Unlimited, *Illinois*
Prairie Rivers Network, *Illinois*
Iowa Environmental Council, *Iowa*
Northeastern Minnesotans for Wilderness, *Minnesota*
Save The River / Upper St. Lawrence Riverkeeper, *Clayton, New York*
Winyah Rivers Foundation, Inc., *North and South Carolina*
Ohio Environmental Council, *Ohio*
Oregon Environmental Council, *Oregon*
Virginia League of Conservation Voters, *Virginia*
OVEC-Ohio Valley Environmental Coalition, *West Virginia*
Okanogan Highlands Alliance, *Washington*
Puget Soundkeeper Alliance, *Puget Sound region, Washington*
Midwest Environmental Advocates, *Wisconsin*
April 18, 2018

Mr. Scott Wilson
Office of Wastewater Management
Water Permits Division (MC4203M)
Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Comment on “Pollution of Surface Waters by Pollution Transmitted From a Point Source through Groundwater with a Direct Hydrological Connection to the Surface Water” (Docket ID No. EPA-HQ-OW-2018-0063)

Dear Mr. Wilson:

On behalf of the Southern Environmental Law Center (SELC) and the undersigned organizations, please consider these comments in response to the above-styled request (“Notice”) of the Environmental Protection Agency (“EPA”) for comment on the EPA’s previous statements regarding the Clean Water Act and whether pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a direct hydrological connection to the jurisdictional surface water may be subject to Clean Water Act jurisdiction. We believe that there is no good reason for the EPA to reverse its previously stated position. The determination of whether subsurface discharges are subject to Clean Water Act jurisdiction by way of hydrological connection to surface water should remain a case-by-case, fact-specific inquiry.

For decades since the enactment of the Clean Water Act, the EPA has repeatedly—during administrations of both parties—followed the plain language of the Clean Water Act and stated that the Act forbids unpermitted pollution of the nation’s rivers, lakes, oceans, and streams when
the polluter’s unlawful contamination travels from a point source to the jurisdictional surface water via groundwater that has a direct hydrological connection to the jurisdictional surface water. The EPA can reach no other conclusion because the plain language of the Clean Water Act requires this conclusion. The EPA has no authority to create a loophole in the Clean Water Act for polluters who dump their unpermitted pollution short of the water’s edge, because the EPA cannot defensibly disregard the plain language of the Act.

It should be emphasized at the outset that citizens across the Southeast and the rest of the country rely upon this important Clean Water Act protection to guard their communities and clean water from dangerous pollution. Arsenic, mercury, selenium, lead, and other dangerous pollutants are leaking from unlined coal ash pits across the Southeast and elsewhere into rivers, lakes, and drinking water reservoirs. Petroleum pipelines have repeatedly cracked open and spilled thousands of gallons of gasoline and diesel fuel into waterways. Other polluters have allowed unpermitted flows of contaminants to reach our waterways through flows of directly hydrologically connected groundwater. Repeatedly, federal and state environmental agencies have not taken effective action. Citizen enforcement of this aspect of the Clean Water Act was expressly provided for by Congress and is essential to protecting the clean water of the Southeast and the United States. The EPA should not take any action to stymie this citizen enforcement.

It is apparent that the EPA’s Notice is intended to reduce the rights of citizens and hinder their work to shield their communities and their clean water from harmful pollution.

**Questionable Timing of the EPA’s Notice.** To date, the EPA has followed the plain language of the Clean Water Act, correctly recognizing that the Act protects the nation’s waters from unpermitted pollution dumped short of the banks of a waterway and transmitted over or under the earth or through hydrologically connected groundwater to surface water. There is no
legitimate reason for the EPA to call into question what it has repeatedly said over the course of almost half a century, and the EPA’s Notice gives none.

However, a number of fossil fuel companies, coal-burning utilities, and petroleum pipeline companies are facing liability across the country for their pollution of the nation’s waters with gasoline, diesel fuel, and coal-ash pollutants like arsenic, selenium, and mercury. They and their trade associations are political allies of this administration, and their executives (including the CEOs of Duke Energy and the Tennessee Valley Authority (“TVA”)) have met and talked with Administrator Pruitt.1

Today, these powerful polluters with close ties to the administration are facing accountability for their unlawful pollution in numerous courts across the country. The United States Courts of Appeals for the Fourth and Ninth Circuits2 recently rejected their arguments and held that the Clean Water Act, by its clear terms, protects the Savannah River watershed and the Pacific Ocean from unpermitted pollution that is spilled above the waterway or injected on the shore and that flows into the waterway or the ocean under the land’s surface through hydrologically connected groundwater. The Ninth Circuit’s decision was recommended by the EPA itself in an amicus brief presented by the U.S. Department of Justice but was opposed by amici representing petroleum companies, the coal-fired utilities, and mining companies.3

In Tennessee, a federal district court found that TVA has for years violated the Clean Water Act at its Gallatin coal-fired plant by polluting the Cumberland River with coal ash and

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heavy metals that flow into the river with groundwater through sinkholes, seeps, and leaks in its coal ash lagoons on the river’s banks. That case is on appeal to the Sixth Circuit, and TVA will face the EPA’s longstanding position based on the plain text of the statute, as did the polluters in the Fourth and Ninth Circuit cases. Once more, the usual polluter amici—coal-fired utilities and mining companies—have shown up to support TVA in its defiance of the text of the Clean Water Act and the EPA’s established position based thereon.

In Virginia, another federal district court found that Dominion Energy is violating the Clean Water Act at its Chesapeake coal-fired plant by polluting the Elizabeth River with arsenic flowing out of its riverfront coal ash lagoon via groundwater into the river. An appeal of that case is pending before the U.S. Court of Appeals for the Fourth Circuit, and, as usual, trade associations representing coal-fired utilities have filed amicus briefs. In all the briefs, Dominion and other polluters struggle to deal with the EPA’s many statements that contradict the polluters’ attempt to create a counter- textual loophole in the Clean Water Act.

In the Fourth Circuit case, Kinder Morgan, the nation’s largest pipeline company, is responsible for one of the largest petroleum pipeline spills in South Carolina history. That spill continues to discharge pollutants from thousands of gallons of gasoline and diesel fuel into a tributary of the Savannah River. In that appeal, the coal-fired utilities, petroleum pipeline companies, and mining companies again appeared to urge the creation of an exception to the Clean Water Act, and once more the polluters struggled to deal with the EPA’s reiteration of the plain language of the Clean Water Act in the Ninth Circuit case and for decades before.

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Across North Carolina, Duke Energy faces significant liabilities for its dangerous, leaking, and polluting disposal of coal ash in riverfront unlined pits. Citizen groups have repeatedly enforced the Clean Water Act against Duke Energy in federal court for coal ash pollution (including arsenic, mercury, and selenium) that flows with subsurface groundwater into North Carolina’s waterways from nearby unlined coal ash pits. Duke Energy companies have pleaded guilty\(^6\) to federal coal ash Clean Water Act crimes across the state and currently face three Clean Water Act enforcement actions pending in federal court.\(^7\) Duke Energy created unlined waterfront pits and dumped millions of tons of coal ash into those pits despite the EPA’s warnings in the 1970s that this irresponsible behavior risked pollution of ground and surface waters. At eight of its fourteen North Carolina coal ash sites, Duke Energy has been required by state court orders and a settlement agreement of a federal Clean Water Act suit\(^8\) to remove its coal ash from these leaking pits to eliminate the ongoing source of this pollution. Duke Energy must contemplate the possibility of further Clean Water Act enforcement against its leaking unlined coal ash pits.

The EPA’s Notice comes at a conspicuously convenient time to align with the litigation strategies of these polluters. This request serves the litigation needs of some of the administration’s closest and most powerful friends and some of the nation’s most notorious and legally vulnerable polluters, at the expense of clean water and the communities that rely on it.

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Indeed, Dominion has already made use of the EPA’s Notice, filing it as purportedly “supplemental authority” with the U.S. Court of Appeals for the Fourth Circuit in its pending appeal. Dominion quotes the carefully crafted phraseology of the EPA’s new political leaders in a thinly veiled attempt to undercut the force of the EPA’s decades-long bipartisan position.

To stay true to its legitimate mission\(^9\) of protecting human health and the environment by safeguarding the nation’s waters, the EPA should withdraw this dubious request and focus its attention on protecting communities and natural resources from pollution. The EPA should end this effort to help the polluters who damage those resources and threaten those communities and to facilitate the pollution that contaminates the nation’s surface waters.

**Plain Language of the Clean Water Act.** The current political leadership of the EPA has no power or discretion to change the EPA’s past position because the Clean Water Act is unambiguous. The plain language of the Act bans unpermitted discharge of pollutants from a point source to surface water and contains no exclusion for the situation when the pollution is dumped short of the water’s edge and travels over or under the ground or through groundwater to the surface water. The EPA has no authority to create a loophole for polluters that is not contained in the language of the Clean Water Act itself.

The language of the Clean Water Act is clear and unqualified: except as otherwise in compliance with Clean Water Act requirements, “the discharge of any pollutant by any person shall be unlawful.”\(^10\) A “discharge” is “any addition of any pollutant to navigable waters from

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\(^9\) See, e.g., EPA, “Our Mission and What We Do”, available at https://www.epa.gov/aboutepa/our-mission-and-what-we-do (accessed March 2, 2018); 33 U.S.C. § 1251(a) (Clean Water Act: “The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”).

any point source.\textsuperscript{11} The Clean Water Act does not provide, as some polluters would like, that a discharge is an addition of a pollutant “directly” to navigable waters, or “by” a point source. The language contains no such limitation or loophole. Instead, the language is intentionally written broadly to encompass “any” addition of “any” pollutant “to” navigable waters “from” any point source.\textsuperscript{12}

If Congress had intended to exclude discharges of pollutants that leave a point source some distance short of the river’s bank but then flow over or under the surface of the ground or via groundwater to surface water, then the Clean Water Act would contain such exclusionary language. Such a remarkable gap in the Act’s prohibition against unpermitted pollution would have to be much more clearly stated, in this statutory context. In part, it would create a huge loophole in the Act’s coverage, allowing any polluter to avoid the Clean Water Act by simply moving its point source back from the water’s edge. Congress did not include such a remarkable exclusion in the Clean Water Act and, to the contrary, plainly provided that “any” discharges “to” surface waters are within the Act’s jurisdiction.

This administration and the current political leadership of the EPA have looked to former Supreme Court Justice Scalia as their guide on Clean Water Act measures. The administration has proposed to use Justice Scalia’s plurality opinion in \textit{Rapanos v. United States}\textsuperscript{13} as the definition of the waters of the United States, even though a majority of the Supreme Court had rejected his definitional approach. President Trump’s Executive Order on Waters of the United States (Feb. 28, 2017) Section 3.

\textsuperscript{11} \textit{Id.} § 1362(12).
\textsuperscript{12} \textit{Id.}
\textsuperscript{13} \textit{547 U.S. 715 (2006)
However, Justice Scalia’s opinion rejects this effort of the EPA’s political leadership to rewrite the Clean Water Act through re-examination of the EPA’s longstanding position on discharges via hydrologically connected groundwater. As Justice Scalia explained in Rapanos, “[t]he Act does not forbid the ‘addition of any pollutant directly to navigable waters from any point source,’ but rather the ‘addition of any pollutant to navigable waters.” In this respect, unlike the plurality opinion’s approach to the definition of the “waters of the United States,” Justice Scalia’s opinion was accepted by the entire Court. If this administration embraces Justice Scalia’s opinion for a point that was rejected by a majority of the Court, it certainly cannot disavow his opinion on a point to which no member of the Court objected.

In trying to dodge the plain language of the Clean Water Act, polluters have constructed arguments from scattered pieces of legislative history – when in fact the legislative history cannot support the polluters’ efforts to create a loophole that the Act itself does not contain. Again, Justice Scalia—whom this administration has favorably cited—has condemned exactly this kind of statutory interpretation: “[I]t is utterly impossible to discern what the Members of Congress intended except to the extent that intent is manifested in the only remnant of ‘history’ that bears the unanimous endorsement of the majority in each House: the text of the enrolled bill that became law.”

The text of the Clean Water Act is clear. When unpermitted pollution travels from a point source to a river or lake via hydrologically connected groundwater, there is an illegal “addition of any pollutant to navigable waters.”

14 547 U.S. at 743 (citing 33 U.S.C. § 1362(12)(A) and § 1311(a)) (emphases in original). 5
This conclusion is also dictated by the statutory purposes of the Clean Water Act, set out by the Congress in the Act itself. The Clean Water Act was enacted to "restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,"\(^\text{17}\) by setting a goal to "eliminate[]" "the discharge of pollutants into the navigable waters."\(^\text{18}\) Allowing irresponsible industries to pollute the nation's waters with abandon as long as they pulled their point sources back from the water's edge would blast a huge hole in the protections of the Clean Water Act and these fundamental statutory purposes would be entirely undercut. Instead of a landmark protection of the nation's waters, the Clean Water Act would become a porous requirement subject to easy manipulation by polluters, their lawyers, and friendly regulators.

In short, the current political leadership of the EPA can reverse course only by running away from the plain language of the Clean Water Act, the Act's central purposes, and Justice Scalia. Instead, the EPA's leadership should in this instance live up to their oath and uphold the law.

**Overwhelming Authority.** In the Notice, the EPA has misleadingly described the supposed "mixed case law." In an endeavor to downplay the fact that the current political leadership is attempting to go against the massive weight of authority, the Notice begins its discussion of federal court decisions by citing the small minority that have misinterpreted the Clean Water Act. In fact, an overwhelming majority of federal courts have held that the Clean Water Act protects the nation's waters from unpermitted pollution transmitted from a point source to surface waters by groundwater with a direct hydrologic connection.

Here is a list of some of those decisions, the great bulk of which are disregarded by the EPA's Notice:

\(^{17}\) *Id.* § 1251(a).
\(^{18}\) *Id.* § 1251(a)(1).

2. *Haw. Wildlife Fund v. Cnty. of Maui*, --- F.3d ----, 2018 WL 1569313 (9th Cir. 2018), denying rehearing en banc and amending opinion reported at 881 F.3d 754 (9th Cir. 2018).


5. *U.S. Steel Corp. v. Train*, 556 F.2d 822, 832 (7th Cir. 1977) (The Clean Water Act “authorizes EPA to regulate the disposal of pollutants into deep wells, at least when the regulation is undertaken in conjunction with limitations on the permittee’s discharges into surface waters.”), *overruled on other grounds by City of W. Chicago v. U.S. Nuclear Regulatory Comm’n*, 701 F.2d 632, 644 (7th Cir. 1983).


17. *Greater Yellowstone Coal. v. Larson*, 641 F. Supp. 2d 1120, 1138 (D. Idaho 2009) (“[T]here is little dispute that if the ground water is hydrologically connected to surface water, it can be subject to” the Clean Water Act.).


underground storage tank failures three years prior was hydrologically connected to navigable waters).

22. *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319–20 (S.D. Iowa 1997) (where groundwater flows toward surface waters, there is "more than the mere possibility that pollutants discharged into groundwater will enter ‘waters of the United States,’" and discharge of petroleum into this hydrologically-connected groundwater violates the Clean Water Act).

23. *Wash. Wilderness Coal v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994) ("[S]ince the goal of the [Clean Water Act] is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation.").


As the EPA well knows, at the time of the notice the leading case was *Hawaii Wildlife Fund v. County of Maui*.10 This was the most recent decision on the issue, and a directly on-point

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10 881 F.3d 754 (9th Cir. 2018).
decision by a federal court of appeals. This unanimous decision was rendered after the issue was squarely presented and briefed. The Ninth Circuit reached the outcome urged by the EPA itself in an amicus brief filed by the U.S. Department of Justice less than two years ago, concurrently rejecting the arguments of the usual industry amici. Yet, the Notice mentions this case only in passing, in the final sentence of the last paragraph in the discussion of the decisions of the federal courts.

As the Ninth and Fourth Circuits noted, other circuits have also concluded that the Clean Water Act forbids unpermitted pollution from point sources that travels on or under the ground or through groundwater to surface water. While the Notice acknowledges the Fifth Circuit’s decision in Sierra Club v. Abston Construction, the EPA omits Concerned Area Residents for Environment v. Southview Farm. The EPA’s Notice cites Village of Oconomowoc Lake v. Dayton Hudson Corp., in which the plaintiffs alluded only to the “possibility” of a hydrological connection, but it overlooks the Seventh Circuit’s decision in U.S. Steel Corp. v. Train, where the Seventh Circuit upheld the Clean Water Act’s jurisdiction over surface-water impacts from injections into wells. Nor does the Notice recognize that the Tenth Circuit has upheld the Clean Water Act’s coverage of surface water pollution conveyed to a point source by groundwater flow.

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20 620 F.2d 41, 45 (5th Cir. 1980).
21 34 F.3d 114, 119 (2d Cir. 1994).
22 24 F.3d 962, 965 (7th Cir. 1994).
23 556 F.2d 822, 852 (7th Cir. 1977) (emphasis added), overruled on other grounds by City of W. Chicago v. U.S. Nuclear Regulatory Comm’n, 701 F.2d 632, 644 (7th Cir. 1983).
Finally, the notice cites *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, without recognizing that it has been specifically disavowed by other courts, including another federal district court in North Carolina. As set out in *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas*, the court in *Cape Fear*, like some of the other courts in the small minority, mistakenly declined to exercise jurisdiction over hydrologically connected groundwater "under the theory that the groundwater is not itself ‘water of the United States.’" The protection afforded by the Act applies to pollution of *surface waters* via groundwater flows from a point source. And now, of course, *Cape Fear* has been rendered invalid by the Fourth Circuit’s contrary ruling.

A candid review of the decisions of the federal courts can only conclude that the vast majority of federal courts—including all the courts of appeals that have squarely faced the issue—have enforced the Clean Water Act according to its plain terms and upheld the Act’s application to surface-water pollution that flows over and under the surface of the earth and through groundwater.

**The EPA’s Longstanding Position.** Since the enactment of the Clean Water Act and through every administration up to the present one, the EPA has recognized the clear words of the Act and stated that the Clean Water Act applies to surface-water pollution flowing from a point source with groundwater that has a direct hydrologic connection to the surface water. The current political leadership of the EPA must know the long history of the EPA’s consistent

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"Discharges into groundwaters that eventually move into surface waters are prohibited" by the Clean Water Act.

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27 141 F. Supp. 3d at 445.
28 Id. (internal quotation omitted).
interpretation of the Clean Water Act, since the EPA laid out that history in its own amicus brief in the Ninth Circuit less than two years ago.

The EPA has set out that position in formal policy positions, in regulation, in response to public comments, and in federal court. The EPA’s application of the Clean Water Act to such discharges reaches back forty years to its 1977 injection-well permitting and has been crystal clear for decades. In 2001, the EPA set forth its most comprehensive analysis—a “general jurisdictional determination” and an “agency policy determination.” The EPA clarified subsequently that “nothing in the 2003 [final] rule was to be construed to expand, diminish, or otherwise affect the jurisdiction of the [Act] over discharges to surface water via groundwater that has a direct hydrologic connection to surface water.” In 2015, the EPA again reaffirmed its “longstanding and consistent interpretation” and noted that it is unaffected by “the exclusion of groundwater from the definition of ‘waters of the United States.’”

The EPA has implemented its approach consistently by issuing individual and general National Pollutant Discharge Elimination System (“NPDES”) permits subject to notice, comment, and judicial review. The “EPA and states have been issuing permits for this type of discharge from a number of industries, including chemical plants, concentrated animal feeding operations, mines, and oil and gas waste-treatment facilities.” For example, an EPA permit prohibits concentrated animal feeding operations from discharging “manure, litter, or process

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wastewater from retention or control structures to surface waters of the United States through groundwater with a direct hydrologic connection to surface waters” and requires a liner for these structures where such connections exist.\textsuperscript{33}

Since the EPA first acknowledged that the Clean Water Act addresses pollution carried from a point source to surface waters by groundwater with a direct hydrologic connection, Congress has amended the Clean Water Act on several occasions, yet, notably, it has never acted to change the plain meaning of the statutory language.\textsuperscript{34}

For the EPA to reverse course by now choosing to disregard the plain language of the Act would be arbitrary and capricious—all the more so as it is plainly a response by the current administration to the Ninth Circuit Court of Appeals decision affirming the EPA’s longstanding position that has been based on the clear statutory text.

\textbf{Importance of Clean Water Act Protection of Navigable Waters.} The EPA cannot escape the unambiguous language of the Clean Water Act protecting against these discharges. But even if such a reversal were legal, it would be contrary to the EPA’s mission and leave crucial gaps in environmental protection that other regulatory programs cannot fill.

The Clean Water Act provides comprehensive, nationwide protection of our waters, working to ensure they are drinkable, swimmable, and fishable. It provides for robust citizen enforcement in federal court to hold polluters accountable for unpermitted discharges when government agencies cannot or will not take action. As the wide range of past and pending


enforcement actions shows, pollution through hydrologic connection to jurisdictional waters happens across different industries and different sources, from pipelines to coal ash ponds. A patchwork of state programs and narrowly focused regulatory schemes, like the underground injection-control regulations, cannot adequately make up for the crucial role the Clean Water Act plays in regulating these discharges. Moreover, relying on state regulatory programs to control these pollution sources would cut off citizen access to courts and undermine federal enforcement of federal law.

Conclusion. There is no need for the EPA to reconsider its position or take any further action. It should adhere to its longstanding, correct position, as it did in its Ninth Circuit amicus brief. As the EPA has stated, the determination of whether groundwater is hydrologically connected to surface water is "a factual inquiry like all point source determinations." The courts are well able to apply the plain language to the facts of particular cases, as the Ninth Circuit has recently done. Indeed, the Fourth Circuit in its opinion was careful to underscore that the specific facts of the case determine the application of the Clean Water Act. The type of pollutant, the geology, the direction of groundwater flow, and the fact that the pollutant can or does reach jurisdictional surface water can all help a court determine whether there is a qualifying connection, as the EPA has itself recognized.

36 See supra; see also Greater Yellowstone Coal. v. Larsen, 641 F. Supp. 2d 1120, 1139 (D. Idaho 2009) (connection too attenuated where movement to surface water could take up to 420 years and pollutants would have to travel underground up to four miles).
38 See, e.g., 66 Fed. Reg. at 3,017.
Any action by the EPA to reverse its longstanding position, which to date has been faithful to the requirements of the plain statutory text, would be unlawful. Further, it would only disrupt the enforcement of the law, create uncertainty, sow unhelpful confusion, foster increased litigation, and serve powerful polluting interests at the expense of the EPA’s core mission to protect public health and the environment.

Sincerely,

Frank S. Holleman, III
Senior Attorney
Southern Environmental Law Center

Alabama Rivers Alliance
Birmingham, AL

Altamaha Riverkeeper
Macon, GA

American Rivers
Washington, DC

Appalachian Voices
Boone, NC

Black Warrior Riverkeeper
Birmingham, AL

Cape Fear River Watch
Wilmington, NC

Catawba Riverkeeper
Charlotte, NC

Chattahoochee Riverkeeper
Atlanta, GA

Coosa Basin River Initiative
Rome, GA

Coosa Riverkeeper, Inc.
Mt. Laurel, AL

Flint Riverkeeper
Albany, GA

Friends of Hurricane Creek
Tuscaloosa, AL

Friends of the Locust Fork River
Cleveland, AL

Glynn Environmental Coalition
Brunswick, GA

James River Association
Lynchburg, VA

Mobile Baykeeper
Mobile, AL
MountainTrue  
Asheville, NC

Ogeechee Riverkeeper  
Savannah, GA

Potomac Riverkeeper Network  
Washington, DC

Roanoke River Basin Association  
Danville, VA

Save Our Saluda  
Marietta, SC

Shoals Environmental Alliance  
Sheffield, AL

Sierra Club  
San Francisco, CA

Sound Rivers  
New Bern, NC

Stokes County Branch, NAACP  
Walnut Cove, NC

Suwannee Riverkeeper  
Hahira, GA

Tennessee Riverkeeper  
Decatur, AL

Upstate Forever  
Greenville, SC

Virginia Conservation Network  
Richmond, VA

Waccamaw Riverkeeper  
Conway, SC

Winyah Rivers Foundation, Inc  
Conway, SC

Yadkin Riverkeeper  
Winston Salem, NC

cc: The Honorable Scott Pruitt, Administrator, U.S. Environmental Protection Agency
Senator BARRASSO. I submit also for the record a number of briefs from New York City et al., across the country, there is strong bipartisan opposition to a Federal takeover of groundwater regulation. I want to submit for the record a court brief filed by more than 20 cities, public wastewater utilities, and associations that represent them. The signatories to the brief include New York City, San Francisco, the Maryland Association of Municipal Wastewater Agencies, and the Narragansett Bay Commission in Rhode Island. These entities explain that an expansion of Federal authority “is not only contrary to law, but unmanageable.”

Without objection.

Senator CARPER. I object. No, I am not objecting. We have fun up here sometimes. I have no objection.

[The referenced information follows:]
No. 15-17447

In the

United States Court of Appeals

For the Ninth Circuit

HAWAII WILDLIFE FUND; SIERRA CLUB – MAUI GROUP; SURFRIDER FOUNDATION; and WEST MAUI PRESERVATION ASSOCIATION, Plaintiffs-Appellees,

v.

COUNTY OF MAUI, Defendant-Appellant,

On Appeal from the United States District Court for the District of Hawai’i

Brief of the Association of American Railroads; American Farm Bureau Federation; American Iron and Steel Institute; American Petroleum Institute; National Mining Association; The Fertilizer Institute; and Utility Water Act Group as Amici Curiae in Support of Defendant-Appellant’s Petition for En Banc Rehearing

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RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 29(c), *amicus* hereby certify that none of them issues stock and none is owned, either in whole or in part, by any publicly held corporation.
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IDENTITY AND INTERESTS OF AMICI CURIAE

*Amici curiae* are trade associations and other groups whose members represent a broad spectrum of the economy. They are the Association of American Railroads, the American Farm Bureau Federation, the American Iron and Steel Institute, the American Petroleum Institute, the National Mining Association, the Fertilizer Institute, and the Utility Water Act Group. \(^1\) *Amici* have a strong interest in this case because many of their members engage in activities that, under the panel’s decision could now be subject to the Clean Water Act’s (CWA) National Pollutant Discharge Elimination System (NPDES) permitting program. *Amici* believe that their broad legal perspective and experience with the NPDES program can help provide the Court with insights on how the panel virtually eliminated the Act’s fundamental distinction between point source and nonpoint source pollution. *Amici* also emphasize the regulatory uncertainty and costs imposed on their members and the rest of the economy by the panel’s interpretation of the CWA.

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\(^1\) This *amicus curiae* brief is submitted with an accompanying motion for leave under Circuit Rule 29-2. No party’s counsel authored any portion of this brief. No party or party’s counsel contributed money to fund this brief’s preparation or submission. No person other than the *amicus curiae*, their members, or their counsel contributed money that was intended to fund this brief’s preparation or submission.
SUMMARY OF ARGUMENT

Congress addressed water pollution differently under the CWA’s point source and nonpoint source programs. Under the former, as relevant to this case, Congress prohibited “any addition of any pollutant to navigable waters from any point source,” such as a pipe, a ditch, or some other “discernible, confined and discrete conveyance,” except as authorized by an NPDES permit issued to the point source. See 33 U.S.C. § 1362(12), (14); see also 33 U.S.C. § 1311(a).

Because pollutants often reach navigable waters by means other than point-source discharges—that is, from diffuse sources such as land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification—Congress also enacted various nonpoint source programs. It conspicuously left to the states the administration of those programs; no NPDES permit is required for nonpoint source pollution. Congress’s “clear and precise distinction” between point sources and nonpoint sources, and how and by whom they are to be regulated, are central to the Act’s proper functioning. See S. Rep. No. 95-370, at 8 (1977).

The panel’s decision eviscerates this clear distinction, creating a new NPDES permit requirement for nonpoint source pollution where none exists in the

\footnote{See https://www.epa.gov/nps/what-nonpoint-source.}
statutory text. Under the panel decision, NPDES permits are now required whenever pollutants found in a navigable water are “fairly traceable from [some] point source,” op. at 19, even when those pollutants only reach the navigable water in diffuse ways, e.g., migrating with groundwater or blowing in the wind. All that matters to the panel is that the pollutants ultimately be traceable to something falling within the Act’s expansive definition of “point source.” The statutory distinction between point source and nonpoint source pollution thus becomes a nullity. *En banc* review is needed to restore that critical statutory distinction and to ensure that NPDES permits are required only when pollutants are added to navigable waters from a point source.

While *amici* contend that this clear distinction is evident from the statutory text, even if the Court somehow finds the distinction less clear, there are still several reasons why the *en banc* Court should reverse panel’s decision. The panel’s interpretation “would bring about an enormous and transformative expansion in EPA’s regulatory authority without clear congressional authorization” and “place plainly excessive demands on limited governmental resources,” thus violating principles announced in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427, 2444 (2014) (“UARG”). It would also impermissibly “adjust the federal-state balance” that Congress carefully struck in the CWA when, among other things, it
left control of nonpoint source pollution in the states’ hands. See Solid Waste Agency of N. Cook Cty. v. U.S. Army Corps of Eng’rs, 531 U.S. 159, 173-74 (2001) (“SWANCC”). The panel’s interpretation must also be rejected because the panel failed to resolve any textual ambiguities in the County’s favor in accordance with the rule of lenity and instead applied a new standard (“fairly traceable”) that creates an unreasonable amount of regulatory uncertainty.

ARGUMENT

I. THE PANEL’S DECISION EVISCERATES THE CWA’S FUNDAMENTAL DISTINCTION BETWEEN REGULATION OF POINT AND NONPOINT SOURCES OF POLLUTION.

Congress’s “disparate treatment” of point source discharges and nonpoint source pollution is an “organizational paradigm of the [CWA].” Or. Nat. Desert Ass’n v. U.S. Forest Serv., 550 F.3d 778, 780 (9th Cir. 2008). In holding that an NPDES permit is required whenever pollutants discharged from a point source are “fairly traceable from the point source to a navigable water,” op. at 19, the panel effectively eliminated the Act’s fundamental distinction between point source discharges and nonpoint sources of pollution. Restoring that distinction is essential to the CWA’s regulatory framework; thus, this case presents a question of exceptional importance warranting *en banc* review.
A. **Congress Clearly Distinguished Between Point and Nonpoint Sources of Pollution in the CWA.**

The CWA in relevant part forbids “any addition of any pollutant to navigable waters from any point source” unless authorized by an NPDES permit. 33 U.S.C. §§ 1311(a), 1362(12). A point source is “any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged.” *Id.* § 1362(14). Read together, these provisions reflect Congress’s clear intent that only pollutants added to navigable waters from a discernible, confined and discrete conveyance are subject to NPDES permitting. It is not enough that pollutants released from a point source might reach navigable waters by some other means, such as wind dispersion or groundwater migration, even if the pollutants are traceable ultimately to the point source. The NPDES program encompasses only the “addition” of pollutants “to navigable waters” “from” a “conveyance . . . from which pollutants are or may be discharged.” *Id.* §§ 1362(12), (14); see also *Cordiano v. Metacomet Gun Club*, 575 F.3d 199, 224 (2d Cir. 2009) (“[A] point source discharge requires that pollutants reach navigable waters by a ‘discernible, confined and discrete conveyance.’”).

According to the Supreme Court, the CWA “makes plain” that a point source must “convey the pollutant to ‘navigable waters’” to be subject to NPDES permitting. *See S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541
U.S. 95, 105 (2004). A point source “need not be the original source of the pollutant,” but it does “need to convey the pollutant to ‘navigable waters.’” Id. (emphasis added).

The mere release of pollutants from a point source is not sufficient, as the D.C. Circuit recognized decades ago:

[It] does not appear that Congress wanted to apply the NPDES system wherever feasible. Had it wanted to do so, it could easily have chosen suitable language, e.g., ‘all pollution released through a point source.’ Instead, as we have seen, the NPDES system was limited to ‘addition’ of pollutants ‘from’ a point source.

Natl’l Wildlife Fed’n v. Gorsuch, 693 F.2d 156, 176 (D.C. Cir. 1982). Otherwise, any non-point-source pollution . . . could invariably be reformulated as point-source pollution by going up the causal chain to identify the initial point sources of the pollutants that eventually ended up through non-point sources to come to rest in navigable waters.” 26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., No. 15-cv-1439, 2017 WL 2960506, at *8 (D. Conn. July 11, 2017), appeal docketed, No. 17-2426 (2d Cir. Aug. 4, 2017). The only way to preserve Congress’s “clear and precise distinction between point sources, which [are] subject to direct Federal regulation, and nonpoint sources, control of which was specifically reserved to State and local governments,” S. Rep. No. 95-370, at
8, is by limiting the NPDES program to pollutants that reach and are added to navigable waters by a discernible, confined and discrete conveyance.

Congress had good reasons for drawing “a distinct line between point and nonpoint pollution sources.” *Or. Nat. Res. Council v. U.S. Forest Serv.*, 834 F.2d 842, 849 (9th Cir. 1987). Chief among them: because nonpoint source pollution is by definition diffuse, it is significantly harder to control and regulate than point source pollution. See S. Rep. No. 92-414, at 39 (1972) (acknowledging that “many nonpoint sources of pollution are beyond present technology of control”). As the Second Circuit summarized:

The structure of the statute — which regulates point source pollution closely while leaving nonpoint source regulation to the states [] — indicates that the term “point source” was included in the definition of discharge so as to ensure that nonpoint source pollution would not be covered. Instead, Congress chose to regulate first that which could easily be regulated: direct discharges by identifiable parties of point sources. *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 653 (2d Cir. 1993). Because the difficult task of abating nonpoint source pollution—e.g., pollutants migrating through groundwater—most typically involves land use controls, Congress thought it best to leave such responsibility to state and local governments, “the level[s] of government closest to the sources of the problem.” S. Rep. No. 95-370, at 9 (1977).
Congress acknowledged possible drawbacks to leaving the states in charge of nonpoint source pollution, speculating that it “may be that sometime in the future a Federal presence can be justified and afforded.” S. Rep. No. 95-370, at 10 (also positing that state control “may not be adequate”). Congress nevertheless concluded that “it is both necessary and appropriate to make a distinction as to the kinds of activities that are to be regulated by the Federal Government and the kinds of activities which are to be subject to some measure of local control” under 33 U.S.C. § 1288 and other nonpoint source programs. Id.

B. The Panel’s “Fairly Traceable” Standard Leaves Almost Nothing of the CWA’s Vital Distinction Between Point and Nonpoint Sources.

The panel’s “fairly traceable” standard effectively eliminates the distinction between point source discharges and nonpoint source pollution; thus, it should be reconsidered and reversed en banc. Nearly all nonpoint source pollution can be traced back to some conveyance, structure, or facility meeting the point source definition. If the panel’s decision stands, nearly all water pollution could suddenly become subject to federal NPDES permitting, contrary to Congress’s clear intent.

By ignoring the means by which pollutants are added to navigable waters, the panel’s “fairly traceable” standard opens the door to imposing NPDES requirements not just on diffuse groundwater migration, but also on other
“paradigmatic examples of nonpoint source pollution,” such as “runoff or windblown pollutants from any identifiable source, whether channeled or not.”

_Metacon Gun Club_, 575 F.3d at 224. For example, under the panel’s approach, NPDES permits could be required in each of the following situations:

- Stormwater runoff carries oil and gas brine leaked from tanks at an oil production operation, percolates into the groundwater, and eventually migrates to navigable waters.
- Wind carries lead particles from a berm at a gun range to a wetland.
- Runoff transports oil, grease, and other pollutants to a retaining pond, where they collect and percolate into the groundwater, through which the pollutants could migrate to navigable waters.

These scenarios involve classic nonpoint sources. See, e.g., U.S. EPA, “What is a Nonpoint Source?”5 (“Nonpoint source pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification.”). Courts around the country have held as much. See _Rice v. Harken Exploration Co._, 250 F.3d 264, 272 (5th Cir. 2001) (gas and brine transported by stormwater runoff); _Metacon Gun Club_, 575 F.3d at 224 (windblown lead from gun range); _Vill. of Oconomowoc Lake v. Dayton Hudson Corp._, 24 F.3d 962, 965 (7th Cir. 1994) (percolation from retention pond). And for good reason: If those are

5 Available at [https://www.epa.gov/nps/what-nonpoint-source](https://www.epa.gov/nps/what-nonpoint-source).
point source discharges, it is difficult to imagine what is not. The panel’s approach
nevertheless requires exactly such aberrant results whenever pollutants are “fairly
traceable” to point sources at those respective facilities.

The essential distinction between point and nonpoint sources has always
rested on the means by which pollutants reach and are added to navigable waters.
Because the panel’s “fairly traceable” standard effectively disposes of that
distinction, this case presents a question of exceptional importance warranting en
banc review.

II. THE “FAIRLY TRACEABLE” STANDARD IS NEITHER
COMPATIBLE WITH ACCEPTED CANONS OF STATUTORY
CONSTRUCTION NOR REASONABLE.

Even if this Court determines that the CWA does not clearly differentiate
between point source discharges and nonpoint source pollution, the panel’s “fairly
traceable” standard is manifestly not an acceptable resolution of any statutory
ambiguity. For one thing, the standard would “bring about an enormous and
transformative expansion in EPA’s regulatory authority [over point sources]
without clear congressional authorization.” UARG, 134 S. at 2444. That expansion
would occur at the expense of the states’ traditional authority to control nonpoint
sources. Additionally, by adopting a “fairly traceable” standard, the panel
impermissibly “add[ed] to the statute what Congress did not provide” rather than
resolving any statutory ambiguities in the County’s favor in accordance with the rule of lenity. See Plaza Health, 3 F.3d at 649. Finally, the panel’s interpretation of the CWA leads to an unreasonable amount of regulatory uncertainty.

A. The Panel’s “Fairly Traceable” Standard Impossibly Expands EPA’s Regulatory Authority Without Clear Direction from Congress.

Where a statutory interpretation effectuates an unprecedented and extraordinary expansion of federal regulatory authority, courts expect a clear indication in the text that Congress intended that result. See UARG, 134 S. Ct. at 2444. Not surprisingly, the Supreme Court has “been reluctant to read into ambiguous statutory text” the “power to require permits for … thousands, … [or] millions, of small sources nationwide.” Id. It has further instructed that an interpretation of ambiguous text that places “plainly excessive demands on limited governmental resources is alone a good reason for rejecting [the interpretation].” Id. Congress must “speak clearly if it wishes to assign to an agency decisions of vast ‘economic and political significance.’” Id. (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 160 (2000)). By all of those measures, the panel’s “fairly traceable” standard is an unreasonable construction of the CWA.

The panel’s standard threatens to subject thousands, if not millions, of additional sources to NPDES requirements, so long as pollutants that reach
Navigable waters are "fairly traceable" to those sources, no matter how distant geographically or temporally they may be. Under the panel's exceedingly broad construction of the CWA, there appears to be no limit to the number or type of releases that might require an NPDES permit. For instance, over 22.2 million homes have septic systems,4 which have never been subject to NPDES permitting. Because those systems collect and disperse wastewater into soil and groundwater, in many instances they will arguably satisfy the panel's "fairly traceable" test.

Elsewhere, unlined impoundments—such as stormwater ponds, farm ponds, surface impoundments, cooling ponds, and water supply reservoirs—are used in numerous industries. Many of these structures and facilities do not currently require NPDES permits. For those that do, NPDES permits focus primarily on regulating pollutants that reach jurisdictional surface waters from a discernible, confined, discrete conveyance. Following the panel's opinion, owners and operators of those impoundments may need to seek new or modified permits and identify additional NPDES discharge points. Compounding their troubles is the

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fact that the groundwater involved in many projects is already covered by other statutory and regulatory schemes. Aquifer recharge and aquifer storage and recovery projects, for example, involve the underground injection or infiltration of water via surface spreading, infiltration pits and basins, and injection wells. Many of these projects are currently subject to Safe Drinking Water Act requirements for Class V wells, but not NPDES requirements. The “fairly traceable” standard appears to add duplicative or even inconsistent requirements to such projects.

Ironically, the panel’s “fairly traceable” standard will discourage any number of public and private treatment and pollution control measures designed specifically to protect and preserve water resources. It would, for instance, cover green infrastructure designed to retain, percolate, and infiltrate stormwater into the ground to minimize discharges of industrial and municipal stormwater. It would also cover groundwater recharge systems that use spreading basins, percolation ponds, infiltration basins, and injection wells to convey stormwater or recycled wastewater into subsurface aquifers. These systems provide a host of ecological benefits including, among others, augmenting public water supplies, creating seawater intrusion barriers, and eliminating surface outfalls. See U.S. EPA, 2012

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Guidelines for Water Reuse, at 4-25 (Sept. 2012). Such measures historically have been treated as nonpoint source discharges. In fact, EPA promotes their use to control for nonpoint source pollution. See U.S. EPA, National Management Measures to Control Nonpoint Source Pollution from Urban Areas 5-9–5-10 (2005). Under the panel’s approach, however, many of them would suddenly require NPDES permits whenever the fluids they collect or dispense ultimately migrate through the groundwater to navigable waters—which, due to the natural hydrologic cycle, much groundwater does. See id. at 5-9.

Such a sweeping and unprecedented expansion of the NPDES program is just the sort of “enormous and transformative expansion in EPA’s regulatory authority without clear congressional authorization” that the Supreme Court warned against in UARG, 134 S. Ct. at 2444. Yet the panel did not wrestle with or acknowledge any of these sweeping, practical ramifications of its holding.

Equally troubling, the expansion of the NPDES program that likely will result from the panel’s decision “readjust[s] the federal-state balance” Congress struck in the CWA by intruding upon the “States’ traditional and primary power

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6 Available at https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=253411.

over land and water use.” SWANCC, 531 U.S. at 173-74. As explained in Part I.A, Congress carefully distinguished between point and nonpoint sources, leaving states in charge of the latter. The panel’s decision, however, effectively eliminates the line between point and nonpoint sources—which in turn dramatically readjusts the federal-state balance—without anything approaching a clear statement from Congress.

B. The Panel’s “Fairly Traceable” Standard is at Odds with the Rule of Lenity.

Those violating the CWA face stiff criminal liability. “Knowing” criminal violations are punishable by up to $100,000 per violation per day and six years’ imprisonment, while “negligent” criminal violations carry fines of up to $50,000 per violation per day and two years’ imprisonment. 33 U.S.C. § 1319(c). Because the CWA has criminal applications, it must be construed in accordance with the rule of lenity, even in civil cases like this one. See Kasten v. Saint-Gobain Performance Plastics Corp., 563 U.S. 1, 16 (2011). Under that rule, statutory ambiguities should be resolved in favor of the defendant. See id.; see also Plaza Health, 3 F.3d at 649 (construing “point source” in accordance with the rule of

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8 The CWA also provides for civil penalties in enforcement actions by EPA or private citizens, which can be up to $52,414 per violation. Id. §§ 1319(d), 1365(a); see also 82 Fed. Reg. 3,633, 3,636 (Jan. 12, 2017) (inflation adjustment rule).
lenity and dismissing criminal prosecutions); *United States v. Granderson*, 511 U.S. 39, 54 (1994) ("[W]here text, structure, and history fail to establish that the Government’s position is *unambiguously correct[,] we apply the rule of lenity and resolve the ambiguity in [the defendant’s] favor.") (emphasis added). Among other goals, the rule of lenity “promote[s] fair notice to those subject to the criminal laws.” *United States v. Kozinski*, 487 U.S. 931, 952 (1988).

For reasons set out in Part I above, the CWA must be construed to not require an NPDES permit for pollutants that reach navigable waters through groundwater migration. Even if those reasons did not ultimately convince the panel, though, surely they establish ambiguity about whether such pollution is subject to NPDES permitting. Because the rule of lenity applies to the CWA’s permitting provisions, the panel should have construed any such ambiguity in favor of the County. Instead, the panel effectively treated the “fairly traceable” standard as the unambiguously correct interpretation of the CWA’s text. That was not just an error, but one that implicates the due process protections of the Constitution. *En banc* review is needed to correct the panel’s mistake.

C. The Panel’s Decision Creates Unreasonable Levels of Regulatory Uncertainty.

The panel’s decision also raises another, related due process concern. Under that decision, a person (at least in this Circuit) now must discern whether water
pollution is, in fact, “fairly traceable” to a point source under his or her control. Yet the panel did not indicate, for example, whether there are limits on the distance pollutants must travel between a point source and navigable waters or whether migration must occur within a certain amount of time. Instead, the panel “left for another day the task of determining when, if ever, the connection between a point source and navigable water is too tenuous to support liability under the CWA.” Op. at 19.

It will often be impossible to determine whether a discharge meets the panel’s “fairly traceable” test or to reasonably regulate those discharges that do. Sometimes pollutants will make their way to navigable waters via someone else’s land, in which case the person who released the pollutants might be unable to fully trace or control their movement. Sometimes pollutants will take so long to migrate to navigable waters, or will migrate across such a long distance before reaching navigable waters, that tracing their movement will be impracticable. And sometimes, upon entering groundwater, pollutants from one source will mix with pollutants from other sources, so that, when the pollutants reach navigable waters, it will be impossible to tell which pollutants come from which source, even when some pollutants may be “fairly traceable” to each source.
In many cases, the only way to tell whether certain pollutants are “fairly traceable” to a particular source will be to conduct a detailed hydrologic study. Hydrologic studies are time consuming and exceedingly expensive. Even if a person is able to pay for such a study, the results will sometimes be inconclusive or unreliable. It is not always possible, for instance, to determine exactly where pollutants reach navigable waters. When there is no readily identifiable discharge point, there is nowhere to conduct the sampling and monitoring required by the CWA. See 40 C.F.R. pt. 122, subpt. C. When, as in this case, pollutants are injected into groundwater as part of the treatment process, sampling at the injection site is inadequate because filtration through the soil is itself part of the treatment process, and compliance with the Act is to be determined only “after all treatment processes” have occurred. See U.S. EPA, NPDES Permit Writer’s Manual § 8.1.2.3 (Sept. 2010).9 The result is that many people and businesses will be unable, as a practical matter, to figure out whether their conduct requires an NPDES permit, and if so, what the requirements of that permitting scheme are.

When a court’s construction of a statute leaves ordinary people guessing as to whether certain conduct exposes them to criminal and civil liability under that

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statute, due process is offended. See Papachristou v. Jacksonville, 405 U.S. 156, 162 (1972) (“Living under a rule of law entails various suppositions, one of which is that [all persons] are entitled to be informed as to what the State commands or forbids.”). Such a construction ought to be rejected when an alternative, reasonable construction exists which does not raise similar constitutional difficulties. See Clark v. Martinez, 543 U.S. 371, 380–81 (2005) (explaining canon of constitutional avoidance). It is unreasonable to stretch the plain language of the CWA in a way that could expose potentially millions of sources to liability. It is likewise unreasonable to inject this level of uncertainty about what is point or nonpoint source into a statute with a “notoriously unclear” geographic scope. Sackett v. EPA, 566 U.S. 120, 132–33 (2012) (Alito, J., concurring) (lamenting the failure of Congress and EPA to resolve the “critical ambiguity” in the “precise reach of the Act”); see also U.S. Army Corps of Engr’s v. Hawkes Co., Inc., 136 S. Ct. 1807, 1816 (2016) (highlighting concerns about “the reach and systemic consequences of the [CWA]”) (Kennedy, J., concurring).

The panel’s “fairly traceable” standard all but ensures that well-meaning people and businesses will be left guessing about whether they are subject to potentially massive criminal and civil penalties under the CWA. The alternative, reasonable reading presented on appeal—that NPDES permit requirements apply
only when pollutants reach navigable waters by a discernible, confined and
discrete conveyance and thus, states regulate diffuse sources of pollution under
other programs—presents no such due process troubles. This Court should grant en
banc review to rectify that constitutional defect in the panel’s approach.

CONCLUSION

For the foregoing reasons, amici respectfully request that the Court grant
Defendant-Appellant’s petition for en banc rehearing.

DATED this 12th day of March, 2018.

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I certify pursuant to Fed. R. App. P. 32(a)(7)(C) and Circuit Rules 29-2 and 32-1 that this brief contains 4,152 words and has been prepared in 14-point Times New Roman proportionally spaced typeface.

/s/ David Y. Chung
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CERTIFICATE OF SERVICE

I certify that on March 12, 2018, I electronically filed a copy of the foregoing brief with the Clerk of Court for the U.S. Court of Appeals for the Ninth Circuit via the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ David Y. Chung
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No. 15-17447

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

HAWAI‘I WILDLIFE FUND; SIERRA CLUB – MAUI GROUP;
SURFRIDER FOUNDATION;
WEST MAUI PRESERVATION ASSOCIATION,

Plaintiffs/Appellees,

v.

COUNTY OF MAUI,

Defendant/Appellant.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR HAWAI‘I, HONOLULU
D.C. NO. 1:12-CV-00198-SOM-BMK, HONORABLE SUSAN OKI MOLLWAY

MOTION OF DEFENDANT-APPELLANT COUNTY OF MAUI
TO STAY THE MANDATE PENDING FILING OF
A PETITION FOR WRIT OF CERTIORARI

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Attorneys for Defendant/Appellant County of Maui
Pursuant to Federal Rule of Appellate Procedure 41(d)(2) and Ninth Circuit
Rule 41-1, Defendant-Appellant County of Maui ("County") respectfully moves
this Court for a stay of this Court's mandate pending the filing and ultimate
disposition of a petition for a writ of certiorari. The County intends to file a timely
petition for a writ of certiorari with the Supreme Court. The petition will ask the
Supreme Court to review the panel's holding that the County's underground
injection control wells require Clean Water Act ("CWA") permits even though
they inject effluent into groundwater and not navigable water, because more than a
de minimis amount of pollutants in the ocean are fairly traceable to the wells. The
County contends the panel's ruling contravenes the CWA's text, structure and
legislative history and conflicts with decisions of the Fifth and Seventh Circuits in
Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001) and Vill. of
Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962 (7th Cir. 1992).

Counsel for the County have conferred with counsel for Plaintiffs-Appellees.
Based on those conversations, Counsel understands that Appellees are unable to
determine at this time whether they will oppose the County’s motion or take no
position.

Argument

"No exceptional circumstances need be shown to justify a stay" of the
mandate. Bryant v. Ford Motor Co., 886 F.2d 1526, 1528 (9th Cir. 1989). See
also United States v. Pete, 525 F.3d 844, 851 (9th Cir. 2008) (stating that it is “often the case” that mandates are stayed while seeking certiorari from the Supreme Court). It is sufficient that a petition for a writ of certiorari would present a “substantial question” and there is “good cause for a stay.” Fed. R. App. P. 41(d)(2)(A). Both factors are satisfied here.

I. This Case Presents A Substantial Question.

A “substantial question” exists where there is a “reasonable probability that four Justices will vote to grant certiorari as well as a reasonable possibility that five Justices would vote to reverse” the circuit court’s judgment. Jepson v. Bank of N.Y. Mellon, 821 F.3d 805, 807 (7th Cir. 2016). That standard does not require confidence the Supreme Court would grant certiorari. It requires only a “reasonable” chance in light of “the issues that the applicant plans to raise in its certiorari petition in the context of the case history, the Supreme Court’s treatment of other cases presenting similar issues and the considerations that guide the Supreme Court in determining whether to issue a writ of certiorari.” Senne v. Vill. of Palatine, Ill., 695 F.3d 617, 619 (7th Cir. 2012).

The County’s anticipated certiorari petition squarely meets that test. The Supreme Court has made clear that the CWA’s reach is an issue of national significance justifying the grant of certiorari, having regularly granted certiorari in cases concerning the Act’s scope. E.g., U.S. Army Corps of Eng’rs v. Hawkes

Whether the CWA’s reach extends to the addition of pollutants to navigable water is such an issue of national significance. In fact, the issue is currently the subject of no less than 5 appeals in 3 other circuits—the Second, Fourth and Sixth. 26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., No. 17-2426 (2d Cir.); Upstate Forever and Savannah Riverkeeper v. Kinder Morgan Energy Partners, No. 17-1640 (4th Cir.); Sierra Club v. Virginia Electric & Power Co., No. 17-1895(L) (4th Cir.); Tennessee Valley Authority v. Tennessee Clean Water Network, No. 17-6155 (6th Cir.); Kentucky Waterways All. v. Kentucky Utils. Co., No. 18-5115 (6th Cir.).

The County’s position also is plainly not frivolous and raises a question on which reasonable jurists can disagree. Indeed, the district courts in three of the five other appeals held opposite of this Court. They held that a point source discharge of pollutants to groundwater does not violate the CWA even if the groundwater conveys the pollutants to navigable water. 26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., 2017 U.S. Dist. LEXIS 106989 (D. Conn. July 11, 2017); Upstate Forever and Savannah Riverkeeper v.

Combined with the decisions in Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001) and Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962 (7th Cir. 1992)—which the County respectfully maintains conflict with this Court’s holding—the issue’s significance and the deep division it has engendered among courts creates a reasonable chance of Supreme Court review. The question is an important issue of federal law that has not been, but should be, settled by the Supreme Court. See Sup. Ct. R. 10(a) (identifying a decision of an U.S. court of appeals in conflict with the decision of another U.S. court of appeals as grounds for granting certiorari).

The Supreme Court’s interest and concern are likely to be particularly heightened given the wide-ranging amici that supported reconsideration of the Court’s ruling and that likely would support the County’s certiorari petition. A bipartisan coalition of State Attorneys General throughout the country expressed grave concern over the burdens that the Court’s decision bodes for their regulatory bodies as well as the interference with their regulatory authority. Associations representing localities throughout the country warned that the decision could jeopardize their ability to provide critical public infrastructure for the provision of
drinking water and wastewater and storm water management. A broad cross-section of businesses and industries expressed the same concern for their wastewater management infrastructure.

As these amici underscore, the application of NPDES permitting to the addition of pollutants to groundwater that is hydrologically connected to surface water has profound ramifications in the public and private sectors. NPDES permits previously have not been issued for discharges to groundwater during the CWA’s 40-year history. All that changes under the Court’s decision, upsetting billions of dollars in public and private investment decisions over those decades. That is precisely the type of expansion in permitting that concerns the Supreme Court and prompts certiorari.  Util. Air Regulatory Group v. EPA, 134 S. Ct. 2427, 2444 (2014) (admonishing against sweeping interpretations of environmental statutes that place “excessive demands on limited governmental resources” and require permits for “tens of thousands, and the operation of millions, of small sources nationwide”).

II. There is “Good Cause” to Stay the Mandate.

The balance of equities favors a stay. A stay would preserve the status quo for the benefit of the Supreme Court’s review on this unsettled question of law. A stay would not harm Appellees either. The County’s UIC wells are not unregulated. They are subject to federal and state Safe Drinking Water Act
permits that limit the volume and concentration of pollutants injected in the wells. The County also has applied to the Hawai‘i Department of Health ("HDOH") for NPDES permits for the wells, as required by the district court’s order on remedies. See Settlement Agreement and Order re: Remedies ("Remedies Order") ¶8 (ER106). A stay of the mandate thus will not interfere with the regulatory processes.

Moreover, stay of the mandate while the Supreme Court considers the County’s certiorari petition will not delay the other relief Appellees were awarded. The remedial actions and civil penalties the district court imposed on the County are contingent on a “Final Judgment” as defined in 28 U.S.C. §2412(d) (2)(G). See Remedies Order ¶4 (ER105). That statute defines “final judgment” as “a judgment that is final and not appealable, and includes an order of settlement.” 28 U.S.C. §2412(d)(2)(G). The County, therefore, is not required to commence the remedial actions and pay the penalties until the time for it to appeal to the Supreme Court has expired and if the County appeals, until the Supreme Court finally resolves the County’s appeal. Stay of the mandate thus will not delay Appellees’ receipt of this relief.

A stay will, however, protect the County from risk of any changes to the Remedies Order. A stay will retain jurisdiction in this Court and foreclose proceedings in the district court by Appellees or anyone else to expand or
otherwise alter the scope of the ordered relief while the Supreme Court considers whether to review this decision.

In short, a stay will not harm Appellees but would protect the County. A stay would protect the County from additional obligations if a party thinks HDOH is taking too long to act on the County’s application or if a party seeks to alter or add to the relief the district court ordered. *Books v. City of Elkhart*, 239 F.3d 826, 828 (7th Cir. 2001) (finding good cause by “balanc[ing] the equities of granting a stay by assessing the harm to each party if a stay is granted.”).

**Conclusion**

The Court should stay the mandate. The County’s certiorari petition will present a substantial question. A stay pending the disposition of that petition will not harm Appellees and would protect the County.

Respectfully submitted,

COUNTY OF MAUI

By: Michael R. Shebelskie

Michael R. Shebelskie

Attorney for Defendant/Appellant
County of Maui
CERTIFICATE OF SERVICE

I certify that on April 3, 2018, I electronically filed a copy of the foregoing motion with the Clerk of Court for the U.S. Court of Appeals for the Ninth Circuit via the appellate CM/ECF system, which will send electronic notification to all registered CM/ECF users in this case.

__________________________
Michael R. Shebelskie /s/

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In the United States Court of Appeals for the Ninth Circuit

HAWAI’I WILDLIFE FUND, a HAWAI I non-profit corporation; SIERRA CLUB-MAUI GROUP, a non-profit corporation; SURFRIDER FOUNDATION, a non-profit corporation; WEST MAUI PRESERVATION ASSOCIATION, a HAWAI I non-profit corporation,

Plaintiffs-Appellees,

v.

COUNTY OF MAUI,

Defendant-Appellant.

Appeal from the United States District Court For the District of Hawaii Case No. 1:12-cv-00198-SOM-BMK

BRIEF OF AMICI CURIAE STATES OF ARIZONA, ALABAMA, ALASKA, ARKANSAS, GEORGIA, INDIANA, KANSAS, LOUISIANA, MISSOURI, MONTANA, NEBRASKA, NEVADA, OKLAHOMA, SOUTH CAROLINA, TEXAS, UTAH, WEST VIRGINIA, AND WYOMING IN SUPPORT OF PETITION FOR REHEARING EN BANC

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STATEMENT OF AMICI CURIAE

The States of Arizona, Alabama, Alaska, Arkansas, Georgia, Indiana, Kansas, Louisiana, Missouri, Montana, Nebraska, Nevada, Oklahoma, South Carolina, Texas, Utah, West Virginia, and Wyoming file this brief under Circuit Rule 29-2(a) to spotlight the effect of the February 1, 2018 panel decision and speak in furtherance of their interests in (and sovereignty over) intrastate water management, in particular when the actions of state political subdivisions are at issue. The panel decision, which threatens to deny state and local governments their traditional primary authority to regulate and manage intrastate land and water uses, is bad for the Amici States, wrong for the environment, and contrary to the principles of our “compound republic.” Quoting Federalist No. 51, reprinted in 1 Debate on the Constitution 323 (B. Bailyn ed. 1993) (J. Madison).

The Amici States have a significant interest in en banc rehearing because of their sovereign status and long history of responsible governance over intrastate lands and waters, including groundwaters. Arizona’s efforts in this regard include its Aquifer Protection Permit and Aquifer Water Quality Standards programs, which protect
groundwaters and aquifers.  See, e.g., A.R.S. §§ 49-203(A)(4), 223, 224(B). And other Amici States have their own permitting and water quality standards programs.¹

**SUMMARY OF ARGUMENT**

The petition for rehearing en banc should be granted because the panel decision wrongly extends Clean Water Act (“CWA”) jurisdiction to intrastate “point sources” that are hydrologically connected only through intrastate nonpoint sources, such as groundwaters, to navigable waters. The panel’s decision usurps from state and local governments their traditional regulatory and management authority in

¹ For example, pursuant to the Nevada Water Pollution Control Law, the Nevada Division of Environmental Protection issues discharge permits that define the quality of a permitted discharge deemed necessary to protect the waters of the State. See NRS 445A.300-700. Nevada’s definition of waters of the State is broad and includes “all waters situated wholly or partly within or bordering upon [the] State, including but not limited to: (1) all streams, lakes, ponds, impounding reservoirs, marshes, water courses, waterways, wells, springs, irrigation systems and drainage systems; and (2) all bodies or accumulations of water, surface and underground, natural or artificial.” NRS 445A.415. Further, NRS 445A.465 specifically prohibits the discharge of a pollutant without a permit. The Nevada Division of Environmental Protection has a long history of successfully overseeing this program. Accordingly, the Nevada Water Pollution Control Law would address the types of discharges contemplated while being protective of all waters of the State.
the sphere of intrastate land and water uses, and thus presents an issue of exceptional importance.

CWA point source jurisdiction is limited to intrastate point sources that themselves convey a pollutant into navigable waters because the governing statutory definition of “discharge of any pollutant” omits any reference to nonpoint sources, such as groundwaters, as a conveyance of a pollutant. Properly construed under the canon “expressio unius est exclusio alterius,” this omission precludes CWA point source jurisdiction when pollutants are conveyed to navigable waters solely by groundwaters or other nonpoint sources.

In reaching a contrary conclusion, the panel decision circumvents Supreme Court precedent, conflicts with opinions from other circuits, and undermines a rule of national application on a question of exceptional importance in which there is an overriding need for uniformity.

ARGUMENT

The mistaken expansion of CWA point source jurisdiction embraced by the panel decision is understandable from a certain perspective—everyone wants a clean, safe and healthy environment.
But the federal government need not usurp state authority to achieve that outcome, and Congress intended no such complete occupation of the field. State and local governments have the plenary power to protect public health, safety, and welfare; this includes protecting intrastate groundwaters from point source discharges. As compared to any federal agency, state and local governments are closer to the problem sources and more responsive to the people. The CWA even authorizes states to form interstate compacts to furnish solutions to interstate problems. 33 U.S.C. § 1253(b). As discussed below, both the environment and the rule of law are best protected by respecting the statutory text, the congressional intent, and the principles of cooperative federalism embraced by the CWA.

I. THE PANEL DECISION INVOLVES A QUESTION OF EXCEPTIONAL IMPORTANCE BECAUSE IT CL ASHS WITH OTHER CIRCUITS AND WOUL D SWEEP AWAY TRADITIONAL STATE AND LOCAL AUTHORITY

“It was said of the late Justice Story, that if a bucket of water were brought into his court with a corn cob floating in it, he would at once extend the admiralty jurisdiction of the United States over it.” Village of Oconomowoc Lake v. Dayton Hudson Corporation, 24 F.3d 962, 965 (7th Cir. 1994). Courts should avoid adopting a similar
approach to CWA point source jurisdiction. Nevertheless, the panel held that CWA point source jurisdiction extends to a “point source” whenever a pollutant added to navigable waters in a more than de minimis amount is “fairly traceable” to a point source, regardless of how the pollutant traveled from the point source. Dkt. 65 18-19, 25.\textsuperscript{2} The panel specifically ruled that a county-operated injection well, which was used for water reclamation and waste management, was required to secure federal National Pollutant Discharge Elimination System (“NPDES”) permitting because pollutants traceable to the well reached the ocean by seeping through intermediating groundwaters. In other words, under the panel’s decision, the jurisdictional element for liability under the CWA is satisfied whenever there is an indirect hydrological connection between a point source and navigable waters, regardless of intervening nonpoint sources, even if the intervening medium is groundwaters.\textsuperscript{3}

\textsuperscript{2} For the sake of brevity, reference to “navigable waters” is used collectively to include both “navigable waters” and “waters of the contiguous zone or ocean.” See 33 U.S.C. §1362(12)(A), (B).

\textsuperscript{3} “It is basic science that ground water is widely diffused by saturation within the crevices of underground rocks and soil,” and “[a]bsent exceptional proof of something akin to a mythical Styx-like subterranean river,” “passive migration of pollutants” through
But neither admiralty nor CWA point source jurisdiction extends to every bucket of water (or well) that is hydrologically connected through inadvertent seepage to navigable waters, especially if that connection is through groundwaters. Contrary to the panel decision, other circuits have held that a point source must \textit{itself} convey a pollutant into navigable waters to trigger CWA point source jurisdiction—\textit{without} the pollutant travelling through nonpoint sources, such as groundwaters.\footnote{\textit{Village of Oconomowoc Lake}, 24 F.3d at 965 (CWA does not assert “authority over groundwaters, just because these may be hydrologically connected with surface waters”); \textit{see also Rice v. Harken Exploration Co.}, 250 F.3d 264, 272 (5th Cir. 2001) (“a generalized assertion that covered surface waters will eventually be affected by remote, gradual, natural seepage from the contaminated groundwater” was outside the scope of the Oil Pollution Act in order “to respect Congress’s decision to leave the regulation of groundwater to the States”); \textit{Cape Fear River Watch v. Duke Energy Progress}, 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014) (“Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow ‘hydrologically connected’ to navigable surface waters”); \textit{see generally Catskill Mountains v. City of New York}, 273 F.3d 481, 493 (2d Cir. 2001) (point source “refers only to the proximate source from which the pollutant is directly introduced to the destination water body”); \textit{Nat’l Wildlife Fed’n v. Gorsuch}, 693 F.2d 156, 165, 175-76 (D.C. Cir. 1982) (affirming reasonableness of EPA interpretation that “the point source must \textit{introduce} the pollutant into navigable water”)}.
regulatory authority (an unsettled question), “the Clean Water Act does not attempt to assert national power to the fullest.” Village of Oconomowoc Lake, 24 F.3d at 965. The circuit reasoned that Congress repeatedly refused to pass proposals to add groundwaters “to the scope of the Clean Water Act.” Id. (citing Exxon Corp. v. Train, 554 F.2d 1310, 1325-29 (5th Cir.1977)). The Seventh Circuit further explained that there was a clear reason for Congress’s refusal: impracticality. As stated by the Senate Committee on Public Works in 1972, Congress rejected proposals to add jurisdiction over groundwaters “[b]ecause the jurisdiction regarding groundwaters is so complex and varied from State to State.” Id. at 965.

Congress was right. The panel decision threatens to create an unworkable regulatory environment by extending an onerous federal regulatory structure over what has been a traditional area of state responsibility. Whether and how pollutants seep through groundwaters into navigable waters from a point source is exceedingly difficult to observe and measure, much less predict, due to numerous factors including difficulty of access, temperature changes, chemical interactions, movement of the earth, tides, transpiration, evaporation,
groundwater withdrawals, vegetative conditions, atmospheric conditions, and surrounding surface and below-ground land uses. See T.C. Winter, et al, Ground Water and Surface Water: A Single Resource, U.S. Geological Survey Circular 1139 (1998). And yet, under the panel’s reading of the CWA, unforeseeable criminal and civil liability could arise whenever any point source is shown in hindsight to have caused the addition of some pollution to any navigable waters through even the most unpredictable, improbable and multisteped causal chain. See, e.g., 33 U.S.C. §§ 1319(c), (d), 1365(a).

The civil and criminal exposure threatened by the panel decision would haunt far more than traditional waste management facilities. Section 1362(6) defines “pollutant” broadly to include much more than traditional wastes.5 Point sources that require NPDES permitting in Arizona alone could possibly jump more than 200,000%—from the current ~150 permitted facilities to most (if not all) of the State’s 35,382

5 Even potable water can be considered a pollutant due to the residuals of the disinfection process. See, e.g., W.R. Grace & Co. v. United States EPA, 261 F.3d 330, 333 (3d Cir. 2001) (describing disinfection process for potable water as creating chloramines).
Class V Wells and potentially even an estimated 282,897 septic systems.\(^6\)

If anything, a *multi-thousand percent increase* in the number of alleged mandatory NPDES permittees is a conservative estimate of the regulatory impact of the panel decision. The regulatory effort compelled by the panel decision would need to range to the entire network of ever changing, externally influenced underground capillaries and seeps that ultimately feed “navigable waters.” *See* 33 U.S.C. § 1342(c)(3). It is hard to imagine *any* land or water use with any potential for runoff, spillage, or leakage (much less *any* water storage, transportation, recycling, or waste management activity) that would not have this *possible* or *eventual* hydrological connection to navigable waters, particularly if viewed in hindsight. Every fluid or semi-fluid discharge that is capable of seepage, runoff, spillage, leakage, or evaporation is likely hydrologically connected to navigable waters indirectly through

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nonpoint sources, such as groundwaters. And almost every land or water use is capable of generating such discharges. As quipped in *Village of Oconomowoc Lake*, even a bucket of water can be hydrologically connected to navigable waters. 24 F.3d at 965.

In short, extending CWA liability to any point source that is connected by groundwaters, or other nonpoint sources, to navigable waters threatens to force Arizona (and other Amici States that have accepted primacy) to undertake a massive expansion of NPDES permitting in areas the CWA was never intended to reach, as the far more reasonable approach of other circuits has confirmed.

II. THE PANEL REACHED ITS SWEEPING OUTCOME BY DISREGARDING A TRADITIONAL CANON OF CONSTRUCTION AND THE COOPERATIVE FEDERALISM EMBODIED IN THE CWA

En banc rehearing would allow for correction of the panel's error through a straightforward application of a basic canon of statutory interpretation with due consideration for principles of cooperative federalism.

A. The Panel Dieregarded The Interpretative Canon "Expressio Unius Est Exclusio Alterius"

Under the interpretative canon “expressio unius exclusio alterius,” the omission of a relevant term from a statutory provision is presumed
to exclude intentionally what has been omitted. *Lamie v. United States Trustee*, 540 U.S. 526, 537 (2004); *U.S. v. Vonn*, 535 U.S. 55, 64 (2002). This canon compels the conclusion that CWA point source jurisdiction cannot be triggered, such that a NPDES permit becomes necessary, unless a point source is the conveyance that adds pollution to navigable waters—to the exclusion of nonpoint sources, such as groundwaters.

The jurisdictional reach of the CWA is established by the meaning of “discharge of any pollutant” in the Act’s declaration that “the discharge of any pollutant by any person shall be unlawful.” 33 U.S.C. § 1311(a). The definition of “discharge of a pollutant” (and “discharge of pollutants”) is “any addition of any pollutant to navigable waters [or waters of the contiguous zone or the ocean] from any point source [other than a vessel or other floating craft].” *Id.* § 1362(12)(A), (B). However, the reference in this definition to “any point source” is emphatically not a reference to a mere source for a pollutant. A “point source” is expressly defined as more than a source: it is defined as a type of “conveyance” that is “discernible, confined, and discrete.” 33 U.S.C. § 1362(14). A conveyance is a “means or way of conveying,” it is not
merely a “source.”? Thus, in the definition of “discharge of a pollutant,” Congress chose to reference “any point source” as the only designated “means or way of conveying” a pollutant into navigable waters.

Congress’s stark omission of any reference to nonpoint sources, such as groundwaters, as a “means or way of conveying” a pollutant in 33 U.S.C. § 1362(12) should not be ignored. Congress repeatedly rejected amendments that would have extended the CWA to groundwater. S. Rep. No. 92-414, at 3735-3739 (1971). Furthermore, whether the conveyance of a pollutant is a point or nonpoint source is highly relevant to the CWA. Numerous provisions of the CWA distinguish between point and nonpoint sources. See, e.g., 33 U.S.C. §§ 1251, 1255, 1270, 1281, 1285, 1311, 1314, 1319, 1324, 1330, 1346. Congress was clearly aware that a nonpoint source, such as groundwaters, could be a relevant conveyance of pollution to navigable waters. Yet, Congress made no mention of any nonpoint source in the

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definition of “discharge of a pollutant,” which controls the reach of CWA point source jurisdiction. Compare 33 U.S.C. § 1311(a) with § 1362(12)(A), (B). This omission should be read as intentional.

Given the omission of any reference to any nonpoint source in the governing definitions, a straightforward application of the “expressio unius exclusio alterius” canon confirms that CWA point source jurisdiction (and NPDES permitting) applies only to point sources that themselves convey pollution into navigable waters, to the exclusion of any nonpoint source, such as groundwaters. See Nat’l R.R. Passenger Corp. v. Nat’l Ass’n of R.R. Passengers, 414 U.S. 453, 458 (1974) (“When a statute limits a thing to be done in a particular mode, it includes the negative of any other mode.’ This principle of statutory construction reflects an ancient maxim—expressio unius est exclusio alterius.”).

To sustain CWA point source jurisdiction, a “point source” must be the “conveyance” of the pollutant into navigable waters, not merely the source, because it is the only conveyance mentioned. This natural interpretation, which has been adopted by other circuits as discussed above, defeats the claim that CWA point source jurisdiction can be
sustained by a mere indirect hydrological connection between a point source and navigable waters through nonpoint sources, such as groundwaters. See also Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Dabit, 547 U.S. 71, 87–88 (2006) ("The existence of these carve-outs both evinces congressional sensitivity to state prerogatives in this field and makes it inappropriate for courts to create additional, implied exceptions.").

B. The Panel Disregarded The Cooperative Federalism Principles Embodied In The CWA

The CWA is a quintessential example of “cooperative federalism.” Catskill Mountains Chapter of Trout Unlimited, Inc. v. EPA, 846 F.3d 492, 514 (2nd Cir. 2017) ("Act largely preserves states' traditional authority over water allocation and use"). The CWA emphasizes that Congress had the intention to accommodate the traditional and "primary" role of state and local government in the field of environmental regulation. 33 U.S.C. §1251(b). The CWA also repeatedly emphasizes that federal agencies are to act in “cooperation” with the States. 33 U.S.C. §§ 1251(g), 1252(a).

When it comes to state authority to “allocate quantities of water,” such as in the Arizona Recharge Program, the CWA includes a
powerfully deferential savings clause to bar federal regulation from interfering with state primacy. 33 U.S.C. § 1251(g).\(^8\) And this savings clause is reinforced by 33 U.S.C. §1370, which states: “except as expressly provided in this chapter, nothing in this chapter shall . . . be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.”

The panel decision’s indirect hydrological connection theory of CWA point source jurisdiction is inconsistent with these manifestations of cooperative federalism in the CWA, which even the EPA recognizes. Definition of “Waters of the United States”—Recodification of Pre-Existing Rules, 82 FR 34899, 34900 (July 27, 2017) (identifying policy goals of CWA as “(a) To restore and maintain the nation’s waters: and (b) to preserve the States’ primary responsibility and right to prevent, reduce, and eliminate pollution”). It disregards the traditional

\(^8\) As part of its Recharge Program, Arizona currently oversees and regulates a vast array of groundwater storage facilities, many, if not most, of which are not currently regarded as subject to NPDES permitting. Underground Water Storage, Savings and Replenishment, available at https://new.azwater.gov/recharge (last visited 2.26.2018). Planning is underway for many more such facilities on the assumption that NPDES permitting is not necessary. USF Permit Application Online Noticing, available at https://new.azwater.gov/recharge/permitted-facilities (last visited 2.26.2018).
management and regulatory authority of states over local land and water uses. *FERC v. Mississippi*, 456 U.S. 742, 767 n.30 (1982) (management and regulation of local lands and waters “is perhaps the quintessential state activity”). And, by threatening a nearly limitless expansion of preemptive federal jurisdiction, the panel decision wrongly circumvents the Supreme Court’s efforts to moderate similarly limitless interpretations of “waters of the United States” in *Rapanos v. United States*, 547 U.S. 715, 779, 786 (2006) (Scalia, J., concurring; Kennedy, J., plurality), and *SWANCC v. U.S. Army Corps of Engineers*, 531 U.S. 159, 172-74 (2001).\9 For these reasons, the panel’s indirect hydrological connection theory of CWA point source jurisdiction, which lacks any clear and manifest textual support in the Act, should be rejected in

\9 The doctrine of constitutional avoidance requires courts to construe statutes, “if fairly possible, so as to avoid not only the conclusion that it is unconstitutional, but also grave doubts upon that score.” *United States v. Jin Fuey May*, 241 U.S. 394, 401 (1916). A mere indirect hydrological connection between a point source and navigable waters might not be a sufficient “jurisdictional element” for Commerce Clause authority under *U.S. v. Morrison*, 529 U.S. 598 (2000), and *U.S. v. Lopez*, 514 U.S. 549 (1995). The panel’s theory is also constitutionally questionable because it may effectively authorize federal permitting to supersede nearly all state authority over intrastate land and water uses. *SWANCC*, 531 U.S. at 172-74 (“significant constitutional questions” are raised by “permitting federal encroachment upon a traditional state power”); see also *Bond v. U.S.*, 564 U.S. 211, 222 (2011) (observing our system of dual sovereignty denies “any one government complete jurisdiction over all the concerns of public life”).

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favor of the interpretation that a point source must \textit{itself} be the
conveyance of pollutants into navigable waters.\textsuperscript{10}

\textbf{CONCLUSION}

For the forgoing reasons, the undersigned Amici States request
that the petition for en banc rehearing be granted.

March 12, 2018

Respectfully Submitted,

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\textsuperscript{10} A federal statute should not be construed to preempt state laws or
traditional sovereign interests unless such intent is evidenced by a clear
doctrine is applicable with special force in the context of cooperative
federalism. \textit{New York State Dept of Social Services v. Dublino}, 413
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CERTIFICATE OF COMPLIANCE


1. Exclusive of the exempted portions of the brief, as provided in Fed. R. App. P. 32(a)(7)(B)(iii) and (f), this brief is 3464 words.

2. This brief has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in 14-point Century type.

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I hereby certify that on this 12th day of March, 2018, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit using the appellate CM/ECF system. Counsel for all parties to the case are registered CM/ECF users and will be served by the appellate CM/ECF system.

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UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

TENNESSEE CLEAN WATER NETWORK;
TENNESSEE SCENIC RIVERS ASSOCIATION,
Plaintiffs-Appellees,

v.

TENNESSEE VALLEY AUTHORITY,
Defendant-Appellant.

On Appeal from the United States District Court
for the Middle District of Tennessee, Nashville Division
Case No. 3:15-cv-00424

BRIEF OF THE STATE OF ALABAMA, THE STATE OF KENTUCKY, FIFTEEN OTHER STATES, AND THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY AS AMICI CURIAE IN SUPPORT OF APPELLANT TENNESSEE VALLEY AUTHORITY

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INTEREST OF AMICUS CURIAE

The States of Alabama, Kentucky, Arkansas, Georgia, Indiana, Kansas, Louisiana, Missouri, Montana, Nebraska, Oklahoma, South Carolina, Texas, Utah, West Virginia, Wisconsin, Wyoming, and the Mississippi Department of Environmental Quality file this brief under Rule 29(a) of the Federal Rules of Appellate Procedure.\(^1\)

The *amicus* States have a substantial interest in this case because the lower court’s decision creates an unprecedented extension of federal jurisdiction under the Clean Water Act ("CWA") and the National Pollutant Discharge Elimination System ("NPDES"), expanding federal regulation to those waters historically regulated by the States. That result is contrary to both the text and the cooperative federalism scheme expressed in the CWA, and erodes the States’ role as principal regulators and protectors of groundwater and land resources. Moreover, the lower court’s expansion of federal jurisdiction to “hydrologically-connected” groundwater will increase administrative and legal costs to the States and their environmental protection agencies without materially improving environmental quality.

In addition, certain *amicus* States’ interest extends beyond legal and jurisdictional disputes. The lower court’s remedy, ordering closure of the Gallatin

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\(^1\) A State “may file an amicus-curiae brief without consent of the parties or leave of court.” Fed. R. App. P. 29(a).
ash ponds by excavation and removal, would cost approximately $1.8 billion to 4.0 billion. As TVA will pass this cost on to its captive utility customers, such a costly remedy will have an unanticipated, immediate, and profound impact on utility ratepayers. If this Court upholds the lower court’s remedy, and closure-by-removal is subsequently applied throughout the Sixth Circuit, the resulting costs to utility customers would be astronomical, costing in the tens-of-billions of dollars. Ratepayers in states outside of the Sixth Circuit who receive wholesale utility service from TVA, like Mississippi, Georgia, and Alabama, would suffer the same negative consequences if the legal arguments and remedies the lower court adopted are accepted by this Court.

SUMMARY OF ARGUMENT

The CWA strikes a balance between state and federal environmental enforcement in a cooperative scheme designed to protect the nation’s waters. The CWA prohibits discharges of pollutants from “point sources,” like pipelines, into waters of the United States. Congress expressly left regulation of groundwater pollution to the States. The pollution at issue here occurred on intrastate land, with some pollutants—eventually and indirectly—making their way to waters of the United States by seeping into the ground from coal ash ponds and migrating through the groundwater. The CWA does not apply to this form of groundwater pollution.
Nevertheless, the district court adopted a “hydrological connection” theory, which has the effect of end-running the jurisdictional limitations embodied in the CWA. The lower court’s adoption of this theory effectively erases the distinction between state and federal authority, which is incorporated into the CWA’s very structure. Moreover, the lower court’s decision creates unnecessary complexities and administrative costs to States attempting to navigate new and unanticipated regulatory duties imposed upon them under an atextual theory, rather than clear text approved by representatives of the States in Congress.

Indeed, the lower court’s decision creates additional, unanticipated costs for TVA’s utility customers both in and out of the Sixth Circuit. Notably, while monopoly-status utilities pass on environmental compliance costs to captive customers, those costs are typically associated with legal and regulatory policy initiatives enacted by elected officials or their delegates. Despite this fact, the lower court mandated – in a proceeding with limited evidence and stakeholder participation – a remedy of “closure by excavation and removal,” which will cost billions that will ultimately be passed on to captive customers in states both within the Sixth Circuit and elsewhere. Application of such a remedy to the dozens of coal ash ponds in the Sixth Circuit in subsequent litigation would add to already mounting costs and could effectively mean hundreds-of-thousands of customers being unable
to afford electricity. This Court should avoid such unintended, costly results and reverse the lower court’s flawed decision.

ARGUMENT

I. The Hydrological Connection Theory of CWA Jurisdiction Is Inconsistent with the Text of The CWA and Cooperative Federalism Principles.

This Court should reject a flawed hydrological connection theory of CWA jurisdiction that is contradictory to the text of the statute and the cooperative federalism principles embodied in its structure. The CWA generally prohibits “the discharge of any pollutant” from a “point source” to “navigable waters,” without an NPDES permit. See 33 U.S.C. §§ 1311(a); 1342; 1362(12). However, the Act’s express language does not include groundwater within federal jurisdiction — a limitation confirmed by the Act’s legislative history, wherein Congress explicitly determined that regulation of ground water be left to the States. Indeed, numerous courts have confirmed that the theory adopted by the lower court is unworkable, finding that hydrologically connected groundwater is neither a “point source” nor a “navigable water” under the text of the Act. See e.g., Kentucky Waterways Alliance, et al. v. Kentucky Utilities, Civ. Action No. 5: 17-292-DCR, 2017 WL 6628917, (E.D. Ky. Dec. 28, 2017).
Management of local lands and waters “is perhaps the quintessential state activity.” *FERC v. Mississippi*, 456 U.S. 742, 767, n. 20 (1982). To secure the reserved power of the States over local land and water resources, the Supreme Court has required a clear statement of congressional intent to interfere with the States’ “traditional and primary power of land and water use” when assessing the validity of expansive interpretations of the CWA. *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 174 (2001) (hereinafter “SWANCC”). But there is no clear statement of Congressional intent to subject regulated parties for groundwater discharges present in the text of the CWA. Instead, Congress chose to leave regulation of groundwater, including groundwater that is “hydrologically connected” to “navigable waters” within the purview and jurisdiction of the States. As a result, the lower court erred when it adopted the hydrological connection theory of CWA jurisdiction.

It is beyond dispute that groundwater does not in itself constitute “navigable waters” and the District Court’s opinion below does not purport to hold otherwise. The CWA’s definition of navigable waters—“waters of the United States, including the territorial seas”—excludes groundwater. 33 U.S.C. § 1362(7). Federal regulations likewise exclude groundwater from navigable waters. 40 C.F.R. §§ 122.2, 230.3(o); 33 C.F.R. § 328.3(a). See also 79 FR 22188, 22218 (Apr. 21, 2014)
(“The agencies have never interpreted ‘waters of the United States’ to include groundwater”).

And the CWA defines the term “discharge of any pollutant” as “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12) (emphasis added). The addition of a pollutant to groundwater from a point source is not enough; Congress repeatedly rejected proposed bills adding that language. See infra pp. 8-9.

A discharge that migrates through groundwater from a point source to navigable water is not an addition of a pollutant to navigable waters from a point source. It is an addition of a pollutant to groundwater from a point source. Thus, the addition of pollutants to groundwater does not constitute an “addition of any pollutant to navigable waters from any point source,” as the District Court’s hydrological connection theory requires. 33 U.S.C. § 1362(12). The possibility of a “hydrological connection” between groundwater and navigable waters is not “a sufficient ground of regulation.” Village of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994) (“the statute Congress enacted excludes some waters, and ground waters are a logical candidate.”) (emphasis in original).

Nor does groundwater itself constitute a “point source.” Under the CWA, a “point source” is “any discernible, confined and discrete conveyance,” which includes (but is not limited to) “any pipe, ditch, channel, tunnel, conduit, well,
discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). But groundwater is neither discernable, confined, nor discrete. “It is basic science that ground water is widely diffused by saturation within the crevices of underground rocks and soil,” and “[a]bsent exceptional proof of something akin to a mythical Styx-like subterranean river,” “passive migration of pollutants” through groundwater is not a discharge from a point source. 26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., 2017 WL 2960506, at *8 (D. Conn. July 11, 2017).

Moreover, while the CWA does prohibit indirect discharges into navigable waters, those discharges must proceed from one distinct point source (e.g. a pipe) into another (e.g. a drainage ditch), which is designed or intended to channel water into navigable waters. See, e.g., Rapanos v. United States, 547 U.S. 715, 743 (2006) (plurality opinion). Given the ubiquitous presence of groundwater in State lands, the lower court’s expansive reading of the CWA would authorize the federal government “to function as a de facto regulator of immense stretches of intrastate land.” Id. at 738 (plurality opinion) (citation omitted). Such “an unprecedented intrusion into traditional state authority” requires a “clear and manifest statement from Congress.” Id. “The phrase ‘waters of the United States’ hardly qualifies.” Id. As a result, migration of pollutants through groundwater is not covered by the
CWA’s prohibition on indirect discharges because groundwater does not constitute a “point source” within the meaning of the statute.

Extending the reach of the CWA to encompass hydrologically connected groundwater would be facially inconsistent with the cooperative federalism structure embodied in the CWA. The EPA has emphasized that the CWA “commands the [EPA] to pursue two policy goals simultaneously: (a) To restore and maintain the nation’s waters; and (b) to preserve the States’ primary responsibility and right to prevent, reduce, and eliminate pollution.” 82 Fed. Reg. at 34900 (emphasis added). As one court stated: “Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that ground water is eventually or somehow ‘hydrologically connected’ to navigable surface waters.” Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014). Instead, Congress determined that regulation of groundwater pollution be left to the states. See Exxon Corp. v. Train, 554 F.2d 1310, 1325-29 (5th Cir. 1977).

The CWA’s legislative history further confirms that Congress extensively considered whether to extend CWA jurisdiction to groundwater and chose not to. Id. Although the Senate Committee on Public Works expressly recognized “the essential link between ground and surface waters and the artificial nature of any distinction,” it expressly rejected, after “heated debate,” an amendment that would
have extended the CWA to groundwater. *Id.* at 1325, 27-29 (*quoting* S. Rep. No. 414, 92d Cong., 1st Sess. 73 (1971)). Instead, Congress determined that regulation of groundwater be left to the States. *Id.* at 1325-29; *see also* *Kelley ex rel. Mich. v. United States*, 618 F. Supp. 1103, 1107 (W.D. Mich. 1985)). Respecting the balance of roles and policy goals that Congress adopted in the CWA is the best way to ensure the existence of strong environmental protection programs at both the State and federal levels. For these reasons, this Court should reverse the lower court's decision.


This Court should not adopt an atextual theory of federal CWA jurisdiction that is certain to drastically increase the cost of States' administration, regulation, enforcement of the NPDES program as well as the costs of citizen and business compliance with the CWA and NPDES program. Initially, expanding CWA liability to groundwater would immediately force States to undergo massive expansion of NPDES programs beyond discharges from "discrete conveyances" to the entire network of underground capillaries that ultimately lead to "navigable waters," or else risk losing their authority to issue NPDES permits altogether. *See 33 U.S.C. § 1342(c)(3).* Next, expanding the NPDES permitting regime would strap the States' environmental protection resource. Finally, the hydrological connection theory
would dramatically increase the number of regulated individuals and business and their CWA and NPDES compliance costs.

Simply put, the adoption of the hydrological connection theory would cause a radical and impracticable expansion of States’ NPDES permitting programs. NPDES permits issued by authorized state agencies contain precise discharge limits from specific point sources into covered water. Compliance with the terms of a permit is the prerequisite for avoiding liability. See, e.g., 33 U.S.C. §§ 1311(a), 1342. But the degree of precision necessary to draft permits with clear compliance requirements would be nearly impossible to replicate with respect to groundwater discharges. States would be forced to issue permits for any flows, seeps, or fissures, including those that are hidden and malleable. The trajectory and speed of groundwater flow depends on geography and gravity, not design. These factors would make it extremely difficult to draft a permit with precise discharge parameters or monitor compliance or seepage.

The struggle to regulate this radically expanded realm of CWA permitting would place an untenable strain on the environmental protection resources of the States. At present, the time and costs for States to administer NPDES permitting programs and otherwise satisfy the requirements of the CWA already require an estimated $83 million in annual labor costs and 1.8 million hours per year. See EPA ICR Supporting Statement, Information Collection Request for National Pollutant
Discharge Elimination System (NPDES) Program (Renewal), OMB Control No. 2040-0004, EPA ICR No. 0229.22 at 23 tbl. 12.1 (Sept. 2017).

In addition to the hundreds or thousands of new permitting applications, States would, at a minimum, be forced to undertake significant environmental impact studies of the many newly covered sources of pollution in order to develop data sufficient to regulate with any degree of precision, coherence, and conformity with established scientific principles. States would also necessarily be required to expand the extent and applicability of their respective water quality standards ("WQS") to cover groundwater. See 33 U.S.C. §§ 1311(b)(1)(C), 1313(e)(3)(A); 40 C.F.R. §§ 130.3, 131.3(i), and 131.4(a). Such a result would expand States’ duties to revise WQS or require them to issue altogether new WQS. See 33 U.S.C. §§ 1313(c)(3); 1315(b)(1)(A)-(B). Moreover, States could not simply decline to undertake these burdensome costs. Instead, if a State chose not to extend its permitting programs to include the addition of pollutants to “groundwater,” it would immediately risk EPA revocation of its authority to issue NPDES permits altogether. See 33 U.S.C. § 1342(c)(3). Ultimately, this theory of CWA jurisdiction would require States to devote astronomical resources from already strained budgets.

Finally, the hydrological connection theory would dramatically increase the number of regulated parties and their compliance costs. The “systemic consequences” of the CWA can be “crushing” “to landowners for even inadvertent
violations.” *Hawkes*, 136 S.Ct. at 1816 (Kennedy, J., concurring). For example, owners of large parking lots could find themselves subject to CWA citizen suits as storm water runoff mixes with petroleum products discharged by cars parked on pavement, and may make its way into groundwater and eventually “navigable water.” The same logic extends to runoff from state, county, and municipal roads and highways. As all groundwater may eventually migrate to navigable waters, individuals and companies will likely find it prudent to seek NPDES permits for essentially every discharge that might find its way to groundwater, resulting in the imposition of immense compliance costs on regulated parties. As the Supreme Court has recently emphasized, the NPDES permitting process is “arduous, expensive, and long.” *U.S. Army Corps of Engineers v. Hawkes Co.*, 136 S.Ct. 1807, 1815 (2016). In sum, the lower court’s adoption of the hydrological connection theory would cause CWA and NPDES compliance costs to skyrocket for both individuals and businesses. As a result, this Court should reverse the lower court’s decision.

III. Extending the CWA’s Scope Is Unnecessary.

This Court should not adopt an unnecessary, atextual theory of federal CWA jurisdiction in light of other state and federal laws that provide adequate, alternative methods for addressing groundwater pollution. The NPDES structure is ill-suited to regulate discharges into groundwater, as explained above, but there are numerous federal and state programs that are better tailored to address groundwater pollution.
These existing laws and programs render the extension of CWA jurisdiction to hydrologically connected groundwater unnecessary. *See Catskill Mountains v. Ch. of Trout Unlimited, Inc. v. EPA*, 846 F.3d 492, 529 (2d Cir. 2017) (finding narrower interpretation of CWA reasonable in part because “several alternatives could regulate pollution . . . even in the absence of an NPDES permitting scheme”).

Several other federal statutes provide the federal government authority to regulate the migration of pollutants through groundwater. For example, the Resource Conservation and Recovery Act (“RCRA”) provides the government the power to bring suits and criminal actions against persons who dispose of solid or hazardous waste, past or present, which “may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6973(2). Indeed, the EPA has exercised its authority under RCRA to regulate the disposal of solid waste by promulgating a rule establishing minimum national standards for the disposal of coal combustion residuals (“CCR”) generated by electric utilities and independent power producers, like the pollutants at issue in this case. *See* Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302 (Apr. 17, 2015), 2010 WL 2470432 (“CCR Rule”); 40 C.F.R. 257.50-257.107. Under the Rule, any existing unlined CCR surface impoundment that is contaminating groundwater above a groundwater protection
standard established by the EPA must stop receiving CCR and either retrofit or close, except in limited circumstances. 40 C.F.R. § 257.71; id. § 257.101.

In addition, The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") grants federal authority to order removal of pollutants or other remedial action whenever any "hazardous substance is released or there is a substantial threat of such a release into the environment." 42 U.S.C. § 9604(a)(1). Unlike the CWA, CERCLA provides authority to remediate "release of pollution" into "environment," expressly including the "navigable waters" and "any other surface water, ground water, drinking water supply, land surface, or subsurface strata, or ambient air within the United States." 42 U.S.C. § 9601(8) (emphasis added). Had Congress intended the CWA to include ground water it would have explicitly said so, as it did under CERCLA.

Moreover, States have long exercised their power to protect intrastate waters and groundwater independent of the CWA NPDES permitting program. Tennessee law, for example, directly addresses the discharge of pollutants into groundwater by rendering it "unlawful for any person to discharge any substance into the waters of the state" where such substances qualify as statutorily defined pollutants and the discharge was not "properly authorized" by state authorities. T.C. § 69-3-114(a); T.C. § 69-3-103 (defining "pollutant"). This prohibition clearly encompasses the discharge of pollutants into groundwater, because the applicable statutory definition
of “waters” includes “any and all water, public or private, on or beneath the surface of the ground, that are contained within, flow through, or border upon Tennessee.”

T.C. § 69-3-103 (emphasis added). Other States in this Circuit enforce similar laws, including—but not limited to—the following:

- Kentucky law provides that “no person shall, directly or indirectly . . . discharge into any of the waters of the Commonwealth . . . any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth” except as authorized by state regulatory authorities.” KRS § 224.70-110; KRS § 224.1-010 (defining “waters” and “waters of the Commonwealth” to include “underground water”).

- Michigan law provides that a “person shall not directly or indirectly discharge into the waters of the state a substance that is or may become injurious” to a broad array of interests, including public health, commercial, industrial and agricultural land uses, and the protection of wild flora and fauna. M.C.L. 324.3109(1). The term “waters of the state” is explicitly defined to include “groundwaters . . . within the jurisdiction of this state.” M.C.L. 324.3101(aa).

- Ohio law makes it unlawful for any person to “cause pollution or place or cause to be placed any sewage, sludge, sludge materials, industrial waste, or other wastes in a location where they cause pollution of any waters of the state.” R.C. § 6111.04(A)(1); R.C. § 6111.01 (defining “waters of the state” to include all “bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located . . . except those private waters that do not combine or effect a junction with natural surface or underground waters”).

In sum, state and federal laws already provide important regulatory checks on groundwater pollution. At best, the hydrologically connected groundwater theory is an expensive, atextual, redundancy. As a result, this Court should respect the
jurisdictional limitations embodied in the text of the CWA and reverse the lower court’s decision.

IV. The Lower Court’s Order Would Impose Substantial Costs on Utility Customers

A. The Impact to Customers Is Immediate and Profound.

Just like any other utility with regulated rates, the TVA generally passes its costs on to consumers.\(^2\) While the specific type of costs that utilities experience may vary, the broad categories of costs the TVA incurs are typical of the industry, and include “[o]peration, maintenance and administration of the utilities’ power system; taxes or in lieu of tax payments; and, capital costs such as debt service payments.”\(^3\)

Over the past few decades, utilities have spent an increasing amount of capital on environmental compliance. For instance, “[f]rom the 1970s to 2017, TVA spent approximately $6.7 billion on controls to reduce emissions from its coal-fired power plants.”\(^4\) The bulk of environmental compliance costs are attributable to government mandates and sweeping regulatory changes, such as the implementation of the Clean

\(^2\) The TVA board has some discretion in determining when costs are recovered through rates, but generally, the TVA sets its rates at levels that will recover its costs. TVA 10-K For the fiscal year ended Sep. 30, 2017 (“TVA 2017 10-K”), at 11-12, accessible here <https://www.sec.gov/Archives/edgar/data/1376986/000137698617000031/tve-09302017x10k.htm>.

\(^3\) Id.

\(^4\) Id. at 32-33.
Water Act and Clean Air Act, or standards for Sulfur Dioxide or Nitrogen Oxides. For example, in 2011 the TVA initiated a project at the Gallatin Plant to install a dry flue gas desulfurization control ("dry FGD") to the tune of $730M, wherein, "[t]he Project allowed TVA to reduce the plant's sulfur dioxide and nitrous oxide emissions into the air."5 When a utility spends significant sums for the purpose of regulatory compliance, the expenses are typically passed on to consumers. When provided with two reasonable options like in this matter — deciding between whether to close-by-removal or close-in-place a coal ash pond — a utility's decision will generally be reflected on customers' bills for decades to come.

The remedy provided by the lower court much more expensive than the alternative remedy. The TVA's preferred option of addressing the future of the Gallatin ash ponds—and an option specifically authorized by the EPA's CCR rule—is a process referred to as closure-in-place. The estimated cost of closure-in-place, as provided to TDEC, is $230 million.6 This is in stark contrast to the remedy ordered by the lower court (and advanced by the Appellees) of the "excavation and offsite relocation of CCR Material," costing approximately $2 billion.7 Should this remedy

5 Trial Tr. (Vol. 4), RE 237, PageID#9513.  
6 Trial Tr. (Vol. 4), RE 237, PageID#9520.  
7 Id.
be upheld, the cost to TVA’s customers for this project alone will likely be nearer to
$4 billion when considering the cost of debt.\textsuperscript{8}

\textbf{B. If this Remedy in this Case Is Upheld and Applied to Additional TVA Sites, the Cost will be Unduly Burdensome to Customers.}

If the hydrological connection theory becomes binding in this Circuit, these costs will dramatically increase. Additional citizen suits will almost certainly follow, likely resulting in closure-by-removal of most, if not all, of the coal ash ponds operated by the TVA. The ratepayer impact of this broad reading and implementation of the CWA, together with the burdensome remedy and subsequent application to other impoundments, would lead to unaffordable bills for many TVA customers. For instance, the cost estimation information provided by the Part II EIS programmatic review, an environmental impact and cost study conducted for the TVA, of ten (10) other wet ash-handling facilities at six (6) additional TVA fossil fuel sites, suggests that if those facilities were closed-by-removal, rather than closed-in-place, the \textit{net} difference in cost would be roughly $2.7 billion, before considering financing costs.\textsuperscript{9}

\textsuperscript{8} Calculated assuming a 30-year amortization period and a debt rate of 4.75%, which is conservative compared to the TVA’s 2017 blended interest rate of 5.11%, TVA 2017 10-K, at 61. 30 years was used as the amortization period as it is generally the ordinary length of time in which large, long-term debts are borrowed and to reflect the anticipated length of ash pond closure-by-removal for Gallatin (24 years). See Proposed Compliance Timetable, RE268, PageID#10883.

\textsuperscript{9} To simplify, the amounts used were those provided for the closure-by-removal (truck) option in the Part II-Programmatic Reviews.
Coupled with the net difference between the costs of the two options at the Gallatin facility, and including financing costs, the estimated cost to TVA customers if the utility is forced to close-by-removal fourteen (14) of its twenty-two (22) total coal ash facilities is more than $8,500,000,000. This estimate does not include the eight (8) ash impoundments that do not have Part II EIS reviews or are part of this litigation. If the other eight (8) ash impoundments are considered, the net cost to TVA customer for the closure-by-removal remedy vs. closure-in-place is likely in excess of $10,000,000,000. Importantly, the TVA currently has outstanding debt in excess of $20 billion, while the TVA Act only authorizes the TVA to issue bonds in an amount not to exceed $30 billion at any time. Similar citizen suits and the imposition of same remedy as the underlying matter could ultimately devastate TVA’s financial position, putting the future of millions of American’s energy supply at risk.

In 2016, Kentucky customers represented approximately 6.5% of the total kWh’s sold by TVA.\textsuperscript{12} Thus, it is reasonable to assume that Kentucky customers would be liable for approximately 6.5% of the $8,500,000,000 net cost associated with the closure-by-removal remedy (rather than closure-in-place) for fourteen (14) of TVA’s ash impoundments – or $550,000,000. Assuming those costs are recovered on a levelized basis over 30 years\textsuperscript{13}, the cost of this single issue will lead to residential customers in Kentucky paying $5,000,000 more a year.\textsuperscript{14} This increase to Kentucky customers provides them no corresponding benefit. These customers do not live in a State where any of the fourteen (14) referenced impoundments are located, while those in Kentucky who live near the Cumberland River are hundreds-of-miles upstream from the Gallatin plant. Any perceived safety or environmental benefits that may be claimed by the Appellees as a result of the ordered remedy will be of little assistance to those 200,000 Kentucky households that will see their bills rise more than necessary than if the TVA closes-in-place its ash ponds. When considering the effect on customers of closing-by-removal all TVA ash


\textsuperscript{13} See footnote 9 stating that the assumed amortization period is 30 years.

\textsuperscript{14} $ 8.5 \text{ billion} \times 6.5\% = $552,500,000 \newline$ 552,500,000 / 30 \text{ years} = $18,416,667 \newline$ 18,416,667 \times 0.2745$ (\% of total 2016 Ky. kilowatt-hours represented by residential customers) = $5,055,375
impoundments, as opposed to closure-in-place, the remedy ordered by the lower court appears to be even more unreasonable.

If similar citizen suits, demanding the same draconian remedy for every impoundment, are applied across the Sixth Circuit additional consumers will suffer. Kentucky, like the others states in the Sixth Circuit, has dozens of ash impoundments. If the lower court’s interpretation of law and the applied remedy are upheld in this matter, similar citizen suits will undoubtedly follow. Due to the rate-regulated nature of most States’ utilities, the consequence of these suits and subsequent mandated remedy of closure-by-removal, will without question lead to increased rates for consumer. For legal precedent based on limited evidence to mandate that utilities close-by-removal all ash impoundments, regardless of whether that method is the most reasonable, will ultimately lead to unaffordable and burdensome utility rates. Using the estimated size of the ash impoundments in Kentucky, and extrapolating the cost estimated in TVA’s programmatic reviews, the costs that will be passed onto customers within the Sixth Circuit alone will be tens-of-billions of dollars. Along with the inappropriate interpretation of the CWA, the remedy the lower court ordered is an unreasonable application of the CWA to these facts, and the precedent it sets for the rest of the States within the Circuit is untenable for customers. Reasonable minds can differ among stakeholders as to the most prudent long-term plans for these impoundments, and under cooperative federalism
every stakeholder has an opportunity in the process to voice those concerns. If upheld, customers across the Circuit will be paying for the preference of those citizens who have strong opinions regarding environmental issues – not what the most reasonable outcome should be.

Consumers in Mississippi, Georgia and Alabama all receive service from, and pay rates to TVA, although they are located outside of the Sixth Circuit. As a consequence of this matter, and any others where TVA may be forced to close its ash impoundments by removal under an unreasonable application of the CWA, customers in those States will pay their portion of the costs, just like residents of the Sixth Circuit States. These States are not within the footprint of the Sixth Circuit, but those consumers will nevertheless be burdened with any negative consequences of the district court’s decision. In fact, the Fifth Circuit, in which Mississippi is located, has already rejected similar arguments under the CWA as those before us.\footnote{See Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001).} Thus, although the federal courts in their State and Circuit have rejected the legal arguments made by Appellees here, consumers may nevertheless pay for a contradictory decision from a different Circuit.
CONCLUSION

For the foregoing reasons, the Court should reverse the judgment of the District Court.

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE


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Dated: February 6, 2018

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CERTIFICATE OF SERVICE

I certify that on February 6, 2018, I electronically filed this document using the Court’s CM/ECF system, which will serve an electronic copy on all registered counsel of record.

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UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

TENNESSEE VALLEY AUTHORITY,
Defendant-Appellant,

v.

TENNESSEE CLEAN WATER NETWORK and TENNESSEE SCENIC RIVERS ASSOCIATION,
Plaintiffs-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF TENNESSEE, NASHVILLE DIVISION

CASE NO. 3:15-CV-00424


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Of Counsel for American Chemistry Council
Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 8th Cir. R. 26.1, Chamber of Commerce of the United States of America makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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Disclosure of Corporate Affiliations
and Financial Interest

Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 25.1, Tennessee Chamber of Commerce & Industry
makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the
   identity of the parent corporation or affiliate and the relationship between it and the named
   party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest
   in the outcome? If yes, list the identity of such corporation and the nature of the financial
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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155  Case Name: TVA v. Tenn. Clean Water Network et al
Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, Kentucky Chamber of Commerce
makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155
Case Name: TVA v. Tenn. Clean Water Network et al
Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, National Association of Manufacturers makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   No

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Richmond, VA 23219

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, American Chemistry Council makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   No

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, American Iron & Steel Institute makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   At this time, American Iron & Steel Institute ("AISI") is not aware that any of its member companies have a financial interest in the outcome of this matter "by reason of insurance, a franchise agreement, or indemnity agreement." L.R. 26.1(b)(2). AISI reserves the right to supplement this disclosure should new or different information become available.

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, American Public Power Association makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   No

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit  
Case Number: 17-6155  
Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, National Rural Electric Cooperative Association makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

No

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155
Name of Counsel: Elbert Lin

Case Name: TVA v. Tenn. Clean Water Network et al

Pursuant to 6th Cir. R. 26.1, The Energy Institute of Alabama makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No. The Energy Institute of Alabama ("EIA") is a non-profit, trade association. EIA's members include corporations with publicly held affiliates, but EIA itself is not publicly held, is not a subsidiary of any corporation, and has no corporate affiliation with any corporation that is publicly held.

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   No

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/s/ Elbert Lin
Hunters & Williams LLP, 951 E. Byrd St.
Richmond, VA 23219

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Disclosure of Corporate Affiliations and Financial Interest

**Sixth Circuit**

**Case Number:** 17-6155  
**Case Name:** TVA v. Tenn. Clean Water Network et al

**Name of counsel:** Elbert Lin

**Pursuant to 6th Cir. R. 26.1, The Mississippi Energy Institute**

makes the following disclosure:

1. **Is said party a subsidiary or affiliate of a publicly owned corporation?** If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   | No |

2. **Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome?** If yes, list the identity of such corporation and the nature of the financial interest:

   | No |

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Sixth Circuit
Case Number: 17-6155
Case Name: TVA v. Tenn. Clean Water Network et al
Name of counsel: Ebert Lin

Pursuant to 6th Cir. R. 26.1, Association of Tennessee Valley Governments
makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, The Tennessee Farm Bureau Federation makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155
Name of counsel: Elbert Lin

Case Name: TVA v. Tenn. Clean Water Network et al.

Pursuant to 6th Cir. R. 26.1, Kentucky Farm Bureau makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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Sixth Circuit
Case Number: 17-6155

Case Name: TVA v. Tenn. Clean Water Network et al

Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, Utility Water Act Group makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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s/Elbert Lin
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Richmond, VA 23219

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155
Case Name: TVA v. Tenn. Clean Water Network et al.
Name of counsel: Elbert Lin

Pursuant to 6th Cir. R. 26.1, Kentucky Industrial Utility Customers, Inc.

Name of Party
makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

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**MISCELLANEOUS**


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INTEREST OF AMICI CURIAE

Amici curiae ("amici") urge this Court to reject the district court’s incorrect expansion of the Clean Water Act ("CWA" or "Act") point source program. That expansion is premised on the mistaken belief that releases of pollutants to groundwater would otherwise escape regulation, and it now threatens to undermine other CWA programs and environmental laws actually intended to regulate such pollution.

Amici are the Chamber of Commerce of the United States of America, Tennessee Chamber of Commerce & Industry, Kentucky Chamber of Commerce, National Association of Manufacturers, American Chemistry Council, American Iron & Steel Institute, American Public Power Association, National Rural Electric Cooperative Association, The Energy Institute of Alabama, The Mississippi Energy Institute, Association of Tennessee Valley Governments, The Tennessee Farm Bureau Federation, The Kentucky Farm Bureau, Utility Water Act Group, and Kentucky Industrial Utility Customers, Inc. They represent a cross-section of the entire economy. Many (if not all) of their members are subject to the CWA and are thus keenly interested in the interpretation and application of the CWA’s

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1 This brief was submitted with an accompanying motion for leave to file pursuant to Federal Rule of Appellate Procedure 29(a)(3). No counsel for a party authored this brief in whole or in part, and no party or their counsel or any person other than amici, their members, or their counsel contributed money that was intended to fund the preparation or submission of this brief.
point source and nonpoint source programs, as well as the CWA’s interaction with other environmental laws, including the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901 et seq. Given amici’s broad perspective, this brief not only addresses the district court’s failure to follow the Act’s text, structure, and legislative history, but also highlights the regulatory uncertainty and costs that would be imposed upon the economy by the district court’s interpretation of the CWA.

ARGUMENT

The core statutory question in this case is not whether pollutants released to groundwater are controlled, but under which type of CWA program—point source or nonpoint source—or other environmental law such releases fall. Congress enacted two principal CWA programs to protect human health and the environment from releases of pollutants to water. First, the point source program prohibits "any addition of any pollutant to navigable waters from any point source," such as a pipe, ditch, or other "discernible, confined and discrete conveyance," unless authorized by a National Pollutant Discharge Elimination System (“NPDES”) permit. See Nat’l Ass’n of Mfrs. v. Dep’t of Def., No. 16-299, 2018 WL 491526, at *4 (U.S. Jan. 22, 2018) (quoting 33 U.S.C. §§ 1362(12), (14)); see also 33 U.S.C. § 1311(a). Second, recognizing that not all water pollution results from point source discharges to navigable waters, Congress created nonpoint source programs
that apply to other releases and gave states primary responsibility for developing such programs with federal support. See infra pp. 9-10. In addition, Congress provided in another environmental law—RCRA—direct federal and state oversight of the ash management features at issue here.

The district court incorrectly expanded the CWA’s point source program based on an unfounded concern that pollution released into groundwater might otherwise escape regulation. Tenn. Clean Water Network v. Tenn. Valley Auth., No. 3:15-cv-00424, 2017 WL 3476069, at *43 (M.D. Tenn. Aug. 4, 2017) (“TCWN”). Without analyzing the statute’s text, structure, or compelling legislative history, the district court permitted a cause of action under the CWA’s point source program for “discharges through groundwater, if the hydrologic connection between the source of the pollutants and navigable waters is direct, immediate, and can generally be traced.” Id. at *44.

As discussed below, releases of pollutants into groundwater do not fall under the point source program; instead, they are subject to the CWA’s nonpoint source programs and other environmental laws. That is unambiguously clear from the CWA’s text, structure and legislative history, EPA’s contemporaneous interpretations, and well-reasoned case law. But even if the statute were unclear,

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the effect of the district court’s interpretation on other regulatory programs, as well as the regulatory uncertainty and enormous expansion of the point source program that it creates, makes it entirely implausible that Congress would approve such a reading of the statute.


   A. The Statutory Text Limits the Point Source Program to Circumstances Where Pollutants Are Carried Into Navigable Waters by a “Discernible, Confined and Discrete Conveyance.”

   The point source program prohibits “the discharge of any pollutant” except as authorized by a NPDES permit. 33 U.S.C. § 1311(a). The term “discharge of a pollutant” means “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12). In turn, a “point source” is defined as “any discernible, confined and discrete conveyance … from which pollutants are or may be discharged.” *Id.* § 1362(14). A prohibited “discharge” under the point source program, therefore, includes only the “addition of any pollutant to navigable waters from” “any discernible, confined and discrete conveyance … from which pollutants are or may be discharged.” *Id.* § 1362(12), (14) (emphases added).

   The only plausible reading of this text is that the point source program applies only where pollutants are added into a navigable water by something “discernible, confined and discrete.” Congress did not extend the program to the addition of pollutants to navigable waters traceable to any “discernible, confined
and discrete” source. Were that true, the statute might plausibly encompass the release of pollutants from a “discernible, confined and discrete” source where the pollutants eventually, through some other means, reach a navigable water. Rather, Congress required the pollutants to come “from” a “conveyance” “from which pollutants are or may be discharged” “to navigable waters,” id. § 1362(14), i.e., something that both carries and discharges pollutants into navigable waters. To give those words meaning, the point source program must be limited to circumstances where the pollutants are carried to, and discharged into, the navigable water by something “discernible, confined and discrete.” In short, a point source must be the means by which the pollutants reach and are added to navigable waters.

The Supreme Court agrees: the CWA “makes plain” that a point source must “convey the pollutant to ‘navigable waters’” to be subject to NPDES permitting. S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 105 (2004) (emphasis added). Emphasizing the word “conveyance,” the Supreme Court explained that a point source “need not be the original source of the pollutant,” but it does “need [to] convey the pollutant to ‘navigable waters.’” Id. at 105; see also Simsbury-Avon Pres. Soc’y, LLC v. Metacon Gun Club, Inc., 575 F.3d 199, 224 (2d Cir. 2009) (Act “requires that pollutants reach navigable waters by a ‘discernible, confined and discrete conveyance’”).
This is also the only reading that maintains any meaningful distinction between point source and nonpoint source pollution. The requirement that a pollutant be conveyed to and added to the navigable water by a point source, and not just have been emitted by a point source at some time before reaching the navigable water, prevents the point source program from encompassing virtually all water pollution. As one court recently explained, “any non-point-source pollution … could invariably be reformulated as point-source pollution by going up the causal chain to identify the initial point sources of the pollutants that eventually ended up through non-point sources to come to rest in navigable waters.” *Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth.*, No. 3:15-cv-1439 (JAM), 2017 WL 2960506, at *8 (D. Conn. July 11, 2017), *appeal docketed*, No. 17-2426 (2d Cir. Aug. 4, 2017).3

The holding below that the point source program covers pollutants that migrate to navigable waters “through groundwater” does not comport with the

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3 This interpretation does not require reading the word “directly” into the statute. Though the Supreme Court was “not decid[ing]” the scope of the point source program in *Rapanos v. United States*, the plurality opinion by Justice Scalia correctly observed that the statutory text does not prohibit only “direct” discharges, 547 U.S. 715, 743 (2006) (plurality op.). The requirement is not that a pollutant originate from a point source and be discharged immediately into navigable waters, but only that the pollutant must be added by a point source to navigable waters. Thus, a pollutant discharged by a point source may “indirectly” reach navigable waters, if it has “pass[ed] through conveyances in between” and is added to those navigable waters by a point source, as was true in every case cited by the *Rapanos* plurality. *Id.* (internal quotations omitted).
statute’s plain text. The district court did not find, nor could it have found, that the groundwater itself is a point source.

Groundwater is, by its nature, a diffuse medium and not the kind of discernible, confined and discrete conveyance contemplated by the CWA’s definition of point source. *Ky. Utils.*, 2017 WL 6628917, at *10 (internal quotation marks and citation omitted); *see also 26 Crown Assocs.*, 2017 WL 2960506, at *8 (“a diffuse medium like ground water for the passive migration of pollutants to navigable waters cannot constitute a ‘point source’ ....”). Thus, pollutants added by groundwater to navigable waters have not been carried to and discharged into the navigable waters by a “discernible, confined and discrete conveyance,” as the statute requires.

The district court’s arbitrary limitations—that there must be a “hydrologic connection” that is “direct, immediate, and can generally be traced,” *TCWN*, 2017 WL 3476069, at *44—merely highlight its error. As one court has observed, the district court below felt compelled to “attempt[] to mitigate” the consequences of its holding, *Ky. Utils.*, 2017 WL 6628917, at *11 n.3, like every other court that has erroneously extended the point source program. 4 The need for that “crucial

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4 Other courts have invented a hodgepodge of inconsistent standards for subjecting releases to groundwater to NPDES regulation. *See, e.g., Haw. Wildlife Fund v. Cty. of Maui*, No. 15-17447, 2018 WL 650973, at *7 (9th Cir. Feb. 1, 2018) (pollutants that “are fairly traceable from a point source” and “more than de minimis”); *Kelley ex rel. People of the State of Michigan v. United States*, 618 F. Supp. 1103, 1106 (W.D. Mich. 1985) (“wastes which migrate from groundwaters back into surface waters are within EPA’s regulatory jurisdiction”) (emphasis
caveat," which is found nowhere in the Act’s text, should have alerted the district court to its mistake. *TCWYN*, 2017 WL 3476069, at *43. As explained, Congress has written into the CWA a logical and easily administrable limitation on the point source program, which the district court failed to apply.5

B. The Statute’s Structure Supports This Reading of the Text.

Other CWA provisions linked to the point source program make sense only if that program is limited to circumstances where pollutants are carried into navigable waters by a “discernible, confined and discrete conveyance.” For example, discharges under the point source program are subject to “effluent limitations,” i.e., restrictions on quantities, rates, or concentrations of chemicals or other substances “which are discharged from point sources into navigable waters.” 33 U.S.C. § 1362(11) (emphasis added); *see also* 71 Fed. Reg. 32,887, 32,891


5 Some have hypothesized that a source could avoid CWA regulation by simply moving a pipe back a few feet from the water and discharge onto ground. As noted, however, the question is not whether such a discharge would be controlled, but how. If momentum from the pipe release conveys pollutants to navigable waters, that release may be subject to point-source permitting requirements. If it does not (and there is no subsequent point source that conveys the pollutants into navigable waters), that release still would be regulated under CWA nonpoint source programs. These, of course, are not the facts presented here.
(June 7, 2006). The word “into” clearly contemplates pollutants being added by point sources to navigable waters. Moreover, establishing these effluent limitations requires identifiable discharge points where the pollutant being added “into” a navigable water can be measured. That can occur if pollutants are added into navigable waters by a “discernible, confined and discrete conveyance,” such as a pipe, but it cannot be done if pollutants migrate from groundwater into navigable waters.

In addition, many CWA provisions recognize that not all pollution is point source pollution measurable through effluent limitations, including the release of pollutants into groundwater. In 1972, Congress enacted a provision directing EPA to issue “guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants,” as well as “processes, procedures, and methods to control pollution” from “subsurface excavations” (like the impoundments here) that potentially discharge pollutants to groundwater. 33 U.S.C. § 1314(f) (emphasis added). Congress has also required states to develop waste management plans to include “a process to control the disposal of pollutants on land or in subsurface excavations within such area to protect ground and surface water quality.” 33 U.S.C. § 1288(b)(2)(K) (emphases added). As this Court has explained: “Congress apparently intended that pollution problems caused by” facilities described in § 1314(f) “are generally to be regulated by means other than
the NPDES permit program.” Nat’l Wildlife Fed’n v. Consumers Power Co., 862 F.2d 580, 587 (6th Cir. 1988) (emphasis added). And Congress bolstered the nonpoint source program in 1987 with the Nonpoint Source Management Program (Section 319 of the CWA), requiring state development and EPA review of nonpoint source control plans, and providing federal grants to support those plans. 33 U.S.C. § 1329(b)(1), (d)-(n).

Indeed, EPA’s “Non-Point Source Control Division” published guidelines in 1973 specifically entitled “Ground Water Pollution from Subsurface Excavations.” EPA, Ground Water Pollution from Subsurface Excavations, EPA-430/9-73-012 (1973), http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000Z6YZ.TXT. Ex. A. EPA listed “landfills,” “lagoons, basins, and pits” like those at issue here as “subsurface excavations” that can cause groundwater contamination, and noted that “polluted ground water” from these facilities also “cause[] surface water pollution.” Id. at 1, 123-135, 151-177. To control such pollution, EPA did not point to the NPDES program, but rather recommended that states employ other control measures. Id. at 131-32. As EPA explained in a contemporaneous rulemaking: “[I]n contrast to … nonpoint sources, point sources of water pollution are generally characterized by discrete and confined conveyances from which discharges of pollutants into navigable waters can be controlled by effluent limitations.” 41 Fed. Reg. 24,709, 24,710 (June 18, 1976) (emphasis added).
The district court’s interpretation conflicts with this statutory structure, under which “the NPDES permit program stands alongside of the system controlling ‘nonpoint sources’ of pollution.” *Consumers Power*, 862 F.2d at 587.

C. The CWA’s Legislative History Further Confirms That the Point Source Program Does Not Cover the Release of Pollutants Into Groundwater.

The legislative history confirms what the text and structure make unambiguously clear. Congress deliberately did not extend the point source program to pollutants entering groundwater, despite knowing that some such pollutants can migrate through groundwater and enter navigable waters. In 1971, EPA asked Congress for authority over groundwater, arguing that polluted groundwater impacts surface waters. The then-EPA Administrator explained:

> The only reason for the request for Federal authority over ground waters was to assure that we have control over the water table in such a way as to insure that our authority over interstate and navigable streams cannot be circumvented, so we can obtain water quality by maintaining a control over all the sources of pollution, be they discharged directly into any stream or through the ground water table.

that “[i]f we do not stop pollution of ground waters through seepage and other means, ground water gets into navigable waters, and to control only the navigable water and not the ground water makes no sense at all.” 118 Cong. Rec. 10,666 (1972) (statement of Rep. Aspin) (emphasis added).

Nevertheless, Congress rejected Representative Aspin’s amendment and other proposals to extend the reach of the point source program. As one committee report explained: “Several bills pending before the [Senate] Committee provided authority to establish Federally approved standards for groundwaters. ... [But] because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation.” S. Rep. No. 92-414, at 73 (1971), reprinted in 1972 U.S.C.C.A.N. 3668, 3739. Rather than extend the NPDES program, Congress chose to regulate pollutants entering groundwater through nonpoint source programs and other federal and state environmental laws that focus on protecting water quality. *Ky. Util.*, 2017 WL 6628917, at *12.

**D. EPA’s Original Interpretations of the CWA Reflect a Similar Understanding of the Point Source Program.**

Although the district court below claimed to have acted “consistent” with recent EPA guidance, *TCW*, 2017 WL 3476069, at *43, it failed to consider EPA’s original interpretations of the Act. In 1973, for example, EPA’s Office of General Counsel confirmed that “the term ‘discharge of a pollutant’ is defined so
as to include only discharges into navigable waters,” and explained that
“[d]ischarges into ground waters are not included.” In re E.I. DuPont de Nemours
added).

About a decade later, the United States successfully argued in Kelley ex rel.
People of the State of Michigan that discharges to groundwater allegedly
hydrologically connected to nearby navigable waters were not regulated by the
point source program. 618 F. Supp. at 1107. In moving to dismiss, the United
States did not dispute a hydrologic connection, such that “chemicals [could] enter
the groundwaters under the … area and be discharged into Grand Traverse Bay.”
United States Mem. in Supp. of Rule 12(b) Mot. & In The Alternative for Summ.
J. at 3-4, Kelley ex rel. People of the State of Michigan v. United States, 618 F.
the United States argued that “Michigan cannot make these claims under the Clean
Water Act since the Act does not regulate pollutant discharges onto soil or into
underlying groundwater.” Id. at 5. According to the United States, “[t]he statutory
language, the legislative history, the case law, and EPA’s interpretation of the Act
all support this conclusion.” Id. at 22.
EPA has also made numerous statements, spanning both Bush Administrations and the Obama Administration, that are consistent with its original position and that contradict the district court’s interpretation.

- In 1992, EPA issued guidance explaining that “EPA and the States regulate facilities [under the CWA] that either discharge wastewaters directly to surface waters or discharge to municipal treatment systems.” 6 “While a number of States have incorporated ground water discharges into their NPDES permits and pretreatment requirements,” EPA confirmed that “there is no national requirement to do so.” 7

- In 2004, EPA indicated that “[n]ational [NPDES] regulations apply to … [e]xisting facilities that discharge directly to surface waters” and to “[n]ewly constructed facilities that discharge directly to surface water.” 8

- In 2005, in discussing a source’s options to avoid NPDES permitting requirements, EPA explained that direct surface water discharges “could be re-directed to a non-surface water discharge location, such as ground injection.” 9 Under those circumstances, “NPDES … permit

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7 Id. (emphasis added).


requirements would not apply, because there would be no direct discharge to a surface water of the United States.\textsuperscript{10}

- In 2011, in response to a comment urging that a final NPDES pesticide general permit should “ensure that discharges do not affect groundwater,” EPA confirmed that “the Clean Water Act’s NPDES program … is for the control of discharges to waters of the United States” and that “discharges to groundwater are not regulated under the NPDES program.”\textsuperscript{11}

- In 2014, EPA issued a fact sheet regarding the reissuance of three NPDES permits for the discharge of stormwater from municipal storm sewer systems to waters in Massachusetts. In addressing stormwater “discharges to the subsurface,” EPA stated that “NPDES permits are applicable for point source discharges to waters of the U.S.” and that “discharges to groundwater are not addressed in the NPDES program and as such are not addressed by this permit.”\textsuperscript{12}

- In 2017, EPA made clear that “discharges to groundwater are not regulated by the NPDES permit program.”\textsuperscript{13}

In confirming that the NPDES program does not regulate additions to groundwater, EPA provided no indication in these statements that a source must consider

\textsuperscript{10} Id. (emphasis added).


\textsuperscript{13} EPA, Response to Public Comments, Permit Nos. MAG910000 and NHG910000, at 7 (undated), https://www3.epa.gov/region1/npdes/remediation/ResponsetoComments.pdf. Ex. I.
whether impacted groundwater has a “direct” hydrological-connection to surface water.

While EPA has made a few statements inconsistent with its original and continuing understanding of the Act, those statements are not entitled to any weight. First, because the statute is unambiguous, EPA’s interpretation warrants no deference. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984). Second and independently, because these statements have never been made pursuant to rulemaking, they “lack[] the force of law and [are] therefore not entitled to Chevron deference.” *Rosales-Garcia v. Holland*, 322 F.3d 386, 403 n.22 (6th Cir. 2003); see also *Ky. Utils.,* 2017 WL 6628917, at *11 n.2. And because these statements are inconsistent with the CWA’s text, structure, and

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14 For example, EPA recently filed an *amicus* brief in the Ninth Circuit, claiming that a “discharge from a point source to jurisdictional surface waters that moves through groundwater with a direct hydrological connection comes under the purview of the CWA’s permitting requirements.” Br. for the United States as Amicus Curiae in Supp. of Pls.-Appellees at 5, *Haw. Wildlife Fund v. Cty. of Maui*, No. 15-17447, 2018 WL 650973 (9th Cir. Feb. 1, 2018), ECF No. 40. Ex. J. Though EPA claimed a “longstanding and consistent” position, *id.* at 25, that is refuted by the regulatory record described above. The Ninth Circuit correctly rejected EPA’s test as inconsistent with the statute, but erred in creating its own test based on terms not in the statute. See *infra* p. 18.

15 See also *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962, 966 (7th Cir. 1994) (“Collateral reference to a problem [in an EPA preamble] is not a satisfactory substitute for focused attention in rule-making or adjudication.”); *Umatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1319 (D. Or. 1997) (*Chevron* deference not warranted where “EPA has offered no formal or consistent interpretation of the CWA that would subject discharges to groundwater to the NPDES permitting requirement”).
legislative history, and internally inconsistent with EPA’s own positions, they are unpersuasive and thus also not entitled to Skidmore deference. Skidmore v. Swift & Co., 323 U.S. 134 (1944).

E. The Majority of Federal Courts of Appeals That Have Addressed This Issue Have Found the Point Source Program Does Not Extend to the Release of Pollutants Into Groundwater.

Two of the three federal courts of appeals to address the issue agree that groundwater contamination falls outside the point source program, even if there is an alleged “hydrological connection” to surface waters. In Village of Oconomowoc Lake, the Seventh Circuit ruled that the NPDES program does not extend to pollutants “seep[ing]” into “local ground waters.” 24 F.3d at 963, 965. The court understood those pollutants could reach “underground aquifers that feed lakes and streams that are part of the ‘waters of the United States.’” Id. at 965. But it refused to extend the point source program to such discharges “just because the[y] may be hydrologically connected with surface waters.” Id. In Rice v. Harken Exploration Co., the Fifth Circuit similarly rejected as “an unwarranted expansion of the [statute]” the application of the point source program to pollutants that reach navigable waters by “gradual, natural seepage” through groundwater. 250 F.3d 264, 271 (5th Cir. 2001). “Congress was aware that there was a connection between ground and surface waters” but decided “to leave the
regulation of groundwater to the States,” and the court chose “to respect Congress’s decision.” *Id.* at 271-72.

The Ninth Circuit’s recent contrary decision in *Hawai‘i Wildlife Fund* is flawed in numerous respects. The court extended the point source program to pollutants added to groundwater that are “fairly traceable from the point source to a navigable water” and reach the navigable water at “more than *de minimis*” levels. 2018 WL 650973, at *7. But the Ninth Circuit gave no consideration to the significance of the word “conveyance,” *see supra* pp. 4-5, other aspects of the point source program, such as the end-of-pipe effluent limitations, *see supra* pp. 8-9, or the CWA’s legislative history, *see supra* pp. 11-12. And contrary to the Ninth Circuit’s own reasoning, its decision “reads … words into the CWA”—namely, “fairly traceable” and “*de minimis*”—“that are not there.” *Haw. Wildlife Fund*, 2018 WL 650973, at *7 n.3; *see also supra* note 4.

As for the cases relied on below, they did not examine the CWA’s text, structure, or legislative history, focusing instead on the CWA’s purported goals. *See*, e.g., *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994) (“since the goal of the CWA is to protect the quality of surface waters, any pollutant which enters such waters … through groundwater, is subject to regulation by NPDES permit”). That is not how statutory interpretation is done.
See Ross v. Blake, 136 S. Ct. 1850, 1856 (2016) ("Statutory interpretation, as we always say, begins with the text ...."). As one court has explained:

The courts that have found that hydrologically connected groundwater is subject to the NPDES permit requirement have relied heavily on the purpose of the CWA. However, the Supreme Court has "often criticized" relying on the statute’s purpose to the detriment of its text “noting that no law pursues its purpose at all costs, and that the textual limitations upon a law’s scope are no less a part of its ‘purpose’ than its substantive authorizations.” Rapanos, 547 U.S. at 752 (plurality opinion).

Ky. Utils., 2017 WL 6628917, at *12 (internal citations omitted).

II. Even if the Act Were Ambiguous, the District Court’s Interpretation Must Be Rejected Because It Lacks Clear Statutory Authorization And Is Unreasonable.

Even were the CWA unclear on the point source program’s limits (which it is not), the sweeping and disruptive consequences of the district court’s interpretation require it to be rejected for at least two reasons. First, ambiguous text cannot be interpreted to effectuate an extraordinary expansion of an agency’s authority or an intrusion on an area of traditional state regulation. Second, ambiguous text cannot be interpreted unreasonably. Both principles independently bar the district court’s interpretation.

A. The District Court’s Interpretation Lacks Clear Statutory Authorization.

Absent clear direction from Congress, courts view with skepticism statutory interpretations that extraordinarily expand regulatory jurisdiction. Util. Air Regulatory Grp. v. EPA, 134 S. Ct. 2427, 2444 (2014) ("UARG"). For example,
the Supreme Court has "been reluctant to read into ambiguous statutory text" the "power to require permits for ... thousands, and the operation of millions, of small sources nationwide." Id. at 2444. Likewise, "excessive demands on limited governmental resources is ... a good reason for rejecting [an interpretation of an ambiguous statute]." Id. The Supreme Court "expect[s] Congress to speak clearly if it wishes to assign to an agency decisions of vast 'economic and political significance.'" Id. (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 160 (2000)).

The district court's interpretation triggers this skepticism. That interpretation would extend the NPDES permitting program to millions of small sources never previously regulated under this program. For example, more than 22.2 million homes have septic systems,16 which have not been understood to require NPDES permits. United States v. Smithfield Foods, Inc., 972 F. Supp. 338, 345 (E.D. Va. 1997). But they disperse wastewater into soil and groundwater, and thus arguably come within the district court's interpretation. Such an increase in sources subject to NPDES permitting would, in turn, require states to devote significant resources to create new (or modify existing) regulatory and permitting

programs, placing “excessive demands on limited governmental resources.”

*UARG*, 134 S. Ct. at 2444. That is precisely the sort of massive regulatory expansion the Supreme Court identified in *UARG*. Yet nothing in the CWA “clearly” supports such an extraordinary change in point source permitting jurisdiction. *Id.* (emphasis added).

Nor has Congress clearly authorized the intrusion the district court’s interpretation would work on the “federal-state framework.” *Solid Waste Agency of N. Cook Cty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 173 (2001) (“*SWANCC*”). The regulation of nonpoint source pollution, and groundwater contamination in particular, has traditionally been left to the states. See *supra* pp. 9-10; see also *Am. Farm Bureau Fed’n v. EPA*, 792 F.3d 281, 299 (3d Cir. 2015), cert. denied, 136 S. Ct. 1246 (2016) (“[CWA] assigns the primary responsibility for regulating ... nonpoint sources to the states”); *Kelley*, 618 F. Supp. at 1105, 1107 (“the CWA ... indicates a clear intent to leave the regulation of groundwater pollution to the states”). By expanding the point source program to reach such pollution, the district court’s interpretation is “a significant impingement of the States’ traditional and primary power over land and water use.” *SWANCC*, 531 U.S. at 174. But again, no clear statutory statement justifies that dramatic change in the federal-state balance.

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17 Under section 510 of the CWA, states retain control over waters of the state, which have long been understood to include groundwater. 33 U.S.C. § 1370.
B. The District Court's Interpretation Must Be Rejected Because It Has Significant Adverse Consequences for Other Regulatory Programs and for Amici and the Public.

Even if a clear congressional mandate were not required, the significantly disruptive consequences of the district court’s interpretation make it implausible that Congress would have intended such a reading. The district court’s interpretation undermines other regulatory programs that already protect water quality, sows regulatory uncertainty, and creates disincentives for environmentally protective infrastructure, all while imposing significant costs on amici and the public. These are paradigmatic indications of an unreasonable reading of a statute. See, e.g., Bryant v. Dollar Gen. Corp., 538 F.3d 394, 402 (6th Cir. 2008).

1. The District Court's Interpretation Undermines Other Regulatory Programs That Already Protect Navigable Waters.

As explained, the CWA contains a number of tools to address nonpoint source pollution, including the release of pollutants into groundwater. In Tennessee, for example, Section 319 of the CWA has been used successfully to address pollution from impoundments associated with legacy mining operations, resulting in the attainment of water quality standards in formerly impaired surface
waters. This program has also been used in Tennessee to replace failing septic systems to reduce bacteria levels in surface waters.

Rather than promoting environmental protection, the district court’s interpretation could divert state resources from successful nonpoint source programs. Because Section 319 funding is only available for nonpoint source pollution, reclassifying releases to groundwater as point source pollution would lead states to lose that funding. 33 U.S.C. § 1329(b).

The district court’s interpretation also would interfere with other federal statutes that regulate groundwater. Those statutes include RCRA, which directly addresses ash management features of the sort at issue here. 42 U.S.C. § 6973(a).

As explained by TVA and by other amici, including the Utility Solid Waste Activities Group, the district court’s interpretation would render inapplicable important public health and welfare programs established under RCRA, including the groundwater protection and remediation provisions of a recent EPA rule specifically addressing the management and closure of coal ash impoundments.

EPA, Hazardous and Solid Waste Management System; Disposal of Coal Ash.

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2. **The District Court’s Interpretation Would Subject Amici to Regulatory Uncertainty.**

A second indication of the unreasonableness of the district court’s interpretation is the regulatory uncertainty it creates. The district court devised a fact-specific test, *TCWN*, 2017 WL 3476069, at *43-44, but provided no guidance on how to implement it. Its interpretation subjects releases to groundwater to the point source program where there is a hydrologic connection to navigable waters that is “direct, immediate, and can generally be traced.” *Id.* at *44. But it is “often not obvious” whether or how groundwater connects to navigable water, and none of those new terms is defined in the Act. *Umatilla*, 962 F. Supp. at 1320. Indeed, that “the control of nonpoint source pollution [i]s so dependent on … site-specific factors” is why Congress decided that “uniform federal regulation was virtually impossible.” *Shanty Town Assocs. Ltd. P’ship v. EPA*, 843 F.2d 782, 791 (4th Cir. 1988).

Under the district court’s new regulatory program, technical assessments of site-specific factors, such as topography, climate, the distance to a surface water, and geologic factors, will be required to determine whether and how the CWA point source program applies. But what is the maximum distance to navigable water, or the necessary time for pollutants to travel through groundwater, for a
connection to be “direct”? How does one determine if a hydrologic-connection “can generally be traced” to the source?

Perhaps most critically, how do point source effluent limitations and monitoring, which require identifiable discharge points to measure the pollutants entering a navigable water, apply to diffuse groundwater migration? As noted, the NPDES permitting regulations are “end-of-pipe.” *Froebel v. Meyer*, 217 F.3d 928, 937 (7th Cir. 2000). The types of determinations required for point source permitting may be infeasible (if not outright impossible) for migration of pollution in groundwater. See generally, EPA, NPDES Permit Writer’s Manual, EPA-833-K-10-001 (Sept. 2010), https://www.epa.gov/npdes/npdes-permit-writers-manual, (overview of permitting requirements).

It is unreasonable to introduce into the CWA this “level of uncertainty … [that] would expose potentially [millions] of … [sources] to … litigation and legal liability if they … happen[] to make the ‘wrong’ choice.” *Umatilla*, 962 F. Supp. at 1320. Several Supreme Court justices have already expressed concern about the regulatory uncertainty caused by recent efforts to expand CWA jurisdiction. *U.S. Army Corps of Eng’rs v. Hawkes Co., Inc.*, 136 S. Ct. 1807, 1816-17 (2016) (“the reach and systemic consequences of the [CWA] remain a cause for concern”) (Kennedy, J., concurring); *Sackett v. EPA*, 566 U.S. 120, 132-33 (2012) (Alito, J.,
concurring) (criticizing EPA’s failure to interpret CWA in way that provides “clarity and predictability”).

Moreover, this regulatory uncertainty will have significant real-world effects that contravene Congress’s general intent in the CWA to protect the environment. The district court’s new test could impact private and public infrastructure that is critical to environmental protection. For example, green infrastructure is designed to retain, percolate, and infiltrate stormwater into the ground, in part, to minimize discharges of industrial and municipal stormwater.20 Other groundwater recharge systems use spreading basins, percolation ponds, infiltration basins, and injection wells to convey stormwater or recycled wastewater into shallow subsurface aquifers. Those systems augment public water supplies, create seawater intrusion barriers, and eliminate surface outfalls, among other benefits.21 In this Circuit, the City of Nashville has developed a framework to maximize these kinds of beneficial green infrastructure.22 But the district court’s interpretation suggests that NPDES


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permit requirements may apply to such environmentally-protective infrastructure, creating obstacles to and disincentivizing their use.

3. The District Court’s Interpretation Would Vastly Increase Permitting Costs on Amici and the Public.

As the Supreme Court has observed, complying with CWA permitting requirements “is not trivial.” *Rapanos*, 547 U.S. at 719 (plurality op.). EPA estimates that the public spends over 26 million labor hours and over $1 billion annually in applying for and complying with NPDES permits. EPA, ICR Supporting Statement, Information Collection Request for National Pollutant Discharge Elimination System (NPDES) Program (Renewal), OMB Control No. 2040-0004, EPA ICR No. 0229.22, at 23, Tbl. 12.1, App. A (Sept. 2017), https://www.regulations.gov/document?D=EPA-HQ-OW-2008-0719-0110. Ex. O.

Requiring NPDES permits for releases of pollutants to groundwater would increase those costs exponentially. If the district court’s interpretation is permitted to stand, virtually any source that adds pollutants to groundwater in any amount would have to undertake a detailed technical assessment of hydrologic and geologic conditions to determine whether to apply for a NPDES permit. As the district court acknowledged, “most, if not all, natural bodies of water [are] … hydrologically connected to … groundwater” and “[t]he bedrock of the CWA is ‘a default regime of strict liability.’” *TCWN*, 2017 WL 3476069, at *41, 42 (citing *Sierra Club v. ICG Hazard, LLC*, 781 F.3d 281, 284 (6th Cir. 2015)). Each of
those many millions of sources newly concerned about NPDES permitting will incur new costs to conduct such an assessment. Even conservatively estimated, the total cost to the public would be in the billions of dollars.

It is unreasonable to adopt an interpretation of the CWA that would so dramatically alter the cost of CWA permitting on the public. See Michigan v. EPA, 135 S. Ct. 2699 (2015).

CONCLUSION

The district court’s judgment should be reversed.

Dated: February 6, 2018

Respectfully submitted,

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Form 6. Certificate of Compliance With Type-Volume Limit

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Attorney for Amici Curiae Chamber of Commerce et al.

Dated: February 5, 2018
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Pursuant to Rule 25 of the Federal Rules of Appellate Procedure and Circuit Rule 25, I hereby certify that on this 6th day of February 2018, I served a copy of the foregoing document electronically through the Court’s CM/ECF system on the following registered CM/ECF counsel of record:

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11288. Areawide waste treatment management
(a) Identification and designation of areas hav-
ing substantial water quality control prob-
lems

For the purpose of encouraging and facilitat-
ing the development and implementation of areawide waste treatment management plans—
(1) The Administrator, within ninety days after October 18, 1972, and after consultation with appropriate Federal, State, and local au-
thorities, shall by regulation publish guide-
lines for the identification of those areas which, as a result of urban-industrial con-
centrations or other factors, have substantial water quality control problems.

(2) The Governor of each State, within sixty-
days after publication of the guidelines issued pursuant to paragraph (1) of this subsection, shall identify each area within the State
which, as a result of urban-industrial con-
centrations or other factors, has substantial
water quality control problems. Not later than one hundred and twenty days following such identification and after consultation with app-
propriate elected and other officials of local
governments having jurisdiction in such areas,
the Governor shall designate (A) the bound-
daries of such area, and (B) a single rep-
resentative organization, including elected of-
ficials from local governments or their de-
legates, capable of developing effective are-
awide waste treatment management plans for
such area. The Governor may in the same man-
ner at any later time identify any addi-
tional area (or modify an existing area) for
which he determines areawide waste treat-
ment management to be appropriate, desig-
nate the boundaries of such area, and des-
nignate an organization capable of developing
effective areawide waste treatment manage-
ment plans for such area.

(3) With respect to any area which, pursuant
to the guidelines published under paragraph
(1) of this subsection, is located in two or more States, the Governors of the respective States shall consult and cooperate in carrying out the provisions of paragraph (2), with a view to-
ward designating the boundaries of the inter-
state area having common water quality control problems and for which areawide waste treatment management plans would be most effective, and toward designating, within one hundred and eighty days after publication of guidelines issued pursuant to paragraph (1) of this subsection, of a single representative or-
ganization capable of developing effective areawide waste treatment management plans for such area.

(4) If a Governor does not act, either by des-
ignating or determining not to make a des-
nignation under paragraph (2) of this sub-
section, within the time required by such paragraph, or, if, in the case of an interstate area, the Governors of the States involved do not designate a planning organization within

the time required by paragraph (3) of this sub-
section, the chiefs elected officials of local gov-
ernments within an area may by agreement
 designate (A) the boundaries for such an area,

and (B) a single representative organization

including elected officials from such local gov-
ernments, or their designees, capable of devel-
oping an areawide waste treatment manage-
ment plan for such area.

(3) Existing regional agencies may be des-
nignated under paragraphs (2), (3), or (4) of
this subsection.

(b) Planning process

(3)(A) Not later than one year after the date of designation of any organization under sub-
section (a) of this section such organization shall in operation a continuing areawide waste treatment management planning process consistent with section 1203 of this title. Plans
prepared in accordance with this process shall contain alternatives for waste treatment man-
agement, and be applicable to all wastes gene-
rated within the area involved. The initial plan
prepared in accordance with such process shall be certified by the Governor and submitted to the Administrator not later than two years after the
planning process is in operation.

(B) For any agency designated after 1975 under subsection (a) of this section and for all portions of a State for which the State is required to act
as the planning agency in accordance with sub-
section (a)(2), the initial plan prepared in ac-
cordance with such process shall be certified
by the Governor and submitted to the Adminis-
trator not later than three years after the re-
ceipt of the initial grant award authorized under subsection (a) of this section.

(2) Any plan prepared under such process shall inclu-
de, but not be limited to—

(A) the identification of treatment works necessary to meet the municipal and indus-
trial waste treatment needs of the area over a twenty-year period, annually up-
dated (including an analysis of alternative waste treatment systems), including any re-
quirements for the acquisition of land for treatment purposes; the necessary waste water collection and urban storm water runoff sys-
tems; and a program to provide the necessary financial arrangements for the development of such treatment works, and an identifica-
tion of open space and recreation opportunities that can be expected to result from improved water quality, including consideration of potential use of lands associated with treatment works and increased access to water-based recrea-

(B) the establishment of construction prior-
ities for such treatment works and time sched-
ules for the initiation and completion of all
treatment works;

(c) the establishment of a regulatory pro-

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(i) implement the waste treatment management requirements of section 134(c) of this title;
(ii) compile the location, modification, and construction of any facilities within such area which may result in any discharge to such area; and
(iii) assure that any industrial or commercial waste treatment works in such area meet applicable pretreatment requirements.

(B) the identification of those agencies necessary to construct, operate, and maintain all facilities required by the plan and otherwise to carry out the plan;

(C) the identification of the measures necessary to carry out the plan (including financing), the period of time necessary to carry out the plan, the costs of carrying out the plan within such time, and the economic, social, and environmental impact of carrying out the plan within such time;

(D) a process to (i) identify, if appropriate, agriculturally and/or fisheries-related nonpoint sources of pollution, including return flows from irrigated agriculture, and their cumulative effects, runoff from manure disposal areas, and from land used for livestock and crop production, and (ii) set forth procedures and methods including land use requirements to control to the extent feasible such sources;

(E) a process to (i) identify, if appropriate, mine-related sources of pollution and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

(F) a process to (i) identify construction activity related sources of pollution, and (ii) set forth procedures and methods (including land use requirements) to control to the extent feasible such sources;

(G) if the Governor of a State obtains approval from the Administrator of a statewide regulatory program which meets the requirements of subparagraph (B) of this paragraph and if such State is administering a permit program under section 134 of this title, no person shall be required to obtain an individual permit pursuant to such section, or to comply with a general permit issued pursuant to such section, with respect to any appropriate activity within such State for which a best management practice has been approved by the Administrator under the program approved by the Administrator pursuant to this paragraph.

(H) any activity conducted pursuant to a best management practice shall comply with the guidelines established under section 134(f)(2)(A) of this title, and sections 132 and 134 of this title.

(I) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.

(J) any program submitted under subparagraph (A) of this paragraph which, in whole or in part, is to control the discharge of other placement of dredged or fill material into the navigable waters shall include the following:

(1) a consultation process which includes the State agency with primary jurisdiction over fish and wildlife resources;

(2) a process to identify and manage the discharge of liquid oxygen, dry ice, or dry ice pellets, which are used in the manufacture of dry ice products, which adversely affects navigable waters, for which there shall be an approved plan to comply with the applicable requirements of this section;

(3) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.

(K) any activity conducted pursuant to a best management practice shall comply with the guidelines established under section 134(f)(2)(A) of this title, and sections 132 and 134 of this title.

(L) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.

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(1) a consultation process which includes the State agency with primary jurisdiction over fish and wildlife resources;

(2) a process to identify and manage the discharge of liquid oxygen, dry ice, or dry ice pellets, which are used in the manufacture of dry ice products, which adversely affects navigable waters, for which there shall be an approved plan to comply with the applicable requirements of this section;

(3) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.

(4) any program submitted under subparagraph (A) of this paragraph which, in whole or in part, is to control the discharge of other placement of dredged or fill material into the navigable waters shall include the following:

(1) a consultation process which includes the State agency with primary jurisdiction over fish and wildlife resources;

(2) a process to identify and manage the discharge of liquid oxygen, dry ice, or dry ice pellets, which are used in the manufacture of dry ice products, which adversely affects navigable waters, for which there shall be an approved plan to comply with the applicable requirements of this section;

(3) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.

(4) any program submitted under subparagraph (A) of this paragraph which, in whole or in part, is to control the discharge of other placement of dredged or fill material into the navigable waters shall include the following:

(1) a consultation process which includes the State agency with primary jurisdiction over fish and wildlife resources;

(2) a process to identify and manage the discharge of liquid oxygen, dry ice, or dry ice pellets, which are used in the manufacture of dry ice products, which adversely affects navigable waters, for which there shall be an approved plan to comply with the applicable requirements of this section;

(3) a process to ensure that any activity conducted pursuant to a best management practice be consistent with a whole state regulatory program under section 134 of this title so requires the requirements of clauses (E) through (K) of paragraph (2) of this subsection shall be developed and submitted by the Governor to the Administrator for approval for application to a class or category of activity throughout such State.
(g) Allocation of funds

(1) Fiscal year 2002

Subject to subsection (b), the Administrator shall use the amounts appropriated to carry out this section for fiscal year 2002 for making grants to municipalities and municipal entities under subsection (a)(2), in accordance with the criteria set forth in subsection (b).

(2) Fiscal year 2003

Subject to subsection (b), the Administrator shall use the amounts appropriated to carry out this section for fiscal year 2003 as follows:

(A) Not to exceed $250,000,000 for making grants to municipalities and municipal entities under subsection (a)(2), in accordance with the criteria set forth in subsection (b).

(B) All remaining amounts for making grants to States under subsection (a)(1), in accordance with a formula to be established by the Administrator, after providing notice and an opportunity for public comment, that allocates to each State a proportional share of such amounts based on the total needs of the State for municipal combined sewer overflow controls and sanitary sewer overflow controls identified in the most recent survey conducted pursuant to section 1175(b)(1) of this title.

(h) Administrative expenses

Of the amounts appropriated to carry out this section for each fiscal year:

(1) the Administrator may retain an amount not to exceed 1 percent for the reasonable and necessary costs of administering this section;

(2) the Administrator, or a State, may retain an amount not to exceed 4 percent of any grant made to a municipality or municipal entity under subsection (a), for the reasonable and necessary costs of administering the grant,

(i) Reports

Not later than December 31, 2003, and periodically thereafter, the Administrator shall transmit to Congress a report containing recommended funding levels for grants under this section. The recommended funding levels shall be sufficient to ensure the continued expeditious implementation of municipal combined sewer overflow and sanitary sewer overflow controls nationwide.

(j) Amendments

(1) EFFECTIVE DATE--Section 1277(a)(2) shall apply to discharges of pollutants occurring on or after January 1, 1987.

(2) REPORT TO CONGRESS--Not later than 3 years after the date of enactment of this Act (Dec. 31, 2000), the Administrator of the Environmental Protection Agency shall transmit to Congress a report consisting of--

(a) the extent of the human health and environmental impacts caused by municipal combined sewer overflows and sanitary sewer overflows, including the location of discharges causing such impacts, the volume of pollutants discharged, and the constituents discharged;
clude any State from requiring compliance with any efficient limitation or schedule of compliance at dates earlier than such dates.

(g) Heat standards

Water quality standards relating to heat shall be consistent with the requirements of section 138 of this title.

(h) Water quality standards

For the purposes of this chapter the term “water quality standards” includes thermal water quality standards.

(i) Coastal recreation water quality criteria

(1) Adoption by States

(A) Initial criteria and standards

Not later than 42 months after October 19, 2000, each State having coastal recreation waters shall adopt and submit to the Administrator water quality criteria and standards for the coastal recreation waters of the State for those pathogens and pathogen indicators for which the Administrator has published criteria under section 1314(a) of this title.

(B) New or revised criteria and standards

Not later than 36 months after the date of publication by the Administrator of new or revised water quality criteria under section 1314(a)(3) of this title, each State having coastal recreation waters shall adopt and submit to the Administrator new or revised water quality standards for the coastal recreation waters of the State for all pathogens and pathogen indicators to which the new or revised water quality criteria are applicable.

(2) Failure of States to adopt

(A) In general

If a State fails to adopt water quality criteria and standards in accordance with paragraph (1)(A) that are as protective of human health as the criteria for pathogens and pathogen indicators for coastal recreation waters published by the Administrator, the Administrator shall promptly propose regulations for the State setting forth revised or new water quality standards for pathogens and pathogen indicators described in paragraph (1)(A) for coastal recreation waters of the State.

(B) Exception

If the Administrator proposes regulations for a State described in subparagraph (A) under subsection (c)(6)(B), the Administrator shall publish any revised or new standard under this subsection not later than 42 months after October 19, 2000.

(2) Except as expressly provided by this subsection, the requirements and procedures of subsection (c) apply to this subsection, including the requirement in subsection (c)(2)(A) that the criteria protect public health and welfare.


References to Text


Amendments


1997—Subsec. (d)(2), Pub. L. 104-208, §404(d), designated existing provisions as subpar. (A) and added subpar. (B).

Subsec. (d)(4), Pub. L. 104-4, §404(k), added par. (4).

1313a. Revised water quality standards

The review, revision, and adoption or promulgation of revised or new water quality standards pursuant to section 303(c) of the Federal Water Pollution Control Act (33 U.S.C. 1313(c)) shall be completed by the date three years after December 31, 1996. No grant shall be made under title I of the Federal Water Pollution Control Act (33 U.S.C. 1382) on any grant after date of enactment for any State that has not completed the revised or new water quality standards.

References to Text

The Federal Water Pollution Control Act, referred to in this section, is act June 30, 1965, ch. 981, as amended generally by Pub. L. 96-530, §2, Oct. 31, 1980, 94 Stat. 2042. Title I of the Act is classified generically to subchapter II (33 U.S.C. 1382 et seq.) of this chapter. For complete classification of this Act to the Code, see Short Title note set out under section 1381 of this title and Tables.

Classification

Section was enacted as part of the Municipal Wastewater Treatment Construction Grant Amendments of 1981, and not as part of the Federal Water Pollution Control Act which comprises this chapter.

1314. Information and guidelines

(a) Criteria development and publication

(1) The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after October 18, 1972 (and from time to time thereafter revise) criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare, including but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, estuaries, and recreation which may be expected from the presence of pollutants in any body of water, including ground water; (B) on the concentration and dispersion of pollutants, or their byproducts, through biological, physical, and chemical processes; and (C) on the impact of pollutants on biological community diversity, productivity, and stability, including information on the factors affecting rates of eutrophication and rates of organic and inorganic sedimentation for varying types of receiving waters.
to navigable waters. Any applicable controls established under this subsection shall be included as a requirement for the purposes of section 1311, 1312, 1316, 1317, or 1342 of this title, as the case may be, in any permit issued to a point source pursuant to section 1342 of this title.

(f) Identification and evaluation of nonpoint sources of pollution; processes, procedures, and methods to control pollution

The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall issue to appropriate Federal agencies, the States, water pollution control agencies, and areas designated under section 1298 of this title, within one year after October 18, 1972, and from time to time thereafter, information including (1) guidelines for identifying and evaluating the nature and extent of nonpoint sources of pollutants, and (2) processes, procedures, and methods to control pollution resulting from—

(A) agricultural and silvicultural activities, including runoff from fields and forest land;

(B) mining activity, including runoff and silting from new, currently operating, and abandoned surfaces and underground mines;

(C) all construction activity, including runoff from the facilities resulting from such construction;

(D) the disposal of pollutants in wells or in subsurface excavations;

(E) salt water intrusion resulting from reductions of fresh water flow from any cause, including abstraction of ground water, irrigation, obstruction, and diversion; and

(F) changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams, levees, channels, causeways, or flow diversion facilities.

Such information and revisions thereof shall be published in the Federal Register and otherwise made available to the public.

(g) Guidelines for pretreatment of pollutants

(1) For the purposes of assisting States in carrying out programs under section 1342 of this title, the Administrator shall publish, within one hundred and twenty days after October 18, 1972, and review at least annually thereafter and, if appropriate, revise guidelines for pretreatment of pollutants which he determines are not susceptible to treatment by publicly owned treatment works. Guidelines under this subsection shall be established to control and prevent the discharge into the navigable waters, the contiguous zone, or the ocean (other than the dead zone in the ocean or through publicly owned treatment works) of any pollutant which interferes with, passes through, or otherwise is incompatible with such works.

(2) When publishing guidelines under this subsection, the Administrator shall designate the category of treatment works to which the guidelines shall apply.

(h) Test procedures guidelines

The Administrator shall, within one hundred and twenty days from October 18, 1972, promulgate guidelines establishing test procedures for the analysis of pollutants that shall include the factors which must be provided in any certification pursuant to section 1342 of this title or permit application pursuant to section 1342 of this title.

(i) Guidelines for monitoring, reporting, enforcement, funding, personnel, and manpower

The Administrator shall (1) within sixty days after October 18, 1972, promulgate guidelines for the purpose of establishing uniform application forms and other minimum requirements for the acquisition of information from owners and operators of point sources of discharge subject to any State program under section 1342 of this title, and (2) within sixty days from October 18, 1972, promulgate guidelines establishing the minimum procedural and other elements of any State program under section 1342 of this title, which shall include:

(A) monitoring requirements;

(B) reporting requirements (including procedures to make information available to the public);

(C) enforcement provisions; and

(D) funding, personnel qualifications, and manpower requirements (including a requirement that no board or body which approves permit applications or portions thereof shall be selected, a significant portion of his income directly or indirectly from permit holders or applicants for a permit).

(j) Lake restoration guidance manual

The Administrator shall, within one year after February 4, 1987, and biennially thereafter, publish and disseminate a lake restoration guidance manual describing methods, procedures, and processes to guide States and local efforts to improve, restore, and enhance water quality in the Nation’s publicly owned lakes.

(k) Agreements with Secretaries of Agriculture, Army, and the Interior to provide maximum utilization of programs to achieve and maintain water quality; transfer of funds; authorization of appropriations

(1) The Administrator shall enter into agreements with the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior, and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, to provide for the maximum utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality through appropriate implementation of plans approved under section 1298 of this title and point source pollution management programs approved under section 1342 of this title.

(2) The Administrator is authorized to transfer to the Secretary of Agriculture, the Secretary of the Army, and the Secretary of the Interior and the heads of such other departments, agencies, and instrumentalities of the United States as the Administrator determines, any funds appropriated under paragraph (9) of this subsection to supplement funds otherwise appropriated to programs authorized pursuant to any agreement under paragraph (1).
charge of a specific pollutant or pollutant under controlled conditions associated with an approved agriculture project may do so if upon submission of such plan the Administrator determines such plans is adequate to carry out the objective of this chapter.

(A) follows the requirements of section 308 of this title after "Management Plan�statutory text.

[Statutory Text.]

AMENDMENTS


§ 30137. Nonpoint source management programs
(a) State assessment reports
(1) Contents
The Governor of each State shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval, a report which—
(A) identifies those navigable waters in the State which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of this chapter;

(B) identifies those categories and subcategories of nonpoint sources or, where appropriate, particular nonpoint sources which add significant pollution to each portion of the navigable waters identified under subparagraph (A) in amounts which contribute to such portion not meeting such water quality standards or such goals and requirements;

(C) describes the process, including intergovernmental coordination and public participation, for identifying best management practices and measures to control each category and subcategory of nonpoint sources and, where appropriate, particular nonpoint sources identified under subparagraph (A) and to reduce, to the maximum extent practicable, the level of pollution resulting from each category, subcategory, or source; and

(D) identifies the States and local programs for controlling pollution added from nonpoint sources to, and improving the quality of, each portion of the navigable waters, including but not limited to, those programs which are receiving Federal assistance under subsections (b) and (c).

(2) Information used in preparation
In developing the report required by this section, the State (A) may rely upon information developed pursuant to sections 1331(e), 1314(f), 1313(b), and 1334 of this title, and other information as appropriate, and (B) may utilize appropriate, needlessly or water treatment management plans developed pursuant to sections 129(e) and 1334 of this title, to the extent such elements are consistent with and fulfill the requirements of this section.

(b) Management plans
(1) In general
The Governor of each State, for that State or in conjunction with adjacent States, shall, after notice and opportunity for public comment, prepare and submit to the Administrator for approval a management plan which each State proposes to implement in the first four fiscal years beginning after the date of submission of such management program for controlling pollution added from nonpoint sources to the navigable waters within the State and improving the quality of such waters.

(2) Specific contents
Each management program proposed for implementation under this subsection shall include each of the following:

(A) An identification of the best management practices and measures which will be undertaken to reduce pollutant loadings resulting from each category, subcategory, or particular nonpoint source designated under paragraph (1)(A), taking into account the impact of the practice on ground water quality.

(B) An identification of programs (including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects) to achieve implementation of the best management practices by the categories, subcategories, and particular nonpoint sources designated under subparagraph (A).

(C) A schedule containing annual milestone for (i) utilization of the program implementation methods identified in subparagraph (B), and (ii) implementation of the best management practices identified in subparagraph (A) by the categories, subcategories, or particular nonpoint sources designated under paragraph (1)(A). Such schedule shall provide for utilization of the best management practices at the earliest practicable date.

(D) A certification of the attorney general of the State or States (or the chief attorney of any State water pollution control agency which has independent legal counsel) that the laws of the State or States, as the case may be, provide adequate authority to implement such management program or, if there is not such adequate authority, a list of such additional authorities as will be necessary to implement such management program. A schedule and commitment by the State or States to seek such additional authorities as expeditiously as practicable.

(E) Sources of Federal and other assistance and funding (other than assistance provided under subsections (b) and (c)) which
will be available in each of such fiscal years for supporting implementation of such practices and measures and the purposes for which such assistance will be used in each of such fiscal years.

(F) An identification of Federal financial assistance programs and Federal development projects for which the State will review individual assistance applications or development projects for their effect on water quality pursuant to the procedures set forth in Executive Order 12772 as in effect on September 17, 1985, to determine whether such assistance applications or development projects would be consistent with the program prepared under this subsection; for the purposes of this subparagraph, identification shall not be limited to the assistance programs or development projects subject to Executive Order 12772 but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of the State's nonpoint source pollution management program.

(3) Utilization of local and private experts

In developing and implementing a management program under this subsection, a State shall, to the maximum extent practicable, involve local public and private agencies and organizations which have expertise in control of nonpoint sources of pollution.

(4) Development on watershed basis

A State shall, to the maximum extent practicable, develop and implement a management program under this subsection on a watershed-by-watershed basis within such State.

(5) Administrative provisions

(a) Cooperation requirement

Any report required by subsection (a) and any management program and report required by subsection (b) shall be developed in cooperation with local, State, regional, and interstate entities which are actively planning for the implementation of nonpoint source pollution controls and have either been certified by the Administrator in accordance with section 138 of this title, have worked jointly with the State on water quality management plans under section 138(a) of this title, or have been designated by the State legislative body or Governor as water quality management planning agencies for their geographic areas.

(b) Time period for submission of reports and management programs

Each report and management program shall be submitted to the Administrator during the 18-month period beginning on February 4, 1987.

(c) Approval or disapproval of reports and management programs

(1) Deadline

Subject to paragraph (2), not later than 180 days after the date of submission to the Administrator of any report or management program under this section (other than subsections (b), (i), and (k)), the Administrator shall either approve or disapprove each report or management program, as the case may be. The Administrator may approve a portion of a management program under this subsection. If the Administrator does not disapprove a report, management program, or portion of a management program in such 180-day period, such report, management program, or portion shall be deemed approved for purposes of this section.

(d) Procedure for disapproval

If, after notice and opportunity for public comment and consultation with appropriate Federal and State agencies and interested persons, the Administrator determines that—

(A) the proposed management program or any portion thereof does not meet the requirements of subsection (b)(3) of this section or is not likely to satisfy, in whole or in part, the goals and requirements of this chapter;

(B) adequate authority does not exist, or adequate resources are not available, to implement such program or portion;

(C) the schedule for implementing such program or portion is not sufficiently expeditious; or

(D) the practices and measures proposed in such program or portion are not adequate to reduce the level of pollution in navigable waters in the State resulting from nonpoint sources and to improve the quality of navigable waters in the State,

the Administrator shall, within 30 days of the receipt of the proposed program, notify the State of any revisions or modifications necessary to obtain approval. The State shall thereupon have an additional 3 months to submit its revised management program and the Administrator shall approve or disapprove such revised program within 3 months of receipt.

(e) Failure of State to submit report

If a Governor of a State does not submit the report required by subsection (a) within the period specified by subsection (c)(2), the Administrator shall, within 30 days after February 4, 1987, prepare a report for such State which makes the identifications required by paragraphs (1)(A) and (1)(B) of subsection (a). Upon completion of the requirements of the preceding sentence and after notice and opportunity for comment, the Administrator shall report to Congress on his actions pursuant to this section.

(f) Local management programs; technical assistance

If a State fails to submit a management program under subsection (b) or the Administrator does not approve such a management program, any local public agency or organization which has expertise in, and authority to, control water pollution resulting from nonpoint sources in any area of such State which the Administrator determines is of sufficient geographic size may, with approval of such State, request the Administrator to provide, and the Administrator shall provide, technical assistance to such agency or
organization in developing such area a man-
agement program which is described in sub-
section (b) and can be approved pursuant to sub-
section (d). After development of such manage-
ment program, such agency or organization shall submit such management program to the Administrator for approval. If the Admini-
strator approves such management program, such agency or organization shall be eligible to receive financial assistance under subsection (b) for implementation of such management pro-
gress as if such agency or organization were a State for which a report submitted under sub-
section (a) and a management program submit-
ted under subsection (b) were approved under this section. Such financial assistance shall be subject to the same terms and conditions as as-
ance provided to a State under subsection (b).
(f) Technical assistance for States
Upon request of a State, the Administrator may provide technical assistance to such State in developing a management program approved under subsection (b) for those portions of the navigable waters requested by such State.
(g) Interstate management conference
(1) Convening of conference; modification; pur-
pose
If any portion of the navigable waters in any State which is implementing a management program approved under this section is not me-
ting applicable water quality standards or the goals and requirements of this chapter as a re-
sult, in whole or in part, of pollution from nonpoint sources in another State, such State may petition the Administrator to convene, and the Administrator shall convene, a man-
gement conference of all States which con-
tribute significant pollution resulting from nonpoint sources to such portion. If, on the basis of information available, the Adminis-
trator determines that a State is not meeting applicable water quality standards or the goals and requirements of this chapter as a re-
sult, in whole or in part, of significant pollu-
tion from nonpoint sources in another State, the Administrator shall notify such States. The Administrator may convene a manage-
ment conference under this paragraph not later than 180 days after giving such notifica-
tion, whether or not the State which is not me-
ting such standards requests such con-
ference. The purpose of such conference shall be to develop an agreement among such States to reduce the level of pollution in such portion resulting from nonpoint sources and to im-
prove the water quality of such portion. Noti-
ting in such agreement shall supersede or al-
locate rights to quantities of water which have been established by interstate water comp-
acts, Supreme Court decrees, or State water laws. This subsection shall not apply to any pollution which is subject to the Colorado River Basin Quality Control Act (43 U.S.C. 1571 et seq.). The requirement that the Admin-
istrator convene a management conference shall not be subject to the provisions of sec-
section 1385 of this title.
(2) State management program requirement
To the extent that the States reach agree-
ment through such conference, the manage-
ment programs of the States which are parties to such agreements and which contribute sig-
ificant pollution to the navigable waters or portions thereof not meeting applicable water quality standards or goals and requirements of this chapter will be consistent with such agreement. Such management programs shall be consistent with Federal and State law.
(h) Grant program
(1) Grants for implementation of management program
Upon application of a State for which a re-
port submitted under subsection (a) and a management program submitted under sub-
section (b) is approved under this section, the Administrator shall make grants, subject to such terms and conditions as the Admin-
istrator considers appropriate, under this sub-
section to such State for the purpose of assist-
ing the State in implementing such manage-
ment program. Funds reserved pursuant to section 1285 of this title may be used to de-
velop and implement such management pro-
gram.
(2) Applications
An application for a grant under this sub-
section in any fiscal year shall be in such form and shall contain such other information as the Administrator may require, including an identification and description of the best manage-
ment practices and measures which the State proposes to assist, encourage, or require in such year with the Federal assistance to be provided under the grant.
(3) Federal share
The Federal share of the cost of each man-
gagement program implemented with Federal assistance in any fiscal year shall not exceed 60 percent of the cost in-
curred by the State in implementing such management program and shall be made on condition that the non-Federal share is pro-
vided from non-Federal sources. 
(4) Limitation on grant amounts
Notwithstanding any other provision of this subsection, not more than 15 percent of the amount appropriated to carry out this sub-
section may be used to make grants to any one State, including any grants to any local public agency or organization with authority to control pollution from nonpoint sources in any area of such State.
(5) Priority for effective mechanisms
For each fiscal year beginning after Septem-
ber 30, 1987, the Administrator may give prior-
ity in making grants under this subsection, and shall give consideration in determining the Federal share of any such grant, to States which have implemented or are proposing to implement management programs which will—
(A) control particularly difficult or serious nonpoint source pollution problems, includ-
ing, but not limited to, problems resulting from mining activities;
(B) Implement innovative methods or practices for controlling nonpoint source pollution, including regulatory programs where the Administrator deems appropriate;

(C) control interstate nonpoint source pollution problems; or

(D) carry out ground water quality protection activities which the Administrator determines are part of a comprehensive nonpoint source pollution control program, including research, planning, ground water assessments, demonstration programs, enforcement, technical assistance, education, and training to protect ground water quality from nonpoint sources of pollution.

(6) Availability for obligation

The funds granted to each State pursuant to this subsection in a fiscal year shall remain available for obligation by such State for the fiscal year for which appropriated. The amount of any such funds not obligated by the end of such fiscal year shall be available to the Administrator for granting to other States under this subsection in the next fiscal year.

(7) Limitation on use of funds

States may use funds granted made pursuant to this section for financial assistance to persons only to the extent that such assistance is related to the costs of demonstration projects.

(8) Satisfactory progress

No grant may be made under this subsection in any fiscal year to a State which in the preceding fiscal year received a grant under this subsection unless the Administrator determines that such State made satisfactory progress in such preceding fiscal year in meeting the schedule specified by such State under subsection (d)(2).

(9) Maintenance of effort

No grant may be made to a State under this subsection in any fiscal year unless such State enters into such arrangements with the Administrator as the Administrator may require to ensure that such State will maintain its aggregate expenditures from all other sources for programs for controlling pollution added to the navigable waters in such State from nonpoint sources and improving the quality of such waters at or above the average level of such expenditures in its two fiscal years preceding February 4, 1977.

(10) Request for information

The Administrator may request such information, data, and reports as he considers necessary to make the determination of continuing eligibility for grants under this section.

(11) Reporting and other requirements

Each State shall report to the Administrator on an annual basis concerning (A) its programs in meeting the schedule of milestones submitted pursuant to subsection (b)(2)(C) of this section, and (B) to the extent that appropriate information is available, reductions in nonpoint source pollutant loading and improvements in water quality for those navigable waters or waterbodies within the State which were identified pursuant to subsection (a)(1)(A) of this section resulting from implementation of the management program.

(12) Limitation on administrative costs

For purposes of this subsection, administrative costs in the form of salaries, overhead, or indirect costs for services provided and charged against activities and programs carried out with a grant under this subsection shall not exceed in any fiscal year 15 percent of the amount of the grant in such year, except that costs of implementing enforcement and regulatory activities, education, training, technical assistance, demonstration projects, and technology transfer programs shall not be subject to this limitation.

(13) Grants for protecting groundwater quality

(1) Eligible applicants and activities

Upon application of a State for which a report submitted under subsection (a) and a plan submitted under subsection (b) is approved under this section, the Administrator shall make grants under this subsection to such State for the purpose of assisting such State in carrying out groundwater quality protection activities which the Administrator determines will advance the State toward implementation of a comprehensive nonpoint source pollution control program. Such activities shall include, but not be limited to, research, planning, ground water assessments, demonstration programs, enforcement, technical assistance, education, and training to protect the quality of groundwater and to prevent contamination of groundwater from nonpoint sources of pollution.

(2) Applications

An application for a grant under this subsection shall be in such form and shall contain such information as the Administrator may require.

(3) Federal share; maximum amount

The Federal share of the cost of assisting a State in carrying out groundwater protection activities in any fiscal year under this subsection shall be 75 percent of the costs incurred by the State in carrying out such activities, except that the maximum amount of Federal assistance which any State may receive under this subsection in any fiscal year shall not exceed $10,000,000.

(4) Report

The Administrator shall include in each report transmitted under subsection (c) a report on the activities and programs implemented under this subsection during the preceding fiscal year.

(5) Authorization of appropriations

There is authorized to be appropriated to carry out subsection (b) and (c) not to exceed $70,000,000 for fiscal year 1988, $120,000,000 for each of fiscal years 1989 and 1990, and $180,000,000 for fiscal year 1991; except that for each of such fiscal years not to exceed $7,500,000 may be made available to carry out subsection (1). Such appropriated pursuant to this subsection shall remain available until expended.
(k) Consistency of other programs and projects with management programs.

The Administrator shall transmit to the Office of Management and Budget and the appropriate Federal departments and agencies a list of those assistance programs and development projects identified by each State under subsection (b)(2)(F) for which individual assistance applications and projects will be reviewed pursuant to the procedures set forth in Executive Order 12372 as in effect on September 17, 1988. Beginning not later than sixty days after receiving notification (in) by the Administrator, each Federal department and agency shall modify existing regulations to allow States to review individual development projects and assistance applications under the identified Federal assistance programs and shall accommodate, according to the requirements and definitions of Executive Order 12372, as in effect on September 17, 1982, the concerns of the State regarding the consistency of such applications or projects with the State nonpoint source pollution management program.

(l) Collection of information

The Administrator shall collect and make available, through publications and other appropriate means, information pertaining to management practices and implementation methods, including, but not limited to, (1) information concerning the costs and relative efficiencies of best management practices for reducing nonpoint source pollution; and (2) available data concerning the relationship between water quality and implementation of various management practices to control nonpoint source pollution.

(m) Reports of Administrator

(1) Annual reports

Not later than January 1, 1989, and each January 1 thereafter, the Administrator shall transmit to the Committee on Public Works of the House of Representatives and the Committee on Environment and Public Works of the Senate, a report for the preceding fiscal year on the activities and programs implemented under this section and the progress made in reducing pollution in the navigable waters resulting from nonpoint sources and improving the quality of such waters.

(2) Final report

Not later than January 1, 1990, the Administrator shall transmit to Congress a final report on the activities carried out under this section. Such report, at a minimum, shall

(A) describe the management programs being implemented by the States by types and amount of affected navigable waters, categories and subcategories of nonpoint sources, and types of best management practices being implemented;

(B) describe the experiences of the States in adhering to schedules and implementing best management practices;

(C) describe the amount and purpose of grants awarded pursuant to subsections (k) and (l) of this section;

(D) identify, to the extent that information is available, the progress made in reducing pollutant loads and improving water quality in the navigable waters;

(E) indicate what further actions need to be taken to attain and maintain in those navigable waters (i) applicable water quality standards, and (ii) the goals and requirements of this chapter; and

(F) include recommendations of the Administrator concerning future programs (including enforcement programs) for controlling pollution from nonpoint sources; and

(G) identify the activities and programs of departments, agencies, and instrumentalities of the United States which are inconsistent with the management programs submitted by the States and recommend modifications so that such activities and programs are consistent with and assist the States in implementation of such management programs.

(n) Set aside for administrative personnel

Not less than 5 percent of the funds appropriated pursuant to subsection (j) for any fiscal year shall be available to the Administrator to maintain personnel levels at the Environmental Protection Agency at levels which are adequate to carry out this section in such year.


REPEATED IN STAT

Executive Order 12372, referred to in subsection (b)(2)(F) and (m). 84 Stat. 1547. 43 U.S.C. 1371, as added, which is set out under section 1371 of Title 43, Public Works.

The Colorado River Basin Salinity Control Act, referred to in subsection (i)(2)(D), Pub. L. 94-226, June 24, 1974, 88 Stat. 357, as added, which is classified to section 2220 of Title 43, Public Works.

Land Rights. For complete classification of this Act to the Code, see Short Title note set out under section 2101 of Title 43 and Tables.

AMENDMENTS

1988—Subsec. (m), (n). Pub. L. 100-303 repealed Pub. L. 96-398, §4(k)(1), Nov. 10, 1980, 94 Stat. 1657, as added, which directed the striking out of heading and text of par. (2), which was repealed by Pub. L. 98-584, See Effective Date of 1988 Amendment note below. (Subsection (m), (n), Pub. L. 96-398, §4(k)(1), (2), which directed the redesignation of subsec. (m) as (n) and striking out of heading and text of former section (m), which was repealed by Pub. L. 98-584, See Effective Date of 1988 Amendment note below.

CHANGE OF NAME

Committee on Public Works and Transportation of House of Representatives treated as referring to Committee on Transportation and Infrastructure of House of Representatives by section 3(a) of Pub. L. 104-134, set out as a note preceding section 21 of Title 2, The Congress.

EFFECTIVE DATE OF 2002 AMENDMENT

Amendment by Pub. L. 107-333 effective Nov. 15, 1998, and Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.) to be applied and administered on and after Nov. 27,
Title 33—Navigation and Navigable Waters

33 CFR Chapter I—Coast Guard

Part 112—Contaminants

\subsection*{112.452 Definition of aggregate aboveground storage capacity.}

For purposes of \section{112.452}, the aggregate aboveground storage capacity of a farm facility is:

\begin{enumerate}
\item all containers on separate parcels that have a capacity that is 1,000 gallons or less, or
\item all containers holding livestock feed ingredients approved for use in livestock feed by the Com- mercial Food and Drug Administration.
\end{enumerate}
Mariana Islands, and the Trust Territory of the Pacific Islands.

(6) The term "municipality" means a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 1289 of this title.

(5) The term "person" means an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body.

(6) The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radionuclides, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. This term does not mean (A) "sewage from vessels or a discharge incidental to the normal operation of a vessel of the Armed Forces" within the meaning of section 1322 of this title; or (B) water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by authority of the State in which the well is located, and if such State determines that such injection or disposal will not result in the degradation of ground or surface water resources.

(7) The term "Navigable waters" means the waters, including those in the United States, including the territorial sea.

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

(9) The term "contiguous zone" means the area established or to be established by the United States under article 2 of the Convention of the Territorial Sea and the Contiguous Zone.

(10) The term "ocean" means any portion of the high seas beyond the contiguous zone.

(11) The term "pollution" means any addition of any pollutant to navigable waters, the waters of the contiguous zone, or the ocean, including scheduled compliance.

(12) The term "discharge of a pollutant" and the term "discharge of pollutants" each means (A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

(13) The term "dissolved pollutants" means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, or on the basis of information available to the Administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or other abnormalities, in such organisms or their offspring.

(14) The term "point source" means any discernible, confined and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agriculturalStormwater discharges and return flows from irrigated agriculture.

(15) The term "biological monitoring" shall mean the determination of the effects on aquatic life, including accumulation of pollutants in tissue, in receiving waters due to the discharge of pollutants (A) by techniques and procedures, including sampling of organisms representative of appropriate levels of the food chain appropriate to the volume and the physical, chemical, and biological characteristics of the effluent, and (B) at appropriate frequencies and locations.

(16) The term "discharge" means a discharge of a pollutant, and a discharge of pollutants.

(17) The term "schedule of compliance" means a schedule of remedial measures including an enforceable sequence of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard.

(18) The term "industrial user" means those industries identified in the Standard Industrial Classification Manual, Bureau of the Budget, 1967, as amended and supplemented, under the category of "Division D—Manufacturing" and such other classes of significant waste producers as, by regulation, the Administrator deems appropriate.

(19) The term "pollution" means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water.

(20) The term "medical waste" means isolation wastes; infectious agents; human blood and blood products; pathological wastes; sharp body parts; contaminated bedding; surgical wastes and potentially contaminated laboratory wastes, dialysis wastes, and such additional medical items as the Administrator shall prescribe by regulation.

(21) COASTAL RECREATION WATERS.—

(A) IN GENERAL.—The term "coastal recreation waters" means—

(i) the Great Lakes and

(ii) marine coastal waters (including coastal estuaries) that are designated under section 303(d) of this title by a State for use for swimming, bathing, surfing, or similar water contact activities.

(B) EXCLUSIONS.—The term "coastal recreation waters" does not include—

(i) inland waters;

(ii) waters upstream of the mouth of a river or stream having an unobstructed natural connection with the open sea.

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\section*{TITLE 33—NAVIGATION AND NAGIVABLE WATERS}

\subsection*{33003 \hspace{3em} EFFECTIVE DATE OF FINAL AMENDMENT}

Amendment by Pub. L. 113–121, set out as a note under section 1321 of this title.

\subsection*{33004 \hspace{3em} TERMINATION OF TREATY TERRITORY OF THE PACIFIC ISLANDS}

For termination of Treaty Territory of the Pacific Islands, see note set out preceding section 1311 of Title 64, Territories and Insular Possessions.

\subsection*{33005 \hspace{3em} TERRITORIAL SEA AND CONTIGUOUS ZONES OF UNITED STATES}

For extension of territorial sea and contiguous zone of United States, see Pub. No. L. 89–667, 89 Stat. 804, section 4, for purposes of the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), the term "source" includes a landfill leachate collection system.

\subsection*{33006 \hspace{3em} Water Pollution Control Advisory Board}

\subsubsection*{(3) Establishment: composition; terms of office}

(a) Establishment: composition; terms of office:

(1) There is hereby established in the Environmental Protection Agency a Water Pollution Control Advisory Board, composed of the Administrator or his designee, who shall be Chairman, and nine members appointed by the President, none of whom shall be Federal officers or employees. The appointed members, having due regard for the purposes of this section, shall be selected from among representatives of various States, interstate, and local governmental agencies, of private and public interests, from Federal and of other public and private agencies, organizations, or groups demonstrating an active interest in the field of pollution prevention and control, as well as other individuals who are expert in this field.

(2)(A) Each member appointed by the President shall hold office for a term of three years, except that (i) any member appointed to fill a vacancy occurring prior to the expiration of the term for which his predecessor was appointed shall be appointed for the remainder of such term, and (ii) the terms of office of the members first taking office after June 30, 1966, shall expire as follows: those at the end of one year after such date, three at the end of two years after such date, and three at the end of three years after such date, as designated by the President at the time of appointment, and (iii) the term of any member under the preceding provisions shall be extended until the date on which his successor’s appointment is effective. None of the members appointed by the President shall be eligible for reappointment within one year after the end of his preceding term.

(B) The members of the Board who are not officers or employees of the United States, while attending conferences or meetings of the Board or while serving at the request of the Administrator, shall be entitled to receive compensation at a rate to be fixed by the Administrator, but not exceeding $100 per diem, including travel-time, and while away from their homes or regular places of business they may be allowed travel-

\section*{ADD-13}
Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.


AMENDMENTS
1988—Subsec. (b)(3). Pub. L. 100-203 redesignated par. (3) as (4) and struck out former par. (3) relating to venue, which provided for selection procedure in subpar. (A), administrative provisions in subpar. (B), and transfer in subpar. (C).
1967—Subsec. (b)(2). Pub. L. 89-708, §300(c), 86 Stat. 1862, substituted “transact business which is directly affected by such action” for “transact such business”, “120” for “ninety”, and “120c” for “ninety”, stricken “130c” and “130” of this title for “or 130c of this title” in cl. (B), and added cl. (D).

EFFECTIVE DATE OF 1988 AMENDMENT
Amendment by Pub. L. 100-203 effective 180 days after Jan. 8, 1988, see section 3 of Pub. L. 100-203, set out as a note under section 2112 of Title 28, Judiciary and Judicial Procedure.

§1376. State authority

Except as expressly provided in this chapter, nothing in this chapter shall (1) preclude or delay the right of any State or political subdivision thereof or interstate agency to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution, except that if an effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance is in effect under this chapter, such State or political subdivision or interstate agency may not adopt or enforce any such limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance which is less stringent than the effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance under this chapter; or (2) be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States.


§1371. Authority under other laws and regulations

(a) Impairment of authority or functions of officials and agencies; treaty provisions

This chapter shall not be construed as (1) limiting the authority or functions of any officer or agency of the United States under any other law or regulation not inconsistent with this chapter; (2) affecting or impairing the authority of the Secretary of the Army (A) to maintain navigation or (B) under the Act of March 3, 1899, (30 Stat. 1112); except that any permit issued under section 1344 of this title shall be conclusive as to the effect on water quality of any discharge resulting from any activity subject to section 1342 of this title, or (3) affecting or impairing the provisions of any treaty of the United States.

(b) Discharges of pollutants into navigable waters

Discharges of pollutants into the navigable waters subject to the Rivers and Harbors Act of 1918 (33 Stat. 500; 33 U.S.C. 401) and the Superfund Amendments and Reauthorization Act of 1986 (42 Stat. 950; 42 U.S.C. 9601-9651) shall be regulated pursuant to this chapter, and not subject to such Act of 1918 and the Act of 1986 except as to effect on navigation and anchorage.

(c) Action of the Administrator deemed major Federal action; construction of the National Environmental Policy Act of 1969

(1) Except for the provision of Federal financial assistance for the purpose of assisting the construction of publicly owned treatment works as authorized by section 1341 of this title, and the issuance of a permit under section 1342 of this title for the discharge of any pollutant by a new source as defined in section 1362 of this title, no action of the Administrator taken pursuant to this chapter shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (43 Stat. 140; 42 U.S.C. 4321 et seq.); and
(2) Nothing in the National Environmental Policy Act of 1969 (43 Stat. 140) shall be deemed to—
(A) authorize any Federal agency authorized to license or permit the conduct of any activity which may result in the discharge of a pollutant into the navigable waters to review any effluent limitation or other requirement established pursuant to this chapter or the adequacy of any certification under section 1341 of this title; or
(B) authorize any such agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this chapter.

(d) Consideration of international water pollution control agreements

Notwithstanding this chapter or any other provision of law, the Administrator (1) shall not require any State to consider in the development of the ranking of priority of need for the construction of treatment works (as defined in subsection (b) of this chapter), any water pollution control agreement which may have been entered into between the United States and any other nation, and (2) shall not consider any such agreement in the approval of any such priority ranking.


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tributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste referred to in paragraph (e)(2) or may be necessary, or both, or to order the Administrator to perform the act or duty referred to in paragraph (e)(2) or, as the case may be, and to apply any appropriate civil penalties under section 6061(a) and (g) of this title for “to enforce such regulations or orders, or to order the Administrator to perform such act or duty as the case may be.”

Subsec. (b) Pub. L. 84-441, §456, amended subsec. (b) generally. Prior to amendment, subsec. (b) read as follows:

“No actions may be commenced under paragraph (a)(1) of this section—

(1) prior to sixty days after the plaintiff has given notice of the violation (A) to the Administrator; (B) to the state in which the alleged violation occurs; and (c) to any alleged violator of such permit, plan, standards, regulation, condition, requirement, or order; or

(2) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States or of a State to require compliance with such permit, plans, standards, regulation, condition, requirement, or order: Provided, Neverthe- less, that in any such action in a court of the United States, any person may intervene as a matter of right.”

Subsec. (c) Pub. L. 96-412, §456(c), substituted “to the prevailing or substantially prevailing party” for “to any party” and inserted “or section 6061 of this title”.

Subsec. (e) Pub. L. 96-412, §456(c), added subsec. (e).

Subsec. (g) Pub. L. 96-412, §456(g), substituted “subchapter III” for “chapter 22” of this title.

Subsec. (h) Pub. L. 95-389, §702(d), substituted “require” for “requiring.”

TRANSFER OF FUNCTIONS

For transfer of certain enforcement functions of Administrator or other official of Environmental Protection Agency under this chapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, and subsequent transfer to Secretary of Energy, then to Federal Coordinator for Alaska Natural Gas Transportation Projects, see note set out under section 6001 of this title.

§6973. Imminent hazard

(a) Authority of Administrator

Notwithstanding any other provision of this chapter, upon receipt of evidence that the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste may present an imminent and substantial endangerment to health or to the environment, the Administrator may bring suit on behalf of the United States in the appropriate district court against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a storage, treatment, or disposal facility) who has contributed to or who is contributing to such handling, storage, treatment, transportation, or disposal, to restrain such person from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both. A transporter shall not be deemed to have contributed or to be contributing to such handling, storage, treatment, or disposal taking place after such solid waste or hazardous waste has left the possessor or control of such transporter if the transporter, “has taken such waste was under a sole contractual arrangement arising from a published tariff and acceptance for carriage by common carrier by rail and such transporter has exercised due care in the past or present handling, storage, treatment, transportation and disposal of such waste. The Administrator shall provide notice to the affected state of any such suit. The Administrator may also, after notice to the affected state, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

(b) Violations

Any person who willfully violates, or fails or refuses to comply with, any order of the Administrator under subsection (a) of this section may, in an action brought in the appropriate United States district court to enforce such order, be fined not more than $5,000 for each day in which such violation occurs or such failure to comply continues.

(c) Immediate notice

Upon receipt of information that there is hazardous waste at any site which has presented an imminent and substantial endangerment to human health or to the environment, the Administrator shall provide immediate notice to the appropriate local government agencies. In addition, the Administrator shall require notice of such endangerment to be promptly posted at the site where the waste is located.

(d) Public participation in settlements

Whenever the United States or the Administrator proposes to covenant not to sue or to forbear from suit or to settle any claim arising under this section, notice, and opportunity for public meeting in the affected area, and a reasonable opportunity to comment on the proposed settlement prior to its final entry shall be afforded to the public. The decision of the United States or the Administrator to enter into or not to enter into such Consent Decree, covenant or agreement shall not constitute a final agency action subject to judicial review under this chapter or chapter 7 of Title 5.


COAUTHORSHIP

In subsec. (d), “chapter 7 of Title 5” substituted for “the Administrative Procedure Act” on authority of Pub. L. 89-554, §7(f), Sept. 2, 1966, 80 Stat. 333, the first section of which enacted Title 5, Government Organizational and Employee Affairs.

AMENDMENTS

1986—Subsec. (a). Pub. L. 99-412, §456, inserted “past or present” after “violates” and added “against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a storage, treatment, or disposal facility) who has contributed to or who is contributing to such handling, storage, treatment, transportation, or disposal, to restrain such person from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both” for “to restrain such person from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both.”
**EXHIBITS**

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EXHIBIT A
GROUND WATER POLLUTION
FROM SUBSURFACE EXCAVATIONS

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
Washington, D. C. 20460
1973
GROUND WATER POLLUTION
FROM SUBSURFACE EXCAVATIONS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Water Programs
Water Quality and Non-Point Source Control Division
Washington, D.C. 20460

1973
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**APPENDIX**

**ADMINISTRATOR'S DECISION STATEMENT NO. 5**

**RECOMMENDED DATA REQUIREMENTS FOR EVALUATION OF SUBSURFACE EMPLACEMENT OF FLUIDS BY WELL INJECTION**
## ILLUSTRATIONS

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PART ONE

SOURCE IDENTIFICATION AND EVALUATION

INTRODUCTION

"Ground water quality" is the name of the game in a discussion of subsurface excavations as sources of pollution. In rare instances pollution from subsurface excavations moves directly to surface water bodies without entering the ground water domain. To the extent that ground water moves to the surface, which is considerable, polluted ground water causes surface water pollution, but it is the alteration of the chemical, physical, biological and radiological integrity of ground water that is the overriding concern.

Identification of the nature of polluting excavations starts from the premise that every hole in the ground, whether natural or man-made, is a potential source of ground water contamination. A "well" is a particular type of subsurface excavation rather than merely, "a place from which water issues forth" as it was described in ancient England where the word originated.
SECTION III - POLLUTION FROM OTHER SUBSURFACE EXCAVATIONS

LAGOONS, BASINS, AND PITS

In general, a lagoon comprises a natural depression in the land or a sector of some bay, estuary, or wetland area diked off from the remainder. No sharp line of definition distinguishes it from a basin, which is most commonly constructed by formal diking or by a combination of excavating and diking. Pits are distinguished from lagoons and basins by a smaller ratio of surface area to depth.

Unlike excavations used in septic systems or in landfill operations, lagoons, basins, and pits are usually open to the atmosphere, although pits and small basins may sometimes be placed under a roof. Some are intended to discharge liquid to the soil system and hence to the ground water, others are designed to be watertight. The former are, therefore, unlined structures sited on good infiltrative surfaces; the later are lined with puddled clay, concrete, asphalt, metal, or plastic sheeting. Thus, both by design and by accident or failure, this type of structure is of concern in the context of ground water quality.
Lagoons and basins are adapted to a wide spectrum of municipal and industrial uses including storage, processing, or waste treatment on a large scale. For example, the unlined lagoon or basin may serve as a large septic tank for raw sewage, a secondary or tertiary sewage oxidation pond, or as a spreading basin for disposing of effluent from treatment ponds or conventional waste water treatment plants by ground water recharge. In industry the unlined system may serve as a cooling pond or to hold hot waste water until its temperature is suitable for discharge to surface waters, or to store waste water for later discharge into streams during flood flows or for application to the land during the growing season. Some unlined lagoons are used for a special purpose, such as evaporating ponds, to concentrate and recover salt from saline water. Lined basins are used for a number of purposes, including evaporation ponds for concentrating salts or process brines. Recovery of minerals, or more economic disposal of the concentrate, may be the motivating factor. In oil fields, refineries, and chemical processing plants, lined pits are used as holding sumps for brines or wastes as a stage in disposal by well injection, or other acceptable procedure. In the East Bay area of California, a lined basin has served as a receiving sump for fruit and
vegetable cannery wastes to be barged to sea or hauled to land disposal sites.

Unlined pits serve to a limited extent in sewerage; examples include pit privies and cesspools or percolation devices in septic systems. They are also widely used to dispose of storm water from roof drains. In California both pits and basins are used to dispose of storm water which would otherwise collect in highway underpasses and interfere with traffic.

Lined pits have historically been used in industry for processes ranging from tanning of animal hides to metal plating. They are commonly used to house sewage pumps below the ground level. In both industry and municipal sewerage, they are used as intake sumps in pumping installations. Although lined pits are commonly concrete or metal structures, undetected leakage of highly concentrated pollutants can have a significant effect on ground water.

**Scope of Problem**
Data by which to evaluate the existing scope of the problem of municipal and industrial waste lagoons and similar open
excavations in relation to ground water quality have not been assembled and analyzed. State health departments and water quality control boards can cite instances in which ponded contaminants have created a local pollution problem. To assess the degree to which the use of lagoons, basins, and pits in fact degrade ground water quality will require an extensive survey of the literature and of the practice of ponding wastes and process materials. The present outlook is that the need for such an assessment will become increasingly great with time. Two factors support this conclusion:

- As institutionalized in Public Law 92-500, there is a growing reluctance of regulatory agencies to permit waste discharges to surface waters, thus requiring either land disposal of sewage effluents or the creation of an increasing volume of process brines in achieving an acceptable effluent quality; and
- A growing tendency to require industry to process its own wastes prior to discharge to the municipal sewer, thus creating more need to use lagoons and basins either for waste processing or for managing waste processing brines.
Both of these developments suggest a need to control the pathways by which contaminants may move from ponds to ground water and to monitor the effectiveness of control measures.

**Potential Hazard to Ground Water**

The potential of sewage lagoons to degrade ground water quality is essentially the same as that of septic systems. An extensive survey of the literature (McGauhey and Krone, 1967) shows that a continuously inundated soil soon clogs to the extent that the infiltration rate is reduced below the minimum for an acceptable infiltration system. If the ground water surface is too close to the lagoon bottom, a hanging column of water will be supported by surface tension and the soil will not drain. Clogging will then continue indefinitely even though no new liquid is added to the system. A spreading pond designed to discharge effluent to the ground water must, therefore, be loaded and rested intermittently to maintain an acceptable recharge rate. If, however, isolating the contents of the lagoon from the ground water is the objective of the system, a low infiltration rate may still mean an undesirable quantity of polluted water passing the water-soil interface. The pollutants carried downward with percolating water from a
sewage lagoon are those described in the section on septic tanks. Not all of the salts introduced to the ground water originate in domestic use. In some instances, such as that of Colorado River water delivered to Southern California, the mineral content of the imported water may be higher than that of the local ground water.

Liquids percolating from lagoons or basins used by industry have a greater potential to degrade ground water than does domestic sewage. Chromates, gasoline, phenols, picric acid, and miscellaneous chemicals have been observed to travel long distances with percolating ground water. Unlined lagoons, basins, and pits are commonly used by industry for the storage of liquid raw materials and waste effluent. Most of these facilities are simply open excavations or diked depressions in which the liquid is temporarily or permanently stored. Few have been designed with proper consideration to water tightness, so that leakage of potential contaminants into the underlying ground water reservoir is very common even though the leakage may seldom be known to exist. Liquids stored in industrial lagoons, basins, and pits may contain brines, arsenic compounds,
heavy metals, acids, gasoline products, phenols, radioactive
substances, and many other miscellaneous chemicals.

Where storage areas have been actively used for many years
and leakage through the sides and bottom of a particular
lagoon or basin has taken place, the quantity of
contaminated ground water can be significant and the plume
of polluted liquid may have traveled long distances with the
percolating ground water. In some instances, the first
realization that extensive ground water pollution has
occurred may come when the plume reaches a natural discharge
area at a stream and contamination of surface waters is
noted.

An example of the fate and environmental consequences of a
leaky basin containing metal-plating waste effluent from an
industrial plant is given in Perlmutter and Lieber (1970).
Plating wastes containing cadmium and hexavalent chromium
seeped down from disposal basins into the upper glacial
aquifer of southeastern Nassau County, New York. The
seepage formed a plume of contaminated water over 1200
meters (4,000 feet) long, about 300 meters (1,000 feet)
wide, and as much as 20 meters (70 feet) thick. Some of the
contaminated ground water is being discharged naturally into a small creek that drains the aquifer. The maximum observed concentration of hexavalent chromium in the ground water was about 40 mg/l, and concentrations of cadmium have been observed as high as 10 mg/l.

In another case in New Jersey, unlined waste lagoons constructed in sand and gravel beds leaked over 75 million liters (20 million gallons) of effluent into the upper 6 meters (20 feet) of aquifer over a period of only a few years. The contaminated ground water contains high concentrations of phenols, chromium, zinc, and nickel.

**Control Methods**

In the case of lagoons or basins for deliberate disposal of sewage effluents, or surface runoff by ground water recharge, controls specifically pertinent to ground water protection are essentially self-generating -- the system simply will not work if not properly designed. The first control measure in ground water protection from spreading basins is to apply existing knowledge to their siting and design. Existing engineering and hydrogeologic knowledge would prohibit the construction of such systems directly in
the aquifer; require adequate distance between the infiltrative surface and the ground water surface to permit drainage; and prohibit construction in faulted or fractured strata or in unsuitable soils.

Control of industrial waste discharges to the ground water is a complex problem. In a state with a highly organized water pollution control agency (e.g., California), individual permits are issued on the basis of adequate design and surveillance programs. Because of the variety of industrial wastes and the varied situations in which they occur, control of ground water pollution from such wastes depends both upon proper design of new systems and upon discovery and correction of existing poor systems. Methods for controlling ground water pollution from industrial lagoons, basins, and pits include:

- Pretreatment of wastes for removal of at least the toxic chemicals.
- Lining with impervious barriers of all lagoons, basins, and pits that contain noxious fluids. This is the principal control technique recommended by
some agencies, such as the Delaware River Basin Commission.

- Use barrier wells, pumped to intercept plumes of contaminated ground water from existing industrial basins where leakage has occurred. Such wells have been used successfully, but can be costly to install and operate. The water removed must be treated before redisposal.

- Banning the use of pits. An example is found in Kansas, where thousands of brine pits were used by the oil industry. Kansas was the first State to ban their use because of the contamination of ground water.

- Locating and identifying unauthorized pits on industrial sites, on a case-by-case basis, and apply appropriate regulatory action.

**Monitoring Procedures**

Lagoons, basins, and pits represent pollution sources which may be of significance to ground water quality degradation. Therefore, a program involving special monitoring wells on a priority basis is a possible approach.
A program of periodic sampling and evaluation of data from existing wells, selected for their potential to reveal both normal ground water quality and point contamination, is another monitoring approach. Accompanying this should be an evaluation of the control measures themselves to assure that ground water protection is indeed being accomplished.
References


2. California State Water Pollution Board, Wastewater Reclamation in Relation to Groundwater Pollution, Publication No. 6, Sanitary Engineering Research Laboratory, University of California, Berkeley (1953).


LANDFILLS

The Matter of Definition
To evaluate the effects of land disposal of solid wastes in the context of "landfills" it is necessary to recognize an unfortunate lack of distinction between the properly designed and constructed sanitary landfill and the variety of operations that are properly classed as refuse dumps. A landfill is herein defined as any land area dedicated or abandoned to the deposit of urban solid waste regardless of how it is operated or whether or not a subsurface excavation is actually involved. A "sanitary landfill" is:

"A method of disposal of refuse on land without creating nuisances or hazards to public health or safety, by utilizing the principles of engineering to confine the refuse to the smallest practical area, to reduce it to the smallest practical volume, and to cover it with a layer of earth at the conclusion of each day's operation or at such more frequent intervals as it may be necessary."

Less than 10 percent of the refuse disposal sites in the United States are operated within this accepted definition of a sanitary landfill. Very few of those considered true sanitary landfills were established in sites studied and
selected for the special purposes of hazardous waste disposal.

Urban, or municipal, solid waste is considered to include household, commercial, and industrial wastes which the public assumes responsibility for collecting. However, commercial solid waste and industrial solid wastes, presently collected and hauled privately, may be discharged into a public landfill, along with municipal wastes and refuse which the citizen himself delivers.

**Environmental Consequences**

The potential hazard of landfills to ground water quality via leachate is a function of the total amount of waste generated, its areal distribution, the composition of the waste itself, and the siting, design, and operation of the fill. The U.S. Environmental Protection Agency estimated that in 1969 urban solid waste totaled 225 million tons per year, while industrial solid waste was about 100 million tons. Various estimates of this total for 1972 are about one ton per capita per year—almost 2.72 kilograms per person per day. In 1970 there were some 16,000 authorized land disposal sites, and perhaps 10 times that many
unauthorized dumping grounds. Because wastes are generated and disposed of where people are, the pattern of population distribution gives a clue to the location and intensity of landfill practice.

Typical values of components of solid wastes collected in urban communities are shown in Table 13. From this Table it may be concluded that slightly over 70 percent of domestic refuse is biodegradable organic matter of which about three-quarters (50 percent of total waste) is paper and wood. An additional fraction ranging from 1 to 15 percent in the Table involves materials which might include some leachate solids such as ashes and certain soils. Studies made in Berkeley, California, in 1952 and repeated for the same area in 1967 verify this conclusion and show that the percentages of individual components changed very little over the 15-year period.

Data on the amount and composition of industrial solid wastes and its disposal are less extensive. A survey (Manufacturing Chemists Association, 1967) of 991 chemical plants, of which 889 were production facilities is reported in Table 14. It shows that 75 percent of waste solids were
noncombustible process solids and that 71 percent of the total was disposed of by landfill on company-owned property. No data are at hand on the composition of these wastes but it must be presumed that some fraction of the total was leachable if conditions leading to leaching occurred.

<table>
<thead>
<tr>
<th></th>
<th>Santa Clara</th>
<th>Los Angeles</th>
<th>Louisville</th>
<th>Quad-Cities</th>
<th>Purdue Univ.</th>
<th>23 Cities</th>
<th>Madison Wis.</th>
<th>National Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Products</td>
<td>50</td>
<td>41</td>
<td>60</td>
<td>45</td>
<td>42</td>
<td>46</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>Food Wastes</td>
<td>12</td>
<td>6</td>
<td>18</td>
<td>1</td>
<td>12</td>
<td>17</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Garden Waste</td>
<td>9</td>
<td>21</td>
<td>--</td>
<td>1</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Plastics</td>
<td>1</td>
<td>2</td>
<td>--</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cloth, Leather</td>
<td>4</td>
<td>2</td>
<td>--</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3k</td>
</tr>
<tr>
<td>Rags, Rubber</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>2</td>
<td>2</td>
<td>--</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Rocks, Dirt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unclassified</td>
<td>7</td>
<td>12</td>
<td>3</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>--</td>
<td>7</td>
</tr>
<tr>
<td>Metals</td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Glass and</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Ceramics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. EPA, 1970; University of California
b. Bergman, 1972
c. EPA, 1970: University of Louisville
d. US Public Health Service, 1968
e. Bell, 1963
f. Niessen and Chanskey, 1970
g. Ham, 1971
h. Salvato, et al, 1971
i. Total 3 categories = 23 percent
j. Includes rubber
k. Rubber included with plastics

Table 13 Components of domestic solid waste (expressed as percentages of total).
<table>
<thead>
<tr>
<th>Type of Waste</th>
<th>Total Per Year (Thousands of Metric Tons)</th>
<th>Percent Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process solids, non-combustible</td>
<td>7,624</td>
<td>75</td>
</tr>
<tr>
<td>Process solids, combustible</td>
<td>520</td>
<td>5</td>
</tr>
<tr>
<td>Containers, non-combustible</td>
<td>58</td>
<td>1</td>
</tr>
<tr>
<td>Containers, combustible</td>
<td>152</td>
<td>1</td>
</tr>
<tr>
<td>Fly ash from fuel combustion</td>
<td>1,440</td>
<td>14</td>
</tr>
<tr>
<td>Other, or unspecified</td>
<td>423</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>10,217</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Disposal Method**

<table>
<thead>
<tr>
<th>Disposal Method</th>
<th>Total Per Year (Thousands of Metric Tons)</th>
<th>Percent Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landfill on company property</td>
<td>7,318</td>
<td>71</td>
</tr>
<tr>
<td>Landfill away from company property</td>
<td>472</td>
<td>5</td>
</tr>
<tr>
<td>Incineration, with heat recovery</td>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td>Incineration, without heat recovery</td>
<td>210</td>
<td>2</td>
</tr>
<tr>
<td>Open dump burning</td>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>Contracted disposal</td>
<td>1,476</td>
<td>15</td>
</tr>
<tr>
<td>Other, or unspecified</td>
<td>559</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>10,217</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Table 14 Landfill disposal of chemical process wastes.*
Leaching of Landfills

Leaching of landfills with consequent degradation of underlying ground water depends upon several factors. These, together with measures for control were summarized in 1971 (Salvato, et al, 1971).

If a landfill is to produce leachate there must be some source of water moving through the fill material. Possible sources include: (1) precipitation, (2) moisture content of refuse, (3) surface water infiltrating into the fill, (4) percolating water entering the fill from adjacent land area, or (5) ground water in contact with the fill. In any event, leachate is not produced in a landfill until at least some significant portion of the fill material reaches field capacity. To accomplish this 4.11 cm of water per meter of depth of fill is reported to be necessary. This value is far in excess of that which might be produced from a typical mixed refuse. Moisture in refuse is about 20 percent by weight. Because of the high paper content and the relatively inert material shown in the typical analyses, Table 13, only a small amount of moisture is released by the decomposition of the organic solids in refuse. A composite sample of an average municipal refuse is shown in Table 15.
To induce composting, a moisture content of 50 to 60 percent is required, hence a fill in a very arid region having no source of moisture except that of urban refuse will decompose very slowly and produce little if any leachate. On the other hand, if a fill were made of fruits and vegetables having 80 to 90 percent moisture, anaerobic decomposition would proceed rapidly and leachate would be produced. Thus, landfill is not recommended for cannery wastes alone.

Percolating water entering a landfill from surrounding land is not likely in a proper landfill. If other sources of
water are excluded from a landfill by employing procedures described in a later section, the production of leachate in a well designed and managed landfill can be effectively eliminated. A proper landfill not intersecting the water table will not cause water quality impairment for either domestic or irrigation use. Subsequent reports of test borings around landfills dating back as far as 50 years in England showed no evidence of ground water pollution as a result of leaching. Similarly, no evidence was found in Holland that past landfilling has been a source of pollution of ground water. Evidence reported from Illinois and Minnesota is that leaching did not contaminate ground water in two major fills built within the aquifer itself. Compaction of fill material, clogging of fill area walls and balance of hydrostatic pressure cause ground water to flow around the fill rather than through it.

Absence of leaching as an important problem is characteristic of landfill sites engineered and constructed in accord with best current technology. In this category are most of the sanitary landfills comprising 8 percent of the present land disposal situations, and presumably those to be built in the future. The 75 percent of urban refuse
placed in dumps, which in varying degrees are open to external sources of water, are likely to produce leachate in significant amounts. It is estimated that of 124 cm annual rainfall in New York, 45 percent will infiltrate into an unsealed and unprotected dump. At some seasons of the year up to 75 percent of the infiltrated water may be returned to the atmosphere by evaportranspiration. The remainder, and at times all, of the infiltrate will percolate through the landfill. If the fill is in a subsurface excavation, this percolate will move downward to the ground water at a rate governed by the degree of clogging of the underlying and surrounding soil. Clogging, however, may reduce permeability at the infiltrative surface; it cannot be assumed that the landfill will long discharge leachate at an appreciable rate. It may tend to become essentially a basin filled with saturated refuse and soil. Further rainfall will then run off the fill surface without coming in contact with refuse. However, if leachate is produced within a fill and soil clogging controls its escape to the ground water, a large fill area, even at a low rate of movement into the underlying strata, could with time discharge a significant volume of leachate.
A secondary leaching phenomenon associated with all types of landfills not subjected to specific controls is the result of CO₂ generated in the fill being forced outward into the surrounding soil. When picked up by percolating rain water, this increases the aggressiveness of water to limestones and dolomites and so increases the hardness of ground water. A refuse of the composition shown in Table 15 is theoretically capable of producing 0.169 cubic meters of CO₂ per kilogram of refuse (Anderson and Callinan, 1969). However, the balance of nutrients, the moisture, and other environmental factors are unlikely to exist over the time span necessary for any such complete destruction of the carbonaceous fraction of refuse.

**Nature and Amount of Leachate**

Data on the analysis of leachate vary widely. Much of it comes from short-term lysimeter studies in which researchers had to make special efforts to saturate the refuse so as to produce maximum leaching. Thereafter, experiments were often terminated before the leaching rate reached an equilibrium. Data on leachate from several sources are summarized in Table 16.
Table 16 indicates what many observers have reported: the initial values of BOD and COD are always high. Studies of operating landfills show constituents of leachate to include:

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>COD</td>
<td>8,000 - 10,000 mg/l</td>
</tr>
<tr>
<td>BOD</td>
<td>2,500 mg/l</td>
</tr>
<tr>
<td>Iron</td>
<td>600 mg/l</td>
</tr>
<tr>
<td>Chloride</td>
<td>250 mg/l</td>
</tr>
</tbody>
</table>

Table 16 also shows hardness, alkalinity, and some ions to be significantly increased. The California data also show that continuous flow through one acre-foot of newly deposited refuse might leach out during the first year approximately:

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium plus potassium</td>
<td>1.36 tons</td>
</tr>
<tr>
<td>Calcium plus magnesium</td>
<td>0.9 tons</td>
</tr>
<tr>
<td>Chloride</td>
<td>0.83 tons</td>
</tr>
<tr>
<td>Sulfate</td>
<td>0.21 tons</td>
</tr>
<tr>
<td>Bicarbonates</td>
<td>3.54 tons</td>
</tr>
<tr>
<td>Determination (mg/L)</td>
<td>Source&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>pH</td>
<td>5.6</td>
</tr>
<tr>
<td>Total hardness (CaCO&lt;sub&gt;3&lt;/sub&gt;)</td>
<td>8,120</td>
</tr>
<tr>
<td>Iron total</td>
<td>305</td>
</tr>
<tr>
<td>Sodium</td>
<td>1,805</td>
</tr>
<tr>
<td>Potassium</td>
<td>1,840</td>
</tr>
<tr>
<td>Sulfate</td>
<td>630</td>
</tr>
<tr>
<td>Chloride</td>
<td>2,240</td>
</tr>
<tr>
<td>Nitrate</td>
<td>no result</td>
</tr>
<tr>
<td>Alkalinity as CaCO&lt;sub&gt;3&lt;/sub&gt;</td>
<td>8,100</td>
</tr>
<tr>
<td>Ammonia nitrogen</td>
<td>815</td>
</tr>
<tr>
<td>Organic nitrogen</td>
<td>550</td>
</tr>
<tr>
<td>COD</td>
<td>no result</td>
</tr>
<tr>
<td>BOD</td>
<td>32,400</td>
</tr>
<tr>
<td>Total dissolved solids</td>
<td>no result</td>
</tr>
</tbody>
</table>

<sup>a</sup> No age of fill specified for Sources 1-3, Source 4 is initial leachate composition, 5 is from 3-year old fill, 6 is from 15-year old fill.

<sup>b</sup> Data from Los Angeles County (1988).

<sup>c</sup> Data from Ehrlich and Landon (1969).

Table 16 Leachate composition
Rates for subsequent years were expected to be greatly reduced.

Field studies of the amount and quality of leachate through well-designed fills have been made by the Los Angeles County Sanitation Districts. At their Mission Canyon Landfill, underdrains were installed beneath two large fills to entrap leachate. One was installed in 1963; the other in 1968. At the time of Meichtry's report (1971) the first of these two had produced nothing but odorous gases although the fill was heavily irrigated from 1968 onward. The second, deeper fill produced odorous gases but no leachate until March 1968 when 11 cm of rain fell in 24 hours. On that occasion 806.1 liters of leachate were collected. Flow then continued at a rate of about 5678 liters per month. Periodic analysis of the leachate indicated that a spring in the canyon wall beneath the fill, rather than infiltration of the fill, was the source.

Table 17 shows both the initial composition of the leachate and its reduction with time over a 3-year period. The Table shows a decrease in concentration of most constituents of the leachate with time. This same phenomenon has been
observed in comparing a 27-year old abandoned fill with an active fill.

Pilot studies were made in 1964 to 1966 to study the effects of rainfall and irrigation on landfill leaching. Two cells, 15 meters square at the bottom and sloped to the top, were filled with a single 5.3 meter lift of refuse, plus a 61 cm earth cover. Devices to collect leachate at various depths were installed. One was subjected to simulated rainfall, the other to irrigation of turf. After 27 months and 330 cm of rainfall, no leachate appeared in the rainfall cell. A small amount of water appeared in the topmost cell of the irrigated system at 27 months and 429 cm of applied water.
<table>
<thead>
<tr>
<th>Constituent</th>
<th>Leachate Analysis</th>
<th>Mission Canyon Landfill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3-18-68</td>
<td>3-24-71</td>
</tr>
<tr>
<td>pH</td>
<td>5.75</td>
<td>7.40</td>
</tr>
<tr>
<td>Total Solids, mg/l</td>
<td>45,070</td>
<td>13,629</td>
</tr>
<tr>
<td>Suspended Solids, mg/l</td>
<td>172</td>
<td>220</td>
</tr>
<tr>
<td>Dissolved Solids, mg/l</td>
<td>44,900</td>
<td>13,409</td>
</tr>
<tr>
<td>Total Hardness, mg/l CaCO₃</td>
<td>22,800</td>
<td>8,930</td>
</tr>
<tr>
<td>Calcium, mg/l CaCO₃</td>
<td>7,200</td>
<td>216</td>
</tr>
<tr>
<td>Magnesium, mg/l CaCO₃</td>
<td>15,600</td>
<td>8,714</td>
</tr>
<tr>
<td>Total Alkalinity, mg/l CaCO₃</td>
<td>9,680</td>
<td>8,677</td>
</tr>
<tr>
<td>Ammonia, mg/l N</td>
<td>0.0</td>
<td>270</td>
</tr>
<tr>
<td>Organic Nitrogen, mg/l N</td>
<td>104</td>
<td>92.4</td>
</tr>
<tr>
<td>BOD, mg/l O</td>
<td>10,900</td>
<td>908</td>
</tr>
<tr>
<td>COD, mg/l O</td>
<td>76,800</td>
<td>3,042</td>
</tr>
<tr>
<td>Sulfate, mg/l SO₄</td>
<td>1,190</td>
<td>19</td>
</tr>
<tr>
<td>Total Phosphate, mg/l PO₄</td>
<td>0.24</td>
<td>0.65</td>
</tr>
<tr>
<td>Chloride, mg/l Cl</td>
<td>660</td>
<td>2,355</td>
</tr>
<tr>
<td>Sodium, mg/l Na</td>
<td>767</td>
<td>1,160</td>
</tr>
<tr>
<td>Potassium, mg/l K</td>
<td>68</td>
<td>440</td>
</tr>
<tr>
<td>Boron, mg/l B</td>
<td>1.49</td>
<td>3.76</td>
</tr>
<tr>
<td>Iron, mg/l Fe</td>
<td>2,820</td>
<td>4.75</td>
</tr>
</tbody>
</table>

Table 17 Change in leachate analysis with time (Meichtry, 1971).
Limited experiments, such as the foregoing, support the conclusion previously cited that leachate from well-designed fills is not a significant problem.

The time required to produce leachate from a fill penetrated by rainfall can be predicted by moisture-routing techniques (Remson, 1968). For example, a 2.44 meter lift of refuse with 61 cm of earth cover will take from 1 to 2 1/2 years to reach field capacity and produce leachate if 117.8 cm of rainfall is allowed to infiltrate and percolate into the fill.

In one field observation (Hassan, 1971) a landfill partly inundated by ground water was investigated. Well water 325 meters down gradient from the fill showed leachate effects in terms of hardness, alkalinity, Ca, Mg, Na, K, and Cl. At a distance of 1,000 meters the effects were undetectable. Inasmuch as the fill was an old one, it might be concluded that the ground water was not seriously affected. However, similar studies in Germany revealed the presence of leachate effects in ground water 3,000 meters away.
In the case of industrial wastes disposed of by landfill on company property, little is known of the nature and extent of leachate. Table 14 shows that noncombustible solids represent 75 percent and ashes another 14 percent of the total. These data suggest that soluble minerals provide the most common materials which might be leached from industrial waste fills. In terms of ground water pollution, oil, process sludges, and salt solutions from lagoons and pits are likely to be the most significant industrial wastes.

Control Methods
In general, procedures for the control of leachate are those which exclude water from the landfill, prevent leachate from percolating to ground water, or collect leachate and subject it to biological treatment. Obviously, the possible utilization of these three approaches is maximum in the design phase of a landfill operation and minimal in some types of existing landfills.

In existing situations the potential of a landfill to pollute ground water can be limited by such procedures as:

- Separating at the source wastes which are unacceptable in a given landfill situation,
• Controlling haulers by requiring permits and by enforcing restrictions on materials for disposal,
• Licensing private haulers of industrial wastes.

In the case of a new projected landfill the control measures include:

• Select site to achieve both general regulations and specific objectives. Typical of the general measures for siting control are those of Los Angeles County which recognize three classes of fills:
  - Class I, which may accept all types of solid wastes by reason of its geologic isolation from any contact with the ground water. This type of site is essentially an impervious bowl, and hence is not common.
  - Class II, which may accept the normal run of mixed municipal solid refuse (no waste oils, or chemical sludges).
  - Class III, which may accept only inert earth-type materials.
- Specific siting involves evaluation of alternate locations by hydrogeologists and engineers to determine such things as:
  - Location and depth of ground water in the vicinity.
  - Importance of underlying ground water as a resource, both present and future.
  - Nature of geology of the site.
  - Feasibility of excluding both surface water and ground water from the finished fill.

- Design landfill to correct deficiencies of best available site:
  - Use compacted earth fill to seal walls and bottom of fill site. If the fill is above water table, as is most commonly required, this will minimize the rate of escape of leachate from the fill. If the fill is in an aquifer, the movement of the ground water into and out of the fill will be minimized.
  - Provide underdrainage system to collect leachate and deliver it to a sump.
- Drain sump to surface by a valued pipe or by a vertical well into which a submersible pump may be inserted, if necessary, to collect and deliver leachate for biological treatment.

- Construct fill with purpose of keeping the minimum of refuse surface exposed to rainfall, and the working surface and site well drained. Use dike and fill technique to isolate fill from unfilled area.

- Utilize water for dust control during construction in such amounts that evaporation rather than infiltration is its fate.

- Divert surface water from the fill site during and after fill construction by means of peripheral bypass drains.

- Compact and slope fill cover for good surface drainage, vent gases through the fill cover with J-vents.
In new or existing landfills:

- Provide continuing maintenance of the graded finished fill cover, fill in and regrade surface as shrinkage of the fill causes cracks or depressions which might serve to increase infiltration.
- Seed completed fill surface with a high transpiration cover crop.
- Avoid over irrigation of surface plantings.
- Divert both surface and ground water around fill site where feasible.
- Reduce the amount of putrescible solid waste by initiating regional reclamation activities under a statewide authority which features energy conversion of the organic fraction of refuse.

In the case of existing landfills and dumps:

- Intercept polluted ground water at the fill site by well points in or near the fill area if the situation is serious.
- Initiate and implement statewide programs of waste management which feature regional landfills, thus replacing numerous small refuse dumps with
landfills on an economic scale, phasing out with
time the leachate contribution to ground water.

Of the foregoing control measures only those which are
applicable to new sanitary landfills have the potential to
prevent or essentially to eliminate the possibility of
ground water pollution by leachate. Siting, constructing,
operating, and maintaining fills are in this category of
control measures. Existing well-engineered landfills,
although not generally equipped with underdrains, are
minimal in their effects upon ground water quality and hence
of secondary importance in comparison with dumps. Similarly,
old landfills may have contributed the major portion of
their leachate already and are now of secondary importance.
Reshaping the soil surface and maintaining surface drainage
are measures which reduce the effect of leachate from
existing fills. The overall effect of dumps may be lessened
by a geographical distribution of the volume of wastes they
contain. Control measures such as well-point interception
reduce rather than prevent or eliminate leachate discharges.
Regionalization of waste treatment is a control measure
which can reduce and eventually phase out the leachate from
existing dumps.


**Monitoring Procedures**

In new fills, properly engineered and sealed off from underlying and sidewall strata, the drainage system and a pumped well located in or near the fill can be used both for inspection (monitoring) and for control.

A system of three observation wells is illustrated in Table 18 along with the results of ground water quality observations.

<table>
<thead>
<tr>
<th>Groundwater Characteristics</th>
<th>Background (mg/liter)</th>
<th>Fill (mg/liter)</th>
<th>Monitor Well (mg/liter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids</td>
<td>636</td>
<td>6712</td>
<td>1506</td>
</tr>
<tr>
<td>pH</td>
<td>7.2</td>
<td>6.7</td>
<td>7.3</td>
</tr>
<tr>
<td>COD</td>
<td>20</td>
<td>1863</td>
<td>71</td>
</tr>
<tr>
<td>Total Hardness</td>
<td>570</td>
<td>4960</td>
<td>820</td>
</tr>
<tr>
<td>Sodium</td>
<td>30</td>
<td>806</td>
<td>316</td>
</tr>
<tr>
<td>Chloride</td>
<td>18</td>
<td>1710</td>
<td>248</td>
</tr>
</tbody>
</table>

Table 18  Ground water quality
It would be feasible to drill and gravel pack a sampling well in a landfill, then seal its bottom and drill through to the ground water below. Portable submersible pumps could be used to pump these two essentially concentric wells for sampling purposes. An alternative might be to drill a pumped monitoring well downstream from the landfill or directly through the fill. Concentrations of TDS, hardness, and chlorides could be measured and used to surmise the presence of leachate, provided the discharge rate needed to produce a significant drawdown cone under the fill did not obscure the effect of leachate on the ground water quality. In any event the best procedure is the use of control measures which minimize the possibility of leaching of landfills.
References


17. Los Angeles County, Development of Construction on Use Criteria for Sanitary Landfills, USPHS Grant No. DOl-01-00046, County of Los Angeles, California (1968).


EXHIBIT B
WATER POLLUTION CONTROL LEGISLATION—1971
(Proposed Amendments to Existing Legislation)

(92-16)

HEARINGS
BEFORE THE
COMMITTEE ON PUBLIC WORKS
HOUSE OF REPRESENTATIVES
NINETY-SECOND CONGRESS
FIRST SESSION

JULY 13, 14, 15, 20, 22, 27, 28, 29; AUGUST 2, 3, 4, 5; SEPTEMBER
13, 14, 15, 16, 20, 21, 22, 23, 24; AND NOVEMBER 9, 1971

Printed for the use of the Committee on Public Works
Of course the primary responsibility for enforcement remains with the States. Our proposals are in no way intended to diminish that role. But we must be able to act swiftly if the States fail to do so.

The inability to secure adequate information and data not available from Government sources concerning pollution has inhibited truly effective enforcement. We propose to give EPA broad authority to obtain information and data, to subpoena witnesses and records for administrative proceedings and to require monitoring and reporting, all consistent with the due process requirements of law.

We would also authorize EPA to move immediately when an emergency presents an imminent and substantial danger to human health or welfare or to water quality by requesting the Attorney General to seek temporary or permanent injunctions in Federal court.

Citizen suits with appropriate safeguards would be authorized to enable private groups and individuals to compel compliance with specific requirements established under the law and to assure that the public interest will be protected where the law provides a clear duty and remedy.

I have appreciated the opportunity to appear before you during these three days of hearings. We look forward to the early enactment of legislation which will achieve the purposes which have been stated. We intend to cooperate with you fully in this process. I will be pleased to answer any questions you may have.

Mr. Roberts. With reference to ground water, you state:

We would also extend water quality standards to ground waters.

Wherein do we have that authority, and where does it exist in the present law?

Mr. RUCKELSHAUS. Well, we don't have the authority under existing law, Mr. Chairman, and we are asking for extension of existing law because of a number of problems which have cropped up. One which I mentioned in my testimony. One, the disposal of toxic wastes in deep wells, which is sometimes a method adopted by industry, and we are worried that these toxic substances, through the ground water table, might contaminate existing water supplies.

Mr. Roberts. Where the State has complete control under the State permit system on ground water, would you interfere in that situation?

I am speaking specifically of salt water injection wells. In water flooding of low-producing oil properties producers use water flood or water injection to bring the pressure back up. You have a State permit system on every well that is drilled, whether it is 100 or 5,000 or 10,000 feet.

Mr. RUCKELSHAUS. We would have no desire, Mr. Chairman, under the program to interfere with the existing State program that was adequately protecting water quality. The only reason for the request for Federal authority over ground waters was to assure that we have control over the water table in such a way as to assure that our authority over interstate and navigable streams cannot be circumvented, so we can obtain water quality by maintaining a control over all the sources of pollution, be they discharged directly into any stream or through the ground water table.

Mr. Roberts. You further state:

We would also authorize EPA to move immediately when an emergency presents an imminent and substantial danger to human health or welfare or to water quality by requesting the Attorney General to seek temporary or permanent injunctions in Federal Court.

I am sure you are aware of the fact that the Congress and the EPA are getting some very unfavorable publicity down in Texas because the Government had two or three airplanes down there to be used for spraying, and saying that EPA would not turn them loose. We have
EXHIBIT C
FRANK J. KELLEY, Attorney General of Michigan for and on behalf of the PEOPLE OF THE STATE OF MICHIGAN, and the NATURAL RESOURCES COMMISSION, Plaintiffs,

v.

THE UNITED STATES OF AMERICA; UNITED STATES DEPARTMENT OF TRANSPORTATION; THE HONORABLE ELIZABETH DOLE, Secretary of the Department of Transportation; The UNITED STATES COAST GUARD, AND ADMIRAL JAMES GRACEY, Commandant of the Coast Guard, Defendants.

Civil Action No. G-83-630

Hon. Richard A. Enslen

DEFENDANTS' RULE 12(b) MOTION AND IN THE ALTERNATIVE FOR SUMMARY JUDGMENT

MEMORANDUM IN SUPPORT OF DEFENDANTS' RULE 12(b) MOTION AND IN THE ALTERNATIVE FOR SUMMARY JUDGMENT

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Dated: July 12, 1984
IN THE UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

FRANK J. KELLEY, Attorney General
of Michigan for and on behalf of the
People of the State of Michigan
and the NATURAL RESOURCES COMMISSION

Plaintiffs,

v.

THE UNITED STATES OF AMERICA, UNITED
STATES DEPARTMENT OF TRANSPORTATION,
THE HONORABLE ELIZABETH DOLE,
Secretary of the Department
of Transportation, THE UNITED
STATES COAST GUARD, AND ADMIRAL
JAMES GRACEY, Commandant of the
Coast Guard,

Defendants.

Civil Action No.
G-83-630(S)

Richard A. Ensen

DEFENDANTS' MEMORANDUM IN SUPPORT OF RULE 12(b)
MOTION AND IN THE ALTERNATIVE FOR SUMMARY JUDGMENT

I. INTRODUCTION

This action is brought under the Clean Water
Act, 33 U.S.C. §§ 1251 et seq. ("CWA"), by the Attorney
General of the State of Michigan and the State of Michigan
Natural Resources Commission ("Michigan" or "plaintiffs").
The plaintiffs claim that the Coast Guard has polluted
the groundwater in and around the Coast Guard Air Station
Traverse City, Michigan and the East Arm of Grand Traverse
Bay. Although the plaintiffs' complaint is imprecise, we
assume that the plaintiffs assert four causes of action in
their three count complaint. The Plaintiffs first assert
a cause of action under Section 505 of the CWA, 33 U.S.C.
§ 1365. The plaintiffs' three other asserted causes of
action are based on Michigan state law. The plaintiffs request relief in the form of monetary damages, an injunction ordering the federal defendants to undertake a program to remove the alleged pollution from Michigan groundwater, and civil penalties.

The federal defendants demonstrate below, however, that the plaintiffs cannot prevail under any of their asserted theories and that the defendants are entitled to summary judgment as a matter of law.

II. BACKGROUND

The Coast Guard Air Station involved here is located in Traverse City, Michigan. The plaintiffs allege that the Air Station was originally operated by the Navy until 1945 when the Coast Guard took over the operation of the Air Station. Complaint ¶s 8-11.

The plaintiffs allege that the defendants have maintained and serviced aircraft at the air station at Traverse City since 1943. Plaintiffs also allege that during routine servicing and maintenance of Coast Guard aircraft, the defendants used oils, lubricants, paints, paint stripping solvents, aviation gasoline, dry cleaning solvent PS-661, toluene, tri-chloroethylene, benzene, carbon tetrachloride, and aromatic naptha. Plaintiffs further allege that the defendants allowed unknown amounts of these chemicals to be released to the ground since 1943 by direct dumpings, spills, and storage leaks. Complaint ¶s 12-15.
In 1980, the plaintiffs allege, a resident of Avenue E in East Bay Township reported to Michigan a strong chemical odor coming from water in a new well. Complaint ¶ 16. As a result of that report Michigan began an investigation of alleged contamination. Id. It is claimed that subsequent tests of other wells in the Avenue E area revealed the presence of chemicals in drinking water wells. Complaint ¶ 18. The Michigan Department of Public Health recommended in October 1980 that Avenue E residents obtain alternate sources of drinking and cooking water. Complaint ¶ 19. In January 1981, the plaintiffs allege, Traverse City municipal water supply lines were extended to Avenue E at a cost of $176,000.00 and 28 Avenue E homeowners paid the necessary charges to connect their homes to the water supply lines. Complaint ¶ 21. Plaintiffs also claim that Avenue E residents now are charged substantially higher rates for water than Traverse City residents.

The plaintiffs allege that the source of the contamination of Avenue E was determined by the Michigan Department of Natural Resources to be the United States Coast Guard Air Station at Traverse City and the land alleged to be owned by the Coast Guard and Navy immediately adjoining the Air Station. Complaint ¶ 23. The plaintiffs further contend that the defendants' improper disposal and handling of the chlorinated hydrocarbons and other petrochemicals at the Coast Guard station have caused
the chemicals to enter the groundwaters under the Avenue E area and be discharged into Grand Traverse Bay. Complaint ¶ 43.

The plaintiffs allege that the attorney general gave notice to the Coast Guard in May 1982 of his intent to sue the Coast Guard under Section 505 of the CWA, 33 U.S.C. § 1365. Complaint ¶¶ 41 and 42. The plaintiffs filed their complaint a year later on June 10, 1983.

III. MICHIGAN'S FOUR CLAIMS

The Plaintiffs first assert a cause of action (Count I) under Section 505 of the Act. The plaintiffs' three other asserted causes of action are based on Michigan state law (examined in detail later in this brief) under Sections 6(a) and 6(c) of the state Water Resources Commission Act (Count II), Michigan Statutes Annotated (MSA 3.526(c)) (hereafter "WRCA"), and Section 2(1) of the Michigan Environmental Protection Act (Count III), MSA 14.528(202)(1) (hereafter "MEPA"). The plaintiffs allege that under Section 313 of the Act, 33 U.S.C. § 323, the United States waived its sovereign immunity, and therefore, according to the plaintiffs, they can sue the federal defendants under those two state laws. As relief the plaintiffs seek to have defendants ordered to eliminate all identifiable contamination sources, to install a purging system to collect and remove contamination from groundwaters, to reimburse the East Bay Township for its expenses in connection with extending water supply lines to
Avenue E, reimbursement of expenses to Avenue E residents and civil penalties.

IV. SUMMARY OF ARGUMENT

As demonstrated below, Michigan cannot make these claims under the Clean Water Act since the Act does not regulate pollutant discharges onto soil or into underlying groundwater.

As to the two state law-based claims, this Court does not have subject matter jurisdiction of those claims since they are barred by sovereign immunity. It is fundamental that sovereign immunity bars any suit against the federal government unless Congress has expressly waived that immunity to allow for a particular claim. Michigan does not show any express waiver to allow a claim under either the WRCA or MEPA. To the extent that Section 313 of the CWA is a waiver of sovereign immunity, the claims under the WRCA and the MEPA are not within the scope of the waiver. The scope of the waiver is restricted to "requirements" of state law that are objective, administratively pre-determined standards of liability. The plaintiffs fail to allege the violation of any such administratively pre-determined pollution standard. Instead the plaintiff do no more than bring their action "pursuant to" the WRCA and the MEP. Complaint ¶s 49 and 56. Thus, Michigan's claims under both WRCA and MEPA are in the nature of nuisance claims. Michigan seeks to determine
the validity of those nuisance claims, not as Congress intended, by deciding whether a set effluent standard has been violated, but by using ad hoc determinations that Congress wanted to avoid.

Additionally, the plaintiffs do not have a cause of action under either the CWA or under Michigan state law. First, the plaintiffs cannot establish three essential elements for a cause of action under Section 505 of the CWA. The plaintiffs do not allege and cannot establish (1) a point source discharge, (2) a date of discharge or (3) an effluent standard under the Act that is violated by defendants. Second, since the plaintiffs cannot show either the source or date of discharge, they do not state a claim under state law. Additionally, the defendants do not come within the statute’s definitions of “person” in WRCA.

Finally, assuming arguendo that Congress had waived the United State’s immunity from either of the two Michigan state law claims, Michigan still cannot obtain the type of relief it seeks under the Clean Water Act. The Act only authorizes non-federal plaintiffs to obtain injunctive relief from the United States which requires prospective compliance with regulatory requirements. Congress did not allow for sweeping equitable decrees concerning past discharges of pollutants. For example, the order to pay for clean-up of past discharges which Michigan wants is not available.
As a civil fine, Congress only authorizes a penalty assessment against the United States when a state court order has been violated. No such violation is alleged in this case.

ARGUMENT

V. TEST FOR DETERMINING THE UNITED STATES' MOTION
AND GENERAL PRINCIPLES OF SOVEREIGN IMMUNITY

This Court must first determine whether it has jurisdiction over each of Michigan's claims, for there is no presumption of federal subject matter jurisdiction to adjudicate a particular case. 5 Wright, Miller, & Cooper, Fed. Proc. & Proc. Civil §1206, p. 75 (1969). Plaintiffs have the burden of establishing federal subject matter jurisdiction for each claim. Id., §§1214, p. 107 and §1350, p. 555, n. 91 (collecting cases). 1/

Indeed, since the United States is the defendant, Michigan has the burden of establishing that sovereign immunity has been waived so as to create subject matter jurisdiction. 5 Wright, Miller and Cooper, supra, §1212.

"The basic rule of federal sovereign immunity is that the

1/ The complaint must, on its face, state the grounds for federal subject matter jurisdiction. Burgess v. Charlottesville Savings & Loan Ass'n., 477 F.2d 40, 43 (4th Cir. 1973). "To sustain it, the complaint must . . . contain allegations 'affirmatively and distinctly' establishing federal grounds, 'not in mere form, but in substance' and 'not in mere assertion, but in essence and effect.'" Burgess, supra. The basis for federal jurisdiction cannot be supplied "argumentatively or by inference." 5 Wright, Miller & Cooper, supra, §1206 at 79.
d. EPA has consistently taken the position that the CWA does not in general regulate discharges into groundwaters.

It is well established that, in construing the CWA, substantial deference should be afforded the interpretation given to it by EPA, the agency charged with its implementation. 

EPA v. National Crushed Stone Ass'n., 449 U.S. 64, 83 (1980); 
E.I. duPont de Nemours and Co. v. Train, 430 U.S. 112, 134-135 (1977); Train v. Natural Resources Defense Council, 421 U.S. 60, 87 (1975). Thus, even if the statutory language, the legislative history, and the case law were not determinative, EPA's views on the issue should be sustained so long as they are reasonable. E.I. DuPont de Nemours and Co., supra.

In an opinion dated December 13, 1973, EPA's Office of General Counsel ruled that EPA did not have the authority to generally regulate groundwaters. Instead, it was opined that only when a person discharges pollutants into deep wells in conjunction with associated discharges to surface waters, did EPA have the statutory authority to regulate the subsurface discharges. 9/ Shortly after that opinion was issued, EPA promulgated regulations that incorporated the General Counsel's interpretation. 38 Fed. Reg. 13528 (May 22, 1973). See 40 C.F.R. §125.26(a)(1)(1977). However, in response to the Fifth Circuit's opinion in the Exxon case, supra, EPA eliminated entirely its authority to regulate discharges into groundwaters.

9/ The General Counsel's opinion is reproduced in full in the Exxon opinion, 554 F.2d at 1320-21 n.21.
Section 301(a) of the CWA thus does not apply to discharges of pollutants into the soil or groundwater. The statutory language, the legislative history, the case law, and EPA’s interpretation of the Act all support this conclusion. Accordingly, Michigan’s Count I should be dismissed for lack of subject matter jurisdiction, or failure to state a claim upon which relief can be granted.

2. Sections 313, 505 of the Act do not authorize claims premised on the substantive state laws which Michigan relies upon here.

Michigan asserts claims in Counts II and III based upon its state statutory law. Michigan makes claims under Sections 6(a) and 6(c) of WRCA and Section 2(1) of the MEPA. In none of those claims, however, does Michigan allege the violation of any effluent standard. Each of these causes

10/ EPA’s current regulations under the CWA apply to groundwater only to the extent that groundwater exists near the surface of land “at a frequency and duration sufficient to support . . . a prevalence of vegetation typically adapted for life in saturated soil conditions.” 40 C.F.R. §322.2 (1983) (definition of “waters of the United States,” subpart (g), defining “wetlands”), appearing at 48 Fed. Reg. 14166, 141 57 (April 1, 1983). See also 33 C.F.R. §323.2(c) (1982) (parallel regulation of U.S. Army Corps of Engineers.)

EPA presently regulates discharges of pollutants into injection wells. However, this is done under the authority of the Safe Drinking Water Act, 42 U.S.C. §§300g et seq. See 48 Fed. Reg. 14189 (April 1, 1983) (to be codified at 40 CFR Part I44). Michigan has not asserted any claim under the Safe Drinking Water Act.
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Part II:
LINKAGE TO EPA AND OTHER FEDERAL AGENCY PROGRAMS
NPDES AND INDUSTRIAL PRETREATMENT PROGRAM

Resource-Based Priority Setting in Decision Making

Under the Clean Water Act, EPA and the States regulate facilities that either discharge wastewaters directly to surface waters or discharge to municipal wastewater treatment systems. Direct discharges are covered under the National Pollutant Discharge Elimination System (NPDES), whereas industrial discharges to municipal treatment systems are covered by pretreatment requirements. The primary objective of these regulatory programs is to ensure the attainment of the "designated uses" (e.g., fishable, swimmable) of receiving surface waters.

While a number of States have incorporated ground water discharges into their NPDES permits and pretreatment requirements, there is no national requirement to do so. States might consider surface water recharge to valuable ground waters as a designated use for surface water and issue specific NPDES permit requirements designed to assure attainment of that designated use and, thereby, indirectly protect inter-connected high priority ground waters. States could use the resource assessment, source evaluation and priority setting mechanism of CSGWPPs to identify high-priority ground waters that are subject to contamination from closely hydrologically connected surface waters.

Coordination with Other Programs

CSGWPPs can provide a central coordination point for surface water regulators to coordinate with ground water officials from a wide variety of ground water-related programs. For example, a number of facilities with required NPDES or pretreatment permits for surface water protection are also likely to be subject to future RCRA D and SDWA Underground Injection Control Class V Well requirements. The CSGWPP can help a State make integrated environmental management decisions across both ground and surface waters. In other words, States can use their ground water protection authorities in conjunction with the NPDES permitting process to ensure that specific requirements in NPDES permits do not result in unintended contamination of sensitive ground water from practices such as the use of surface impoundments.
EXHIBIT E
Evaluation Report

Effectiveness of Effluent Guidelines Program for Reducing Pollutant Discharges Uncertain

Report No. 2004-P-00025

August 24, 2004
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## Executive Summary

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Chapter 1

Introduction

Purpose

Effluent guidelines are national technology regulations that limit the discharge of pollutants to surface waters and publicly owned treatment works. By creating minimum levels of treatment for different industrial sectors based on the environmental performance of specific technologies, effluent guidelines are intended to establish a minimum floor of control across the country. Guidelines produce an environmental outcome by having their requirements factored into individual facilities’ discharge permits as they are renewed. The Environmental Protection Agency (EPA) has developed effluent guidelines for 55 industrial point source categories affecting between 35,000 to 45,000 facilities that directly discharge to the nation’s waters. Guidelines cover industries as diverse as iron and steel to centralized waste. According to EPA, effluent guidelines are responsible for preventing the discharge of almost 700 billion pounds of pollutants each year through their utilization in National Pollutant Discharge Elimination System (NPDES) permits. EPA has budgeted about $22 million a year for the last 3 fiscal years (2001 to 2003) to develop effluent guidelines. For this evaluation, we sought to answer the following questions:

- How has EPA’s effluent guidelines development process changed over time?
- How effectively are effluent guidelines used to reduce pollutant loadings?
- To what extent does EPA measure the effectiveness of the effluent guidelines program?

Background

In 1972, Congress established the effluent guidelines program by adopting the Federal Water Pollution Control Act of 1972, which was amended by the 1977 Clean Water Act Amendments and the Water Quality Act of 1987. Congress adopted these Acts to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” EPA’s Office of Water is responsible for implementing these Acts, which provide EPA and the States with a variety of programs to protect and restore the nation’s waters.

The effluent guidelines program, along with the water quality standards and criteria program, form the basis of all water quality programs used by EPA to reduce point source loadings. National effluent guidelines regulations typically specify the maximum allowable levels of pollutants that may be discharged by
facilities within an industrial category. While pollutant limits are based on the performance of specific technologies, they do not generally require each facility to use these technologies; rather, they allow it to use any effective alternatives to meet the numerical pollutant limits.

Each facility within an industrial category must generally comply with the applicable discharge limits, regardless of its location within the country or on a particular water body. In this way, the limits are consistent for all facilities within an industrial category or subcategory. National regulations apply to three types of facilities within an industrial category:

- Existing facilities that discharge directly to surface waters.
- Existing facilities that discharge to publicly owned treatment works.
- Newly constructed facilities that discharge directly to surface water.
- Newly constructed facilities that discharge to publicly owned treatment works.

According to EPA, effluent guidelines, through their use in NPDES permits, are responsible for preventing the discharge each year into public waters of over 1 billion pounds of toxic pollutants, such as heavy metals; over 470 billion pounds of non-conventional pollutants, such as nutrients and salts; and almost 220 billion pounds of conventional pollutants, such as suspended solids. All facilities that discharge pollutants from any point source into waters of the United States are required to obtain a NPDES permit. Table 1.1 provides definitions for each pollutant type and additional examples.

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<tr>
<th>Pollutant Type</th>
<th>Definition</th>
<th>Examples</th>
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<tr>
<td>Conventional</td>
<td>Pollutants typical of municipal sewage and for which municipal secondary treatment plans are typically designed. These pollutants are defined by regulation.</td>
<td>Biological oxygen demand, total suspended solids</td>
</tr>
<tr>
<td>Toxic</td>
<td>Pollutants or combination of pollutants that cause death, disease, or other injuries to humans or animals upon exposure, inhalation, or ingestion. The pollutants are defined by regulation.</td>
<td>Dioxin, chloroform</td>
</tr>
<tr>
<td>Non-conventional</td>
<td>All pollutants not listed by regulation.</td>
<td>Acetone, ammonia</td>
</tr>
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Initially, the 1972 Clean Water Act directed EPA to develop effluent guidelines for existing industrial dischargers by certain statutory deadlines. EPA was unable to do this by the statutory deadlines and was sued by the Natural Resources
Defense Council (NRDC). In 1976, EPA entered into a consent decree with NRDC and agreed to speed the completion of effluent guidelines and address more toxic pollutants when developing and revising effluent guidelines.

The Clean Water Act was amended by the Water Quality Act of 1987, which required EPA to establish schedules for reviewing and revising existing effluent guidelines and promulgating new ones. In 1990, EPA published its first Effluent Guidelines Plan, with schedules developing new and revised effluent guidelines for several industrial categories. Following another suit from the NRDC and Public Citizen, Inc., EPA, in 1992, agreed to abide by a consent decree that established a schedule for EPA to promulgate effluent guidelines for 19 industrial categories. The consent decree required EPA to develop effluent guidelines for certain industries, and allowed EPA the discretion of selecting other industries for effluent guidelines development.

The consent decree also required that EPA establish an Effluent Guidelines Task Force (Task Force) to develop recommendations on how to improve the effluent guidelines program. The Task Force sought to determine ways in which the effluent guidelines process could be streamlined.

State and EPA permits writers are responsible for writing NPDES permits. When developing a permit, the permit writers must calculate technology-based effluent limits from effluent guidelines and compare them to water quality-based effluent limits for each pollutant in a permit. The Clean Water Act and EPA regulations require the permit writer to apply the most stringent limit. A permit writer can use an effluent guideline in developing a facility’s permit after the effluent guideline is effective (typically about 60 days after the effluent guideline is promulgated).

Scope and Methodology

We conducted our evaluation in accordance with Government Auditing Standards, issued by the Comptroller General of the United States. We conducted our field work from August 2002 to November 2003. We evaluated the effluent guidelines program by developing and applying a four-phase model that describes the four key processes involved in the program (Table 1.2).
EXHIBIT F
INTRODUCTION

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's response to comments (RTC) received on the Draft NPDES Permit (MA0001520). The RTC explains and supports EPA's determinations that form the basis of the final Permit. The Holyoke Gas & Electric Department (HG&E) Cabot Street Station draft permit public comment period began August 19, 2005, and ended on September 17, 2005. HG&E is also referred to as the facility and the permittee in this document. Comments were received from:

1. Charles L. Martel, Environmental Health & Safety Coordinator, City of Holyoke Gas & Electric Department;
2. Andrea F. Donlon, River Steward, Connecticut River Watershed Council (CRWC);
3. Cindy Delporta, Stream Ecologist, Massachusetts Riverways Programs.

Additionally, EPA received a correspondence from the permittee dated September 19, 2005. This correspondence did not present any new comments, it only requested clarification on two points in the permit. For administrative convenience, EPA is addressing these two points in Section C of this document.

This document refers to the above Commenters by designated numbers.

The final permit has changed from the draft permit based on comments received. EPA's decision-making process has benefited from the various comments and the additional information submitted. The information and arguments did not result in any substantial new changes to the permit. However, a few improvements and changes are detailed in this document and are reflected in the final permit. A summary of the changes made in the final permit is listed below. The analyses underlying these changes are explained in the responses to individual comments. Each change is followed by a number that correlates to a specific response.

1. A footnote has been added to the table in Part I A1. of the final permit to allow for the continuous flow measures for Outfall 001 to be monitored in each of the two contributing pipes separately and summed. (1)

2. The monitoring frequency for pH at Outfall 002 has been changed from once per month to once per day when a discharge from Outfall 002 occurs. (7)

3. A one-time Whole Effluent Toxicity (WET) test requirement for Outfall 001 has been added to the final permit. (8)

4. A prohibition on the use of biocides has been added to the final permit. (9)

5. Requirements to collect temperature measurement in the Second Level Canal and the Connecticut River during thermal study events have been added in Part I.A.10 of the final permit. (11)

6. Requirements to collect temperature measurements at the water/sediment interface in each sample location during each thermal study event have been added in Part I. A.10 of the final permit. (11)
C. Clarification Issues

HG&E raised two somewhat similar issues and requests an EPA response. EPA points out here that the permit has been developed based on previous information submitted by the company and actual operations, not on future hypothetical scenarios. EPA provides the following responses. However, since the company has not made specific changes at the facility that may warrant modifications to the permit, EPA is providing general answers to the inquiries.

Issue 1:

In its email dated September 19, 2005, HG&E asked, "... how will HG&E’s plans to reconfigure the piping associated with internal outfalls 004 and 005 affect the Draft Permit? Will we still be required to meet the sampling and testing protocol established in the Draft Permit if the discharges are redirected?" The company referred to an August 21st e-mail to EPA in which HG&E indicated that it was considering making piping changes to the traveling screen.

Response to Issue 1:

This permit addresses the current configuration of internal Outfalls 004 and 005. Future permitting actions, if appropriate, will depend on how and if the discharges are redirected or otherwise reconfigured. Two examples of potential piping changes and the subsequent potential permitting requirements are provided below.

First, the permittee may wish to cease the discharge altogether. The discharges could be re-directed to the publicly owned treatment works (POTW) where they would be regulated by the POTW’s pretreatment regulations. Alternatively, the discharges could be re-directed to a non-surface water discharge location, such as ground injection. In such a situation, the National Pollutant Discharge Elimination System (NPDES) permit requirements would not apply, because there would be no direct discharge to a surface water of the United States. Therefore, the permittee would not be subject to sampling and testing requirements. However, the permittee would still be required to report a “no discharge” for internal Outfalls 004 and 005 in the monthly Discharge Monitoring Report (DMR) until the permit is modified or re-issued.

Second, HG&E could redirect either of these discharges to a new discharge location that ultimately discharges to the receiving water. In this instance, HG&E would need to submit a permit modification request (including new flow diagrams) so that the applicable standard could be evaluated as explained in Section 5.1 of the Fact Sheet. Since these are low volume wastes as defined in 40 CFR § 423.11(b), they would be subject to these technology-based standards or to water quality based standards, whichever is more stringent.

Issue 2:

In its August 19, 2005 email, HG&E asked if it still would be held to the sampling and analytical protocol established for the Outfall 002 in the Draft Permit if it abolished all discharges from Outfall 002 due to the July 2005 demolition of its demineralizer system? Additionally, HG&E asked “What steps would be necessary for the HG&E to change the 002 discharge from demineralizer waste to a filter backwash waste stream? This last issue was also raised by the company in an August 2, 2005 email to EPA.
EXHIBIT G
Response to Public Comments

EPA NPDES Pesticide General Permit

October 31, 2011

Docket ID #: EPA-HQ-OW-2010-0257
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PGP Comment Response NOI Threshold Essay

EPA received numerous comments on the Agency’s approach for determining which Operators are required to submit NOIs when seeking coverage under the PGP and which Operators would be covered automatically without having to submit an NOI. While some commenters disagreed with the Agency’s position that not all Operators should have to submit an NOI to obtain coverage, the majority of commenters supported EPA’s basic idea that NOI submittal would be based on the basic principles that only pesticide applications of larger size, from more significant Operators, and to sensitive waterbodies should be required to submit NOIs.

Operators that are not required to submit NOIs are still required to comply with the terms of the permit such as: minimizing discharges to waters of the United States resulting from the application of pesticides, meeting applicable water quality standards, and monitoring for and reporting adverse incidents. Under the permit, these Operators have fewer requirements than Operators that are required to submit NOIs. EPA bases this decision on EPA’s evaluation of applicable technology-based requirements for the universe of dischargers and the use of EPA’s best professional judgment (33 U.S.C. 1342(a)(1); 40 CFR § 125.3(c)) when establishing many of the other permit terms and conditions. For example, one commenter noted that the use of restrictive NOI requirements would promote the use of home misting systems which would not be regulated under the permit. However, all Operators (regardless of whether they are required to submit an NOI or not) must comply with NPDES permit requirements for point source discharges of biological pesticides, and of chemical pesticides that leave a residue to waters of the United States. Likewise, Operators applying biological pesticides, and chemical pesticides that leave a residue that result in discharges to waters of the United States consistent with any of the four pesticide use patterns identified in the permit are required to either seek coverage through an NOI, and once authorized, comply with the permit, or comply automatically with the NPDES permit. Please note that pesticide applications that do not result in point source discharges of pollutants to waters of the United States do not require NPDES permit coverage regardless of the size of that application.

EPA received a number of suggestions regarding which Operators should be required to submit an NOI. For instance, some commenters believed that no Operator should be required to submit an NOI (provided those Operators were in compliance with other state and federal laws, including FIFRA requirements). Other commenters suggested that all Operators should be required to submit NOIs since EPA would not be able to track pesticide applications activities without obtaining information from every entity covered under the permit. Some commenters noted that they did not believe uniform annual treatment area thresholds were reasonable for establishing who should be required to submit an NOI because of varying soil and climatic conditions as well as the differences in solubility, mobility, and bioavailability of pesticides. Other commenters suggested other bases for establishing annual treatment area thresholds to be used for establishing who should submit NOIs such as to consider:

- Budget of the agency performing applications;
- Distance the application is from the waterbody;
- Exempting small waterbodies (e.g., less than 20 acres);
- Percent of waterbody treated;
- Quality of the waterway (e.g., impaired and Tier 3);
- Type/toxicity of pesticide used or on risks (human health and environmental) and benefits of the application;
- For agricultural activities, the total acres cultivated in the production unit;
- For weeds, whether treatment is for emergent or submergent plants;
- For transmission and other utility right of ways, 750 miles or more; and
- An ecological or watershed approach, with a cap and maximum amount of pesticide applications depending on the status of each bioregion.

EPA worked with states and other stakeholders throughout the multi-year process of developing the PGP to evaluate different approaches and select an appropriate one for identifying the types of dischargers that should be required to submit NOIs. The approach in the final permit represents EPA’s best professional judgment regarding which Operators should submit NOIs and when those NOIs should be submitted and is based on communication with states and stakeholders and public comments. EPA acknowledges that the other suggestions for establishing thresholds identified above to identify who should submit NOIs generally have some merit; however, EPA opted for the approach used in the final permit based on the discussion which follows. EPA expects to consider many of these other alternatives during this permit cycle and may revise its approach for the next PGP based on any additional information gathered and analyzed over the next five years. EPA developed an NOI form (along with other forms such as an annual report form, adverse incident reporting form, and pesticide discharge evaluation worksheet) and an electronic NOI (eNOI) system to assist Operators with completing and submitting necessary documentation under the permit and making that information readily available to the public through the Agency’s website at www.epa.gov/npdes/pesticides. Use of the eNOI system provides the most efficient approach for Operators to submit NOIs and obtain authorization to discharge in a timely manner (as is important for many pesticide applications). EPA expects to provide additional guidance, such as a Pesticide Discharge Management Plan template, on that same website.

EPA acknowledges that Operators who are not required to submit NOIs will be more difficult to identify/evaluate than those that do submit NOIs; however, the Agency believes its approach provides a reasonable balance between permit requirements, the burden placed on Operators, and environmental protection. EPA expects to coordinate with other stakeholders knowledgeable in pesticide applications, such as state lead agencies for pesticide programs, to develop and implement outreach and oversight of Operators who are not required to submit an NOI. EPA will evaluate data and other information gathered during this five year permit term and may opt for a revised approach in subsequent permit issuances, if necessary. However, consistent with 122.28(b)(2)(v), EPA has the discretion to authorize discharges under a general permit without submitting a NOI where EPA finds an NOI would be inappropriate. To be clear, EPA does not consider the PGP to be a rule or a permit-by-rule; rather, general permits are administrative actions performed under the authority of the NPDES regulations.

It is important to note that NPDES-authorized states are not obligated to use EPA’s NOI approach for their state-issued NPDES permits for point source pesticide discharges. EPA expects states to issue permits consistent with the NPDES regulations that allow a state permit
writer to base permit limitations on the permit writer's best professional judgment. 33 U.S.C. § 1342(a)(1); 40 CFR § 125.3(c). Those states have the authority to establish permit requirements based on their state-specific considerations (e.g. whether to include requirements based on "waters of the state" rather than on the federal requirement to protect "waters of the United States"). NPDES-authorized states are required to provide a rationale for their permitting approach for any general permit in the companion fact sheet. One commenter requested that EPA's permit ensure that discharges do not affect groundwater. To be clear, the Clean Water Act's NPDES program, under which EPA issued the PGP, is for the control of discharges to waters of the United States. Generally, discharges to groundwater are not regulated under the NPDES program; rather, discharges to groundwater are regulated under Safe Drinking Water Act along with any additional protections that may be incorporated in FIFRA regulations.

EPA revised its approach for NOI requirements in the final permit based on comments received on the draft. These changes include:

1. NOIs are now required based on three criteria: operator type, nature of receiving stream, and size of area treated (i.e., annual treatment area threshold). The draft permit based NOI obligations only on the size of area treated.
2. For-hire applicators no longer are required to submit NOIs. Rather NOIs are to be submitted only by certain Decision-makers.
3. Research and development activities no longer require submission of an NOI.
4. All Decision-makers (regardless of annual treatment area threshold) with discharges to Tier 3 waters or to waters of the United States with any NMFS Listed Resources of Concern now must submit an NOI for those discharges.
5. EPA revised its use of annual treatment area thresholds to include:
   o Standardized the use of the term "annual treatment area threshold" throughout the permit and added a definition of this term in Appendix A of the permit.
   o Annual treatment area threshold for two pesticide use categories (i.e., mosquitoes and other flying insects and forest canopy pests) increased by an order of magnitude (from 640 acres in the proposed permit to 6,400 acres in the final permit). The annual treatment area threshold for two categories (i.e., aquatic weeds and algae and aquatic animal pests) increased from 20 acres of water to 80 acres of water (or a linear distance of 20 miles, a threshold that remains the same in the final permit).
   o Annual treatment area threshold calculations are now based on discharges directly to waters of the United States and does not include discharges to conveyances.
   o Areas treated for the both aquatic weeds and algae and aquatic animal pests categories are now to be calculated based on the size of area treated in a calendar year regardless of the number of applications to that area. Area treated for both the Mosquito Control and Other Flying Insect Pest Control and Forest Canopy Pest Control use patterns are still based on accumulation of multiple treatments to calculate a total annual treatment area.
   o Calculation of annual treatment area for mosquito control now only counts areas treated with adulticide. Larviciding is not to be used in the calculations.
6. No NOIs are required for any discharges between the effective date of this permit and January 12, 2012 to allow time for Decision-makers to provide an opportunity for
Decision-makers to take necessary actions as required by the permit prior to NOI submission.

A discussion of these changes and the final PGP NOI approach are provided below.

As noted above, regulations at §122.28(b)(2)(v) provide that at the discretion of the Director (which, for the PGP, is EPA), certain discharges can be authorized under a general permit without submitting an NOI where EPA finds that an NOI would be inappropriate for such discharges. In making such a finding, the regulations require the Director to consider the following criteria: the type of discharge; the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. As described below, EPA is requiring submission of an NOI for certain discharges and is providing automatic coverage for certain other discharges for which EPA determined it would be inappropriate to require an NOI.

EPA expects a large number of discharges from the application of pesticides spanning a wide range of Operators and activities will require compliance with NPDES requirements. EPA's consideration of the regulatory criteria in §122.28(b)(2)(v) for providing general permit coverage to certain Operators without submission of an NOI is as follows:

Type and expected nature of discharge

All discharges authorized by this general permit involve discharges resulting from the application of biological pesticides, or chemical pesticides that leave a residue into Waters of the United States. The general permit is structured by pesticide use patterns. These use patterns were developed to include discharges that are similar in type and nature, and therefore represent the type of discharges and expected nature of the discharges covered under this permit. EPA evaluated each use pattern independently with the goal of identifying the significant activities resulting in discharges that should be covered under this PGP. As described below (see section entitled, "NOIs for Decision-Makers Exceeding an Annual Treatment Area Threshold"), EPA evaluated pesticide application practices of each of these four use patterns to identify the most significant applications, for which NOIs would be most appropriate. In general, annual treatment area thresholds are larger for mosquito and other flying insect pests and forest canopy pests than for aquatic weeds and algae and aquatic animals applications.

Potential for toxic and conventional pollutants in the discharge

EPA does not expect the potential for toxic and conventional pollutants in the discharges from pesticides to vary among use patterns. EPA would expect, however, that the potential for impacts from high concentrations of toxic or conventional pollutants in the discharge would be smaller when fewer acres or linear feet are treated or when pesticide applications are targeting pests not directly in the water.
EXHIBIT H
Fact Sheet – Massachusetts Small MS4

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

FACT SHEET

DRAFT GENERAL PERMITS FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS IN MASSACHUSETTS

NPDES PERMIT NUMBERS:

MAR041000 –Traditional cities and towns
MAR042000 –Non-traditional state, federal, county and other publicly owned systems
MAR043000 –Non-traditional transportation systems

PUBLIC COMMENT PERIOD: September 30, 2014 – December 29, 2014

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Fact Sheet – Massachusetts Small MS4

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Attachment 1: Charles River Basin Nutrient (Phosphorus) TMDLs, Phosphorus Load Export Rates, and BMP Performance
I. INTRODUCTION AND PROGRAM BACKGROUND

The Director of the Office of Ecosystem Protection EPA-Region I is proposing to reissue three (3) National Pollutant Discharge Elimination System (NPDES) general permits for the discharge of stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) to waters within the Commonwealth of Massachusetts. The General Permit will apply to traditional cities and towns, state and federal MS4s, and state transportation agencies (except for MassDOT-Highway Division). The Draft General Permit consists of the following parts:

Part 1: Introduction
Part 2: Non-Numeric Effluent Limitations
Part 3: Additional Requirements for Discharges to Surface Drinking Water Supplies and Their Tributaries
Part 4: Program Evaluation, Record Keeping and Reporting
Part 5: Requirements for Non-Traditional MS4s
Part 6: Requirements for Transportation Agencies

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Appendix E — Information Required for the Notice of Intent (NOI)
Appendix F — Requirements for MA Small MS4s Subject to Approved TMDLs
Appendix G — Impaired Waters Monitoring Parameter Requirements
Appendix H — Requirements Related to Discharges to Certain Water Quality Limited Waterbodies
Appendix I — EPA New England Bacterial Source Tracking Protocol

A. Program Background

The goal of the Clean Water Act is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Clean Water Act (CWA) § 101(a), 33 U.S.C. § 1251(a); see also id. §§ 1251(a)(1) (“national goal that the discharge of pollutants into the navigable waters be eliminated by 1985”), (a)(2) (“national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983”).

In 1987, Congress amended the Clean Water Act to better regulate stormwater discharges. Congress enacted Section 402(p) of the Clean Water Act, which requires that “[p]ermits for discharges from municipal storm sewers ... shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and shall require controls to reduce the discharge of pollutants to the maximum extent practicable...and such other provisions as the Administrator ... determines appropriate for the control of such pollutants,” CWA §§ 402(p)(O)(B)(i)-(iii).

EPA’s “Phase II” stormwater regulations, among other things, set forth requirements for stormwater discharges from small municipal separate storm sewer systems, (“small MS4s”) which are defined at 40 CFR § 122.26(b)(16) as follows:

Small municipal separate storm sewer system means all separate storm sewers that are:
(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over
unless granted a waiver by the permitting authority. The latest Decennial Census was conducted in 2010. MS4s located in an urbanized area as determined by the 2010 Census will be subject to the stormwater requirements for small MS4s unless they receive a waiver in accordance with 40 CFR §122.32(c) or 40 CFR § 123.35(d). The 2010 Census delineated urbanized areas in municipalities that did not contain urbanized areas according to the 2000 Census, namely: Adams, Amherst, Ashburnham, Ashby, North Adams, Pelham, Ware, Wellfleet, and Westhampton. EPA has provided notification to any MS4 affected by the 2010 Census. MS4s located in an urbanized area as defined by the 2000 census remain subject to the stormwater regulation even if there is a change in the reach of “urbanized area” because of a change in census data. This is consistent with the preamble to the Phase II rule that states “...a small MS4 that is automatically designated into the NPDES program for stormwater under an urbanized area calculation for any given Census year will remain regulated regardless of the results of subsequent urbanized area calculations.” 64 FR 68752, December 8, 1999.

As stated previously, the Draft Permit applies to small MS4s located in urbanized areas and those MS4s designated by EPA to need a permit. EPA has authority under the CWA to designate stormwater sources other than those that are specifically identified by the stormwater regulations as needing to obtain a permit when necessary to protect water quality or remedy localized water quality impacts, including small MS4s not in an urbanized area. If EPA decides to designate additional MS4s, EPA will provide public notice and an opportunity to comment on the designation. Once designated, such sources would be eligible for coverage under this general permit.

1. **Limitations on Permit Coverage**

   The Draft Permit sets limitations on the discharges that are authorized by the permit. The Draft Permit does not authorize the following:

   1. Stormwater discharges that are mixed with sources of non-stormwater unless the non-stormwater discharges are in compliance with a separate individual or other general NPDES permit. The Draft Permit requires illicit (non-stormwater) discharges to be prevented and eliminated except for the categories of non-stormwater discharges listed in 40 CFR §122.34(b)(5) and identified in Part 1.4 of the Draft Permit. These categories need not be addressed unless they are determined by the permittee or EPA to be significant contributors of pollutants to the MS4. Since this Draft Permit addresses stormwater discharges, requiring that sources of non-stormwater are addressed under separate NPDES permits ensures that the various sources of pollutants are addressed appropriately.

   2. Stormwater discharges that are subject to other permits. This includes industrial stormwater discharges described at 40 CFR § 122.26(b)(14)(i)-ix) and (xi); stormwater discharges related to construction described in either 40 CFR § 122.26(b)(14)(i) or 40 CFR § 122.26(b)(15); or discharges subject to an individual permit or alternative general permit for stormwater.

   3. Stormwater discharges, or discharge-related activities, that are likely to adversely affect any species that are listed as threatened or endangered under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is designated as critical under the ESA. The MS4 must follow the procedures detailed in Appendix C of the Draft Permit to make a determination regarding permit eligibility. A more detailed discussion of the Endangered Species Act and EPA’s obligation under that Act are contained in Section 1.B of this fact sheet.

   4. Stormwater discharges whose direct or indirect impacts do not prevent or minimize any adverse effects on any Essential Fish Habitat (EFH). This topic is addressed in in Section 1.B of this fact sheet.
Fact Sheet – Massachusetts Small MS4

5. Stormwater discharges or implementation of a stormwater management program that would adversely affect properties listed or eligible to be listed on the National Register of Historic Places. The MS4 must follow the procedures in Appendix D of the Draft Permit to make a determination regarding eligibility. This topic is addressed in Section 1.B of this fact sheet.

6. Stormwater discharges to territorial seas, the contiguous zone and the ocean. (Territorial seas are areas located between the mean low water line and a line approximately twelve nautical miles from the mean low water line. The contiguous zone is from the edge of the territorial sea up to 24 nautical miles from the mean low water line.)

7. Discharges that are prohibited under 40 CFR § 122.4.

8. Stormwater discharges to the subsurface subject to Underground Injection Control (UIC) regulations. Although the permit includes provisions related to stormwater infiltration and groundwater recharge, structural controls that dispose of stormwater into the ground may be subject to UIC regulation requirements or other state regulations. Authorization for such discharges must be obtained from the relevant authority depending on the location of the discharge and/or conform to state regulations. NPDES permits are applicable for point source discharges to waters of the U.S.; discharges to groundwater are not addressed in the NPDES program and as such are not addressed by this permit.

9. Any Non-traditional MS4 facility that is a “new discharger” and discharges to a waterbody listed in category 5 or 4b on the Massachusetts Integrated Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) due to nutrients (nitrogen or phosphorus), metals, solids, bacterial pathogens, chloride or oil and grease (hydrocarbons), or discharges to a waterbody with an approved TMDL, few or none of those pollutants, is not eligible for coverage under this permit and shall apply for an individual permit.

2. Allowable Non-Stormwater Discharges

The Draft Permit lists sources of non-stormwater discharges contained in 40 CFR § 122.34(b)(3)(iii). These are sources of allowable non-stormwater into the MS4. However, if the permittee determines that these sources (either categorically or individually) are significant contributors of pollutants to the MS4, the permittee must control or prohibit these sources of non-stormwater as part of its illicit discharge detection and elimination (IDDE) program. The Draft Permit does not require any action by the permittee regarding these discharges if the permittee determines that these sources are not significant contributors of pollutants to the MS4. Other than language contained in the CWA regarding non-stormwater sources, the legislative history of the stormwater regulations is essentially silent on the issue of non-stormwater discharges, which makes determination of Congress' expectations regarding non-stormwater discharges subject to agency interpretation. EPA expects MS4s to examine the sources of non-stormwater discharges as categories and examine their potential to contribute pollutants to the MS4. For example, potable water may not contribute pollutants that affect the MS4 discharges because the source is associated with the water supply. However, foundation drains and crawl spaces may be within residential basements and the type of pollutants associated with the non-stormwater discharge may be unknown. In this situation, the MS4 may want to establish a registration program for such discharges and include education about proper storage of household chemicals, or the MS4 may choose to prohibit the discharge due to the unknown nature of the pollutants. The permittee must document its determinations on the categories of non-stormwater in its SWMP and must prohibit any sources identified as a significant contributor of pollutants. In accordance with 40 CFR § 122.34(b)(3)(iii), discharges or flows from
EXHIBIT I
Response to Public Comments

In accordance with the provisions of 40 Code of Federal Regulations (CFR) §124.17, this document presents the United States Environmental Protection Agency’s response to comments received on the following draft National Pollutant Discharge Elimination System (NPDES) general permit for remediation activity discharges – the Remediation General Permit (RGP):

Massachusetts General Permit, Permit No. MAG910000
New Hampshire General Permit, Permit No. NHG910000

From August 18, 2016 to September 19, 2016, the United States Environmental Protection Agency (EPA) solicited public comments for the draft RGP for sites located in the Commonwealth of Massachusetts and the State of New Hampshire which discharge as a result of remediation activities from eight categories: 1) Petroleum-related site remediation; 2) Non-petroleum-related site remediation; 3) Contaminated/formerly contaminated site dewatering; 4) Pipeline and tank dewatering; 5) Aquifer pump testing; 6) Well development/rehabilitation; 7) Dewatering/remediation of collection structures; and 8) Dredge-related dewatering. This document represents EPA’s response to comments received on the draft RGP.

After a review of the comments received, EPA has made a final decision to issue the RGP authorizing the remediation activity discharges. Although EPA’s decision-making process has benefited from the comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the RGP. Therefore, the final RGP is substantially similar to the draft RGP that was available for public comment.

EPA did, however, make minor changes to the final RGP based on comments received. The rationale underlying these changes are explained in the responses to individual comments that follow and are reflected in the final RGP. Comments received in writing are organized by commenter and some have been paraphrased for length or clarity. EPA has also corrected typographical errors and/or inconsistencies in the draft RGP. Except when directly stated in response to a specific comment, these corrections do not result in a change to any effluent limitation or condition of the final RGP.

In the fact sheet that accompanied the draft RGP, EPA stated that we would seek concurrence from the United States Fish and Wildlife Service (FWS) regarding EPA’s determination of effects on endangered species. Following the release of the draft RGP, EPA had discussions with FWS on this matter. Based on discussions with FWS, EPA has determined that this general permit has “no effect”. The reason for this determination is because each Notice of Intent (NOI) that is submitted must assess site-specific endangered species impacts using FWS’s Information, Planning, and Conservation (iPaC) system mapping tool website. Based on the findings using the iPaC website, the operator can either make a determination of impacts or if there are questions, seek input from FWS directly. Since each NOI is individually screened prior to authorization, the general permit has no effect. EPA requested concurrence from the National Marine Fisheries Service (NMFS) regarding EPA’s determination of effects on endangered species under their jurisdiction. Concurrence was received from NMFS, dated January 13, 2017.
Copies of the final permits may be obtained from EPA Region 1’s RGP website at: http://www.epa.gov/region1/npdes/rgp.htm, or by writing or calling EPA’s NPDES Stormwater and Construction Permits Section (OEP 06-1), Office of Ecosystem Protection, 5 Post Office Square, Suite 100, Boston, MA 02109-3912; Telephone: (617) 918-1989.
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Response to Comment A.2
EPA Method 1664 revisions A and B, are currently the only approved test methods in 40 CFR 136 for analysis of Total Petroleum Hydrocarbons (TPH). Method 8100 is a surface water method that, prior to the approval of Method 1664, was occasionally specified on a case-by-case basis in NPDES permits for analysis of TPH. However, because an approved test method is available and meets the test method requirements specified in the RGP, including sufficiently sensitive test methods requirements, it is the test method operators are required to use for the purposes of compliance with the RGP.

However, an individual operator may elect to request formal approval of an alternative method under the Clean Water Act Alternate Test Procedure (ATP), described at 40 CFR 136.4 and 136.5. This program provides a mechanism for submission and review for limited use of an ATP for measurement of a pollutant as an alternative to the methods approved at 40 CFR Part 136. An ATP may fall into one of two categories: 1) A method using a determinative technique (e.g., a pollutant detector) different from that in an existing Part 136 method (for method validation and evaluation purposes this type of method is referred to as a new method); or 2) A modification to a Part 136 method that falls outside the scope of the modification flexibility described in the Part 136 method, or at 40 CFR 136.6 (for validation and evaluation purposes this type of method is referred to as an ATP).

If you wish to request approval of EPA Method 8100 for use under a RGP authorization, the Regional ATP Coordinator for Region 1 is Ann R. Jeffries in EPA’s New England Regional Laboratory Quality Assurance Branch (Phone: 617-918-8373). In the event an ATP is approved for use by all operators, EPA may incorporate such methods into Appendix VII. You may also use EPA Method 8100 for process control in addition to Method 1664 for compliance monitoring.

B. Comments submitted by Jeremy Fennell, Senior Scientist, Epsilon Associates, Inc.

Comment B.1
In section 3g. of the 2010 general permit, there is a very clear exemption for “discharges directly or indirectly to the ground”. The 2016 draft permit does not have such an exemption. This is creating some disagreement among certain entities concerning discharge of hydrostatic test waters from newly built pipelines within uncontaminated sites to vegetated uplands where direct overland flow will not occur to a Water of the U.S. Please provide some clarification and continue this exemption clearly within the 2016 permit.

Response to Comment B.1
EPA believes the commenter is referring to Part I.A.3 g of the 2010 RGP under “Specific Discharges Excluded from Coverage”. This part refers to types of discharges that were excluded, that is, ineligible, for coverage under the 2010 RGP. The draft RGP contained the discharges ineligible for coverage in Part I.3, “Limitations on Coverage”. This part is not intended as a list of discharges exempt from NPDES permit coverage. The NPDES permit program is applicable to the discharge of pollutants to Waters of the United States. See §301(a), 33 USC §1311(a). The regulations governing the EPA NPDES permit program are generally found at 40 CFR Parts 122,
124, 125, and 136. Accordingly, discharges to groundwater are not regulated by the NPDES permit program. However, discharges to groundwater may be regulated under other discharge permit authorities.

EPA retained each of the ineligible discharges included in the 2010 RGP except when such discharges are either 1) no longer ineligible to obtain coverage under the RGP; or 2) the exclusion was revised to provide greater specificity. With respect to “discharges directly or indirectly to the ground” ineligible for coverage under the RGP, EPA retained the following limitation on coverage:


This limitation was retained to provide specificity that if a discharge to groundwater requires a permit, the RGP is not the permit program authority under which such discharges can be covered. Such discharges are generally regulated under the UIC Program, as indicated. However, other similar programs, such as State groundwater discharge permit programs, could also apply. EPA also acknowledges that this limitation could retain the phrase used in the 2010 RGP, as requested. Therefore, EPA has revised this limitation on coverage in the final RGP as follows:

13. Discharges directly or indirectly to the ground subject to other program authority, including the Underground Injection Control (UIC) Program under authority of the Safe Drinking Water Act, a State groundwater discharge permit program, or a similar program authority.

Regarding discharges of hydrostatic test waters from newly-built pipelines at uncontaminated sites, if such discharges do not result in the discharge of pollutants to Waters of the United States, the RGP does not apply. However, such discharges may be regulated under other discharge permit authorities. If such discharges are expected to occur in Massachusetts, the commenter should contact the Massachusetts Department of Environmental Protection regarding the applicability of a Groundwater Discharge Permit. If such discharges are expected to occur in New Hampshire, the commenter should contact the New Hampshire Department of Environmental Services regarding the applicability of a Groundwater Management Permit (GMP) or Groundwater Release Detection Permit (GRDP).

C. Comments submitted by Lauren Konetzny, Project Manager, CDW Consultants, Inc.

Comment C.1
Appendix 4 Part I Section I: “EPA’s NOI processing time is thirty (30) days. The effective date of coverage will be the date indicated in the authorization to discharge provided to the operator by EPA in writing and will generally be the first day of the month following EPA’s NOI processing time.”

It is proposed that the RGP review process has been extended from fourteen days to at least 30 days. Based on the above statement, the review period could be as long as two months. (If the NOI is submitted 29 days prior to the end of the month, the end of the EPA’s 30-day processing
EXHIBIT J
No. 15-17447

IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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

Plaintiffs-Appellees,

v.

COUNTY OF MAUI,

Defendant-Appellant.

On Appeal from the U.S. District Court, Dist. of Hawaii
No. 12-cv-198, Hon. Susan Oki Mollway, District Judge

BRIEF FOR THE UNITED STATES AS AMICUS CURIAE
IN SUPPORT OF PLAINTIFFS-APPELLEES

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**STATEMENT OF THE CASE**

**I. STATUTORY BACKGROUND**

Congress enacted the Clean Water Act to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). Congress therefore prohibited any non-excepted “discharge of any pollutant” to “navigable waters” unless it is authorized by a permit. *Id.* §§ 1311, 1342, 1344, 1362. The CWA defines “discharge of a pollutant” as “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12)(A) (emphasis added). Pollutant means “dredged spoil, solid waste, incinerator, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” *Id.* § 1362(6). The CWA defines “navigable waters” as “the waters of the United States, including the territorial seas”; and a point source is “any discernible, confined and discrete
conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” *Id.* § 1362(7), (14).

The CWA authorizes EPA to issue NPDES permits under Section 402(a), but EPA may authorize a state to administer its own NPDES program if EPA determines that it meets the statutory criteria. *Id.* § 1342(a), (b). When a state receives such authorization, EPA retains oversight and enforcement authorities. *Id.* §§ 1319, 1342(d). Hawaii obtained such permitting authority in 1974. See 39 Fed. Reg. 43,759 (Dec. 18, 1974).

The CWA is a strict-liability regime that prohibits non-exceptioned discharges unless they are authorized by a CWA permit. *Id.* §§ 1311, 1342, 1344. An unpermitted discharge constitutes a violation of the CWA regardless of fault and is subject to enforcement by the state or federal government or a private citizen. *Id.* §§ 1319, 1365. To establish liability for a violation of the permit requirement, a plaintiff must show there was (1) a discharge (2) of a pollutant (3) to navigable waters (4)
from a point source. *Headwaters, Inc. v. Talent Irrigation Dist.*, 243
F.3d 526, 532 (9th Cir. 2001).

The CWA includes a civil-penalty provision for those who violate the Act. 33 U.S.C. § 1319(d). When determining a civil-penalty amount, courts must consider "the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require." *Id.*

EPA's longstanding position is that a discharge from a point source to jurisdictional surface waters that moves through groundwater with a direct hydrological connection comes under the purview of the CWA's permitting requirements. *E.g.*, Amendments to the Water Quality Standards Regulations that Pertain to Standards on Indian Reservations, 56 Fed. Reg. 64,876, 64,982 (Dec. 12, 1991) ("[T]he affected ground waters are not considered 'waters of the United States' but discharges to them are regulated because such discharges are effectively discharges to the directly connected surface waters.").

C. The District Court’s Finding of Liability Is Consistent with EPA’s Longstanding Position.

EPA’s longstanding position has been that point-source discharges of pollutants moving through groundwater to a jurisdictional surface water are subject to CWA permitting requirements if there is a “direct hydrological connection” between the groundwater and the surface water. EPA has repeatedly articulated this view in multiple rulemaking preambles. In 1990, EPA stated that “this rulemaking only addresses discharges to water of the United States, consequently discharges to ground waters are not covered by this rulemaking (unless there is a

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4 The County misconstrues EPA’s position in *Inland Steel v. EPA*, 901 F.2d 1419 (7th Cir. 1990). EPA argued that not all disposals into injection wells are discharges of pollutants under the CWA, and that the connection between the wells and navigable waters in that case was too attenuated to bring the discharges under the purview of the CWA. *Id.* at 1422-23. That position (embraced by the Seventh Circuit) does not mean that “injection into wells is not a discharge of pollutants requiring a NPDES permit.” Op. Br. at 27.

And in the preamble to its final rule addressing water quality standards on Indian lands, EPA stated:

[T]he Act requires NPDES permits for discharges to groundwater where there is a direct hydrological connection between groundwaters and surface waters. In these situations, the affected groundwaters are not considered “waters of the United States” but discharges to them are regulated because such discharges are effectively discharges to the directly connected surface waters.

56 Fed. Reg. at 64,982.

In 2001, EPA reiterated its position: “As a legal and factual matter, EPA has made a determination that, in general, collected or channeled pollutants conveyed to surface waters via ground water can constitute a discharge subject to the Clean Water Act.” 66 Fed. Reg. at 3017. EPA recognized that the determination was “a factual inquiry, like all point source determinations,” adding:

The time and distance by which a point source discharge is connected to surface waters via hydrologically connected surface waters will be affected by many site specific factors, such as geology, flow, and slope. Therefore, EPA is not proposing to establish any specific criteria beyond confining
the scope of the regulation to discharges to surface water via a “direct” hydrological connection.

*Id.* A general hydrological connection between all groundwater and surface waters is insufficient; there must be evidence showing a direct hydrological connection between specific groundwater and specific surface waters. *Id.*

To the extent there is statutory ambiguity about whether the CWA applies to discharges to jurisdictional surface waters through groundwater, EPA’s interpretation is entitled to *Chevron* deference. *Chevron,* 467 U.S. at 842-43.

The County’s contention that the direct-hydrological-connection standard is at odds with EPA’s recently-stated position on whether groundwater is a jurisdictional water misinterprets EPA’s statements. Op. Br. at 38-39. The Clean Water Rule, which was promulgated in June 2015 (and stayed by the Sixth Circuit pending further order of the court, see *In re EPA & Dep’t of Def. Final Rule,* 803 F.3d 804, 809 (6th Cir. 2015)), expressly excludes groundwater from the definition of “waters of the United States.” 80 Fed. Reg. 37,054. But, as EPA clarified, the fact that groundwater itself is not jurisdictional under the CWA does not mean that pollutants that reach waters of the United
States through groundwater do not require CWA permits. “EPA agrees that the agency has a longstanding and consistent interpretation that the Clean Water Act may cover discharges of pollutants from point sources to surface water that occur via ground water that has a direct hydrologic connection to the surface water. Nothing in this rule changes or affects that longstanding interpretation, including the exclusion of groundwater from the definition of ‘waters of the United States.’” See EPA, *Response to Comments – Topic 10 Legal Analysis* (June 30, 2015); available at http://www.epa.gov/cleanwaterrule/response-comments-clean-water-rule-definition-waters-united-states. The County erroneously attempts to conflate the jurisdictional exclusion of groundwater with the role that groundwater can play as the pathway through which pollutants from a point source reach jurisdictional surface waters.5

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5 The district court stated that if the proposed Clean Water Rule was finalized, it “would likely mean that the groundwater under the [facility] could not itself be considered ‘waters of the United States’” and that this would affect whether Plaintiffs could also prevail under *Healdsburg, Hawaii* I, 24 F. Supp. 3d at 1001. But the court erred in attempting to apply *Healdsburg* because the jurisdictional status of groundwater itself is irrelevant to whether discharges that move through groundwater to jurisdictional waters require NPDES permits.
EXHIBIT K
American Housing Survey for the United States: 2011

Current Housing Reports

Issued September 2011

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

U.S. Department of Commerce
Economics and Statistics Administration
U.S. Census Bureau
census.gov
American Housing Survey for the United States: 2011

Current Housing Reports

U.S. Department of Housing and Urban Development
Shaun Donovan, Secretary
Maurice Jones, Deputy Secretary

Office of Policy Development and Research
 Vacant, Assistant Secretary

U.S. Department of Commerce
Penny Pritzker, Secretary
Patrick D. Gallagher, Acting Deputy Secretary
Economics and Statistics Administration
Mark Dons, Under Secretary for Economic Affairs

U.S. Census Bureau
John H. Thompson, Director
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occupied occupied occupied

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C. Historical Changes: 2011 ............................. C-1
D. Errors .................................................. D-1

* Table not shown, it only applies to owner-occupied units.
** Table not shown, it only applies to renter-occupied units.
Introduction

This report presents data from the American Housing Survey (AHS). The survey is sponsored by the Department of Housing and Urban Development (HUD) and conducted by the U.S. Census Bureau.

The AHS is the most comprehensive national housing survey in the United States. It provides data on a wide range of housing subjects, including single-family homes, apartments, manufactured housing, vacant units, family composition, income, housing and neighborhood quality, housing costs, equipment, fuel type, and recent moves. National data are collected every 2 years from a sample of housing units. The national survey, which began in 1973, has sampled the same units since 1985; it also samples new construction to ensure continuity and timeliness of the data.

The survey, whose data are presented in this report, includes about 155,000 housing units. Respondents in the sample were interviewed between July and December 2011. Data are collected by census enumerators by telephone or personal visit via a laptop survey questionnaire. For unoccupied units, data are collected from landlords, rental agents, or neighbors.

In the past, the AHS was two surveys conducted independently of one another. The national survey was enumerated every other odd-numbered year, while the metropolitan survey occurred in selected areas on a rotating basis. Starting in 2007, the national and metropolitan surveys were conducted in the same time-period to reduce costs. Although they were collected simultaneously, the resulting data were not pooled to produce a single set of estimates.

The national cases were used for regional- and national-level estimates, while the metropolitan cases were used for specific area estimates. These areas usually, but not always, coincide with the Office of Management and Budget (OMB) definitions of the metropolitan statistical area. There was no AHS-Metropolitan sample in the 2011 surveys. Instead, a supplemental sample of housing units was selected for 29 metropolitan areas. This supplemental sample was combined with the national sample in these areas in order to produce metropolitan estimates using the national survey.

The 2011 sample also included an oversample of assisted housing units, drawn from HUD administrative records.

SAMPLE DESIGN

Information regarding the sample size and response rate can be found in Appendix B. Sample units are weighted and represent about 2,000 other units in the national survey. The weighting is designed to minimize sampling error and utilize independent estimates of occupied and vacant housing units.

SAMPLING ERRORS

The data in this report are subject to error from sampling and other causes, such as incomplete data and wrong answers. Appendix D contains a complete description of the types of errors and provides formulas for constructing confidence intervals. Standard errors for all 2011 AHS tables are available at <www.census.gov/housing/ahs/>.

2011 CHANGES

The 2011 AHS includes topical supplements on potential health and safety hazards in the home and modifications made to assist occupants living with disabilities. Mortgage questions have been redesigned, while selected neighborhood and journey-to-work questions were dropped from the 2011 survey altogether. These topical supplements will likely rotate back into the questionnaire in subsequent surveys. In addition, the 2011 tables were significantly redesigned from 2009. See Appendix C for more details.

A table crosswalk for the all 2011 AHS tables is available at <www.census.gov/housing/ahs/>.

SURVEY AUTHORITY

Title 12, Sections 1701-1.1 and 1701.2-5 (1) of the U.S. Code authorizes the Secretary of HUD to collect data from the public and private agencies and protect the confidentiality of the data. Title 12, Section 1701.2-10 mandates the collection of the data for the AHS. The guarantee of confidentiality made to respondents is provided by the Census Bureau through Title 13, Section 9(a) of the U.S. Code.

FOR MORE INFORMATION

Visit the AHS Web site at <www.census.gov/housing/ahs> for national and metropolitan publications dating back to 1973. Also available from the Web site are public-use micro data files in SAS and ASCII formats, as well as additional survey information, including questionnaire text, micro data codebooks, and AHS-based analyses.

Please contact us at 888-518-785 (toll-free) or e-mail us at <ahsinfo@census.gov> with any inquiries about these data.
## Table C-04-A0
### Plumbing, Water, and Sewage Disposal—All Occupied Units

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<td>Well or spring source of water</td>
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<td>With no gas water heater</td>
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**Notes:**
- This data may not be complete or may contain errors due to issues with data collection and reporting.
- The data represents the number of households with the specified characteristic.
- "New house" refers to houses built after 1980.
- "Existing house" refers to houses built before 1980.
- "Rural-urban analysis" refers to the classification of the dwelling as rural or urban.

**Source:** American Housing Survey for the United States: 2011

**U.S. Department of Housing and Urban Development and U.S. Census Bureau**

14 American Housing Survey for the United States: 2011
EXHIBIT L
Installing Best Management Practices Abates Acid Mine Drainage in Crab Orchard Creek

**Waterbody Improved**

Acid mine drainage (AMD) significantly diminished aquatic life in Morgan County, Tennessee’s Crab Orchard Creek. As a result, the Tennessee Department of Environment and Conservation (TDEC) added Crab Orchard Creek to the state’s Clean Water Act (CWA) section 303(d) list of impaired waters in 1998 for pH and sedimentation due to pollution from abandoned mines. Best management practices (BMPs) were installed in the watershed, including intensive restoration activities to abandoned mines. These abatement activities led to the attainment of water quality standards in a 2.3-mile segment of Crab Orchard Creek. The segment was removed from the state’s CWA section 303(d) list of impaired waters in 2016.

**Problem**

Crab Orchard Creek, a 29.9-mile-long tributary to the Emory River in upper west Tennessee, drains a 47.3-square-mile area that includes portions of Morgan and Cumberland counties (Figure 1). The watershed is mostly forested with areas of agriculture, pine plantations, and abandoned mines. Crab Orchard Creek is designated for both fish and aquatic life, recreation, livestock watering, and irrigation. It is listed on the Nationwide Rivers Inventory for exceptional scenic, recreational, geologic, and fish/wildlife values.

Coal mining operations in the Crab Orchard Creek watershed left open pit and waste disposal materials creating thousands of standing and flowing surface water with depressed pH, elevated mineral content, and minimal aquatic habitat. The main sources of these impairments were resource extraction and AMD.

Biological monitoring score (biomonitor) is a tool used to recognize stream improvement using species richness measures. The biomonitor index is scored on a scale from 1 to 15, where 1 is considered very poor, and 15 is considered good. The principal metrics used are the total number of macroinvertebrate families found in a stream. In 1998, Crab Orchard Creek failed a biomonitor study. At that time, the entire tributary of Crab Orchard Creek (Figure 1) was on the 1998 CWA section 303(d) list for pH and sedimentation due to pollution from abandoned mines. In 1989 and 2001, a TMDL study confirmed that pH levels in the creek were low and failed to meet water quality standards.

**Project Highlights**

To improve water quality within the Crab Orchard Creek watershed, 44 acres of land have been reclaimed. AMD treatments were installed and other remedial management measures were used to achieve nonpoint source pollution load reductions. Measures included: i) evapotranspiration ponds and systems; ii) constructed wetlands; iii) vegetated swales; and iv) revegetation. Figures 2 and 3. The Crab Orchard Creek Project.
also involved constructing AMD treatment systems and reclaiming abandoned coal mines to improve the water quality in Mill Creek and Little Laurel Creek (the three tributaries to Crab Orchard Creek). Four abandoned mine sites where AMD was significantly impacting receiving streams were prioritized and included approximately 150 acres of abandoned surface mines with two sediment ponds, 1,907 feet of highwalls, six identified seeps, and approximately 2,000 feet of exposed and eroding creek banks.

TEC’s Division of Water Pollution Control performed remedial management measures to help treat the creek with BMPs, including land reclaimation, in-stream discharge control, limestone treatment ponds, constructed wetlands, sediment ponds, bioremediation pond, and stabilization with vegetation. From 2002 through 2010, the Agricultural Resources Conservation Fund (ARCP) funded the restoration of agricultural BMPs, including 198 feet of fencing, planting 16.5 acres of pasture and trees, 42 acres of riparian and conservation easement, laying 3,085 feet of pipeline, construction of a pumping station, creating two reforestation areas, construction of four wetting facilities, and the construction of a well.

In order to raise awareness among local citizens and recreational users about nonpoint source pollution, impacts from abandoned mines, and this restoration project, a series of four articles were written and submitted to the Morgan County News. This project was also highlighted in the newsletters from the Emery River Watershed Association and the Morgan County Clean Water Coalition.

Additionally, a series of public meetings were held to share information and updates about the project over the course of the implementation period. An informative brochure was developed as well as a display developed in 2009 showing the watershed. The display was used for special events such as the annual Morgan County Discovery Festival.

Results

In 2006 TEC collected a Semi-Quantitative Single Habitat Assessment (SQA) test at mile 2.1 of Crab Orchard Creek. The habitat score indicated that this segment was in compliance with water quality standards and that the stream was of beneficial use for fish and wildlife. In 2007, a biocenosis survey at this same station yielded a perfect score of 15, documenting 17 EPT families, 17 invertebrates, and 31 total families. During a sampling in 2006, the stream invertebrate community and the biology had significantly improved. The CWA section 303(d) assessment for the 2015 list now states that Crab Orchard Creek (7507000020052006) fully supports its designated uses. The upstream section of Crab Orchard Creek remains on the 303(d) list for manganese and pH problems due to mining.

Partners and Funding

Many federal and state agencies, local organizations, and individual landowners worked together to improve water quality in the Crab Orchard Creek watershed. The principal project partners were the Emery River Watershed Association, the Morgan County Soil Conservation District (MCSCD), TEC’s Marquee Escrow, the community of Onslow, and the Tennessee Valley Authority. In 2002, the U.S. Environmental Protection Agency, through the Tennessee Department of Agriculture, awarded a CWA Section 319 Grant of $46,150 to TEC’s Abandoned Mine Land Reclamation Program for Crab Orchard Creek Watershed Plan. The grant’s state project number was ID-06-08123-09 for the Crab Orchard Creek Watershed Plan. It began on March 1, 2006 and was completed on February 28, 2011. TEC also provided $260,000 in matching funds. The Agricultural Resources Conservation Fund (ARC) spent $10,383.29 through the Morgan County Soil Conservation District. U.S. Department of Agriculture Farm Bill funds also supported installation of practices from 2007 to 2011.

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EXHIBIT M
NONPOINT SOURCE SUCCESS STORY

Tennessee

Septic Tank Effluent Pumping Project Improves King Branch

Waterbody Improved

Since 1993 King Branch has been posted with signs for water contact avoidance due to high Escherichia coli (E. coli) levels from failing septic systems. In 1998 the Tennessee Department of Environment and Conservation (TDEC) added the entire West Prong Little Pigeon River watershed to the Clean Water Act (CWA) section 303(d) list; King Branch was added to the 303(d) list as an individual segment in 2002. The Tennessee Nonpoint Source Program, in conjunction with the Sevier County Environmental Health Department and using partial funding support through CWA section 319 grant funding, installed a septic tank effluent pump (STEP) sewer system to treat sewage that had been impacting both surface and groundwater. As of April 2014 the water contact advisory was lifted due to improved water quality and decreased E. coli. TDEC removed the 2.5-mile segment of King Branch from Tennessee’s CWA section 303(d) list in 2014.

Problem

King Branch is within the West Prong Little Pigeon River watershed (900/3007/3008) near Pigeon Forge in Sevier County, Tennessee (Figure 1). King Branch flows generally eastward into the West Prong Little Pigeon River, which is part of the Lower French Broad River watershed.

In the early 1990s TDEC conducted an ammonia biological surveys of the West Prong Little Pigeon River to determine if the river met bacteriological standards for body contact recreation during recreational periods. The sampling results showed that King Branch exceeded regulatory bacterial limits, and the stream was deemed unsafe for contact recreation. The primary source of the problem was identified as failing septic systems (likely for homes and businesses) along King Branch Road. In 1993 a public advisory was issued and warning signs were posted. In 1995 and 1996 TDEC tested samples from King Branch for E. coli. The sample concentrations ranged from 1,513 counts/100 mL to 12,400 counts/100 mL, i.e., above the test method’s detection limit. In 1998 TDEC added the entire West Prong Little Pigeon River watershed to the Clean Water Act (CWA) section 303(d) list; King Branch was added to the 303(d) list as an individual segment (T4000/007/0306_0029) in 2002.

A total maximum daily load (TMDL) for pathogens in the Lower French Broad River was determined by TDEC and approved by the U.S. Environmental Protection Agency in December 2005. The goal of the TMDL was
geometric mean based on a minimum of 10 samples collected from a given sampling site over a period of not more than 30 consecutive days, with individual samples being collected at intervals of not less than 12 Hours, and the concentration of the fecal coliform group in any individual sample shall not exceed 1,000 cfu/100 ml.

Project Highlights
Planning and design for restoring King Branch began in 2002. In 2006 the Sevier County Environmental Health Department approved the construction of a STP sewer system in this area because of an immediate threat to public health from failing septic systems. STP systems collect sewage from the customers on the system and route it to a re-circulating sand filter with drip irrigation lines for disposal. Previously existing septic systems were removed from service, which prevents sewage from reaching the soil surface and contaminating runoff. In 2007 a STP system capable of treating up to 11,000 gallons of effluent per day was constructed to serve over 30 homes and businesses along King Branch Road (Figure 2).

Results
Removing septic-related pollution sources reduced bacteria levels in King Branch. Sampling conducted by TDEC in 2013 showed that the E. coli levels within the stream had improved and met water quality standards for all designated uses. Observations from June to August 2013 indicated E. coli had decreased to a range of 2.2 most probable number (MPN) per 100 ml, to 22.4 MPN/100 ml (this is approximately equal to a range of 22.4 – 112.4 cfu/100 ml), which is well below the 124 cfu/100 ml required by state standards (Figure 3). In 2014 TDEC lifted the contact advisory and removed King Branch from the impaired water list for bacteria.

Partners and Funding
The Sevier County Environmental Health Department served as the lead organization for the STP project. Other cooperating organizations included the Sevier County Soil Conservation District, Smoky Mountain Resource Conservation and Development Council, Tennessee Department of Agriculture, TDEC, Tennessee Department of Health — Division of Lab Services, and the U.S. Department of Agriculture — Natural Resources Conservation Service. Sevier County was also the recipient of two CNH section 319 grants ($301,500 in 2001 and $301,500 in 2005) for a total of $603,000. Further funding through the CNH section 319 program assisted in the purchase of the STP system itself, along with the accompanying leached bed holding, infiltration-efluent dispersal system. Matching funds for the project were supplied by Sevier County. The system is owned and operated by Tennessee Wastewater Systems and is inspected twice a month. The system serves approximately 30 homes under Permit No. 10PH-05094; the permit must be renewed every 5 years (the current permit expires August 31, 2017).

For additional information contact:
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Tennessee Department of Agriculture
615-837-5166 • Sam.Marshall@tn.gov
EXHIBIT N
Guidelines for Water Reuse

U.S. Environmental Protection Agency
Office of Wastewater Management
Office of Water
Washington, D.C.

National Risk Management Research Laboratory
Office of Research and Development
Cincinnati, Ohio

U.S. Agency for International Development
Washington, D.C.
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Chapter 3 Types of Reuse Applications

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CHAPTER 4
State Regulatory Programs for Water Reuse

This chapter presents an overview of the overarching approach to developing a reuse program at the state level, a regulatory framework outlining fundamental components for states considering developing or revising regulations, and a summary of which states have regulations and guidelines governing reuse. This chapter also provides a listing of the existing state water reuse regulations or guidelines in 10 sample states (Arizona, California, Florida, Hawaii, Nevada, New Jersey, North Carolina, Texas, Virginia, and Washington) for a comparison of approaches governing different types of reuse applications. Finally, the chapter provides suggested regulatory guidelines for water reuse.

4.1 Reuse Program Framework
Since publication of the 2004 guidelines, several states have developed state water reuse programs, building on the examples of other states with well-established water reuse programs, such as Florida, California, Texas, and Arizona. Establishing an effective state water reuse program involves a number of complex factors beyond establishing guidelines or regulations. There are 15 key elements to an effective state water reuse program, as presented in Table 4-1.

4.2 Regulatory Framework
Reuse programs operate within a framework of regulations that must be addressed in the earliest stages of planning. A thorough understanding of all applicable regulations is required to plan the most effective design and operation of a water reuse program and to streamline implementation. Currently, there are no federal regulations directly governing water reuse practices in the United States. In the absence of federal standards and regulations, each state may choose to adopt rules and develop programs for water reuse to meet its specific resource needs, and to ensure that water reuse projects are designed, constructed, and operated in a manner protective of the environment, other beneficial uses, and human health. Water reuse regulations and guidelines have been developed by many states, as described in Section 4.5. Regulations refer to actual rules that have been enacted and are enforceable by governmental agencies. Guidelines, on the other hand, are generally not enforceable, but can be used in the development of a reuse program. In some states, however, guidelines are, by reference, included in the regulations, and thus are enforceable. In addition to providing treatment and water quality requirements, comprehensive rules or guidelines also promote reuse by providing the playing field for which projects must comply. They provide the certainty that if a project meets the requirements, it will be permitted.

Table 4-2 provides fundamental components of a regulatory framework that states may want to consider when developing or amending rules or regulations for water reuse.

4.3 Relationship of State Regulatory Programs for Water Reuse to Other Regulatory Programs
States’ regulatory programs for water reuse must be consistent with and, in some cases, function within the limitations imposed by other federal and state laws, regulations, rules, and policies. The following subsections describe some of the more common laws and regulations that can affect states’ regulatory programs for water reuse. Laws, policies, rules, and regulations that affect state water reuse regulatory programs include water rights laws, water use, and wastewater discharge regulations, as well as laws that restrict land use and protect the environment.
4.5.2.9 Groundwater Recharge – Nonpotable Reuse

Spreading basins, percolation ponds, and infiltration basins have a long history of providing both effluent disposal and groundwater recharge. Most state regulations allow for the use of relatively low quality water (i.e., secondary treatment with basic disinfection) based on the fact that these systems have a proven ability to provide additional treatment. Traditionally, potable water supplies have been protected by requiring a minimum separation between the point of application and any potable supply wells. These groundwater systems are also typically located so that their impacts to potable water withdrawal points are minimized. While such groundwater recharge systems may ultimately augment potable aquifers, that is not their primary intent and experience suggests current practices are protective of raw water supplies.

California, Florida, Hawaii, and Washington have regulations or guidelines for reuse with the specific intent of groundwater recharge of nonpotable aquifers. Hawaii does not specify required treatment processes; determining requirements on a case-by-case basis. The Hawaii Department of Health Services bases the evaluation on all relevant aspects of each project, including treatment provided, effluent quality and quantity, effluent or application spreading area operation, soil characteristics, hydrogeology, residence time, and distance to withdrawal. Hawaii requires a groundwater monitoring program. Arizona regulates groundwater recharge through their Aquifer Protection Permit process. Washington has extensive guidelines for the use of reclaimed water for direct groundwater recharge of nonpotable aquifers although all aquifers in the state are considered to be potable. Recharge of nonpotable aquifers in Washington first requires the redesignation of the aquifer to nonpotable.

Table 4-15 shows reclaimed water quality and treatment requirements for groundwater recharge via rapid-ribe (surface spreading) application systems.

4.5.2.10 Indirect Potable Reuse (IPR)

IPR involves use of reclaimed water to augment surface or groundwater sources that are used or will be used for public water supplies or to recharge groundwater used as a source of public water supply. Unplanned (de facto) IPR is occurring in many river systems today. Additionally, many types of reuse projects inadvertently contribute to groundwater as an unintended result of the primary activity. For example, irrigation can replenish groundwater sources that will eventually be withdrawn for use as a potable water supply. IPR systems, as defined here, are distinguished from typical groundwater recharge systems and surface water discharges by both intent and proximity to subsequent withdrawal points for potable water use. IPR involves intentional introduction of reclaimed water into the raw water supply for the purposes of increasing the volume of water available for potable use. In order to accomplish this objective, the point at which reclaimed water is introduced into the environment must be selected to ensure it will flow to the point of withdrawal. Typically the design of these systems assumes there will be little additional treatment in the environment after discharge, and all applicable water quality requirements are met at the point of release of the reclaimed water.

Four of the 10 states (California, Florida, Hawaii, and Washington) have regulations or guidelines specifically pertaining to IPR. For groundwater recharge of potable aquifers, most of the states require a pretreatment program, public hearing requirements prior to project approval, and a groundwater monitoring program. Florida and Washington require pilot plant studies to be performed. In general, all the states that specify treatment processes require secondary treatment with filtration and disinfection. Washington has different requirements for surface percolation, direct groundwater recharge, and streamflow augmentation. Hawaii does not specify the type of treatment processes required. Determining requirements on a case-by-case basis. Texas and Virginia do not have specific IPR regulations but review specific projects on a case-by-case basis.

Most states specify a minimum time the reclaimed water must be retained underground prior to being withdrawn as a source of drinking water. Several states also specify minimum separation distances between a point of recharge and the point of withdrawal as a source of drinking water. Table 4-16 shows the reclaimed water quality and treatment requirements for IPR.
EXHIBIT O
ICR Supporting Statement
Information Collection Request for
National Pollutant Discharge Elimination
System (NPDES) Program (Renewal)

OMB Control No. 2040-0004, EPA ICR No. 0229.22

September 2017
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A. Justification

1. Explain the circumstances that make the collection necessary and explain the legal or administrative requirements relevant to the collection and attach a copy of the statute or regulation authorizing the collection

1.1 Short Characterization/Abstract

This consolidated Information Collection Request (ICR) renews the National Pollutant Discharge Elimination System (NPDES) Program ICR. It calculates the burden and costs associated with the NPDES program, identifies the types of activities regulated under the NPDES program, describes the roles and responsibilities of state governments and the Agency, and presents the program areas that address the various types of regulated activities.

This ICR being renewed (Office of Management and Budget [OMB] control no. 2040-0004, EPA ICR no. 0299.21, expiration date 12/31/2017) consolidated the burden and costs associated with activities previously reported in 11 of the NPDES program or NPDES-related ICRs administered by EPA’s Water Permits Division. This renewal documents the addition of the burden and costs for seven more NPDES programs, raising the total to 18. Those programs were previously addressed by the following separate ICRs. Once this renewal ICR is approved and these programs are formally incorporated into this ICR, the follow ICRs will be discontinued.

- Consolidated Animal Sectors (OMB control no. 2040-0250, EPA ICR no. 1989.09, expiration date 5/31/2019)
- Pesticide Applicators (OMB control no. 2040-0284, EPA ICR no. 2397.02, expiration date 3/31/2019)
- National Pretreatment Program (OMB control no. 2040-0009, EPA ICR no. 0002.15, expiration date 4/30/2019)
- Cooling Water Intake Structures at Phase III Facilities (OMB control no. 2040-0268, EPA ICR no. 2169.05, expiration date 07/31/2017)
- Cooling Water Intake Structures Existing Facilities (OMB control no. 2040-0257, EPA ICR no. 2060.07, expiration date 10/31/2017)
- NPDES Electronic Reporting Rule (OMB control no. 2020-0035, EPA ICR no. 2468.02, expiration date 1/31/2019)

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation’s waters (CWA section 101). The NPDES program, established under CWA section 402, is an important tool for controlling pollutant discharges. The CWA authorizes the Agency to issue permits for the discharge of pollutants to waters of the United States; the Agency uses the NPDES program to regulate point source discharges. CWA section 402(b) allows states (defined to include Indian tribes and
state agencies in direct contact with individual permittees. EPA Headquarters staff responsible for program oversight were also contacted to provide revised information and data for this ICR.

9. **Explain any decision to provide compensation to respondents**

No payments or gifts are provided to respondents.

10. **Describe any assurance of confidentiality provided to respondents**

Permit applications and other respondent reports may contain confidential business information. If this is the case, the respondent may request that such information be treated as confidential. All confidential data will be handled in accordance with 40 CFR 122.7; 40 CFR Part 2, and EPA’s Security Manual Part III, Chapter 9, dated August 9, 1976. Any claim of confidentiality must be asserted at the time of submission. However, CWA section 308(h) specifically states that effluent data may not be treated as confidential.

11. **Provide additional justification for any questions of a sensitive nature**

Questions of a sensitive nature are not found in this information collection.

12. **Provide estimates of the hour burden of the collection of information**

The estimate of respondent burden hours covers facilities subject to NPDES program requirements (permittees) and authorized states. Appendix A describes the information collected and the methodology for estimating respondent burden and costs. Appendix B presents a calculated respondent burden estimate grouped by activity type and respondent type. Table 12.1 summarizes the labor burden and associated labor costs for permittees and states with NPDES program authority.

<table>
<thead>
<tr>
<th></th>
<th>Average Annual Respondents</th>
<th>Average Annual Total Burden (hours)</th>
<th>Average Annual Total Labor Costs (2016$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permittees</td>
<td>934,383</td>
<td>26,385,587</td>
<td>$1,348,910,138</td>
</tr>
<tr>
<td>States, tribes, territories, and D.C.*</td>
<td>631</td>
<td>1,853,675</td>
<td>$53,674,896</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>995,020</td>
<td>28,239,262</td>
<td><strong>$1,432,585,035</strong></td>
</tr>
</tbody>
</table>

* 590 of these 637 are not authorized to administer the NPDES program and respond to only one information item (certification of EPA-issued permits).

13. **Provide an estimate of the total annual cost burden to respondents**

This section presents an estimate of annual operating and maintenance (O&M) and capital and start-up costs. The majority of the burden and cost calculations in this ICR are the result of labor costs only. The ICR does, however, account for O&M costs for certain testing/analysis plus certain capital and start-up costs incurred by respondents that perform activities outside the normal operation practices. All costs presented have been adjusted using the Consumer Price Index to August 2016 dollars. This ICR estimates that there are no O&M or capital and start-up costs for state agencies or the federal government.

**Permittee O&M costs**: The permittee O&M costs are linked to the following activities:

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Appendix A—Description of the Information Collected and Methodology for Estimating Respondent Burden and Cost of Collection

This appendix provides detailed information regarding the methodology for estimating respondent burden and costs. Section A.1 provides the methodology for deriving respondent burden and breakdown of capital/start-up cost, while the derivation of costs is provided in section A.2.

A.1. Estimating Respondent Burden

This section describes the methodology for estimating respondent burden for the information requests. Facilities subject to NPDES program requirements (also referred to as permit holders or permittees) and authorized states are included as respondents in this section. Methodologies that apply to NPDES-authorized states also apply to federal burden associated with EPA Regions acting as permitting authority in non-NPDES-authorized states. However, the EPA permitting authority burden and costs are not included in the respondent burden and cost estimates.

This ICR calculates annual burden and costs to respondents. These calculations are complicated because there are two types of permittee respondents discussed in this section: permittees renewing existing permits and applicants for new permits. Applications for NPDES permit renewal must be submitted every 5 years. For these respondents, the ICR assumes that the number of applicants renewing per year equals one-fifth of the total number of existing permitted facilities. For new permits, respondents will apply for each type of new permit only once and the annual number is estimated based on the expected average number of new permit applications that will be submitted over the three-year period covered by this ICR. In subsequent ICRs, new permits will transition to renewal permits.

This section summarizes the input data and assumptions for each category of respondent activity shown in Appendix B. In some cases, the “total number of respondents” and “annual number of respondents” shown in Appendix B may reflect double-counting of individual respondents because the respondent values are summed values within the category which may include multiple activities for the same respondent. For example, a permittee may be required to submit different types of notices to the permitting authority. This is particularly true for recordkeeping, which can involve multiple types of recordkeeping activities.

To simplify the burden estimation process, Appendix A identifies respondent categories that can be used as input values to adjust the burden estimates during each ICR cycle. For each respondent input category, estimates for number of responses, labor hours, O&M costs, and capital/start-up costs are derived from previous ICR estimates. These previous ICR estimates are then adjusted based on revisions to the number of respondents in each respondent input category and wherever underlying assumptions change. The revised number of respondents in each input category are listed in Appendix D and represent
various subsets of the unique respondents listed in Appendix E. The basic assumptions used to derive the ICR estimates are described below.

A.1.1. Recordkeeping

Permittees. Recordkeeping activities include those associated with data collected, DMRs, permit documents, notices, and correspondence. Frequency may range from ongoing to once every five years. The estimated time required per response ranges from 10 minutes (0.17 hours) for sludge permits to 6-7 hours for general stormwater and major industrial NPDES permits.

States. The estimated time required for state respondents for permit oversight recordkeeping ranges from a per-state aggregate of 0.33 hours for the CSO program to 50 hours for sludge programs to 300 hours for the NPDES program.

A.1.2. Individual Permits

A.1.2.1. Application Forms

Below are NPDES application forms that are submitted initially for new permits and resubmitted upon permit renewal every five years. These forms and the facilities that submit them are included in Table 2.1 in Item 2 of Section A (Justification) above. Due to the wide variety in response times, the burdens for different types of application forms are discussed separately below.

Form 1

Permittees. Form 1 requirements apply to all nonmunicipal individual permits and individual stormwater permits. The estimated time required per permittee respondent for Form 1 ranges from 1 to 3 hours.

States/federal. The estimated burden hours for state/federal respondents to review Form 1 is 0.5 hours per form.

Forms 2C-2F

Permittees. The estimated time required per permittee respondent for Forms 2C-2F ranges from 14 hours for Form 2E to 46 hours for Form 2D.

States/federal. Estimated burden hours for state/federal respondents to review Forms 2C-2F ranges from 0.5 hours to 2 hours per form.

Forms for POTWs and ProOTWs

Permittees. The estimated time required per permittee respondent for Forms for POTWs and ProOTWs (Form 2A - Basic, Form 2A - Part D, Form 2A - Part E, Form 2A - Part F, Form 2A - Part G) ranges from 4 to 18 hours. There are non-labor operating costs associated with Forms for POTWs and ProOTWs due to requirements for testing and analysis. See section A.2 for details.

States. Estimated burden hours for a state respondent to review Forms for POTWs and ProOTWs ranges from 0.67 hours to 4 hours per application.
**Ocean Discharge Application**

**Permittees.** The estimated total hours per permittee respondent for applications for ocean discharges is 778 hours but no applications are anticipated for the three year-period for this ICR renewal.

**States/federal.** Estimated burden hours for state/federal respondents to review applications for ocean discharges is 88 hours per application. As stated above, no applications are anticipated for the three years covered by this ICR renewal.

**A.1.2.2. DMRs**

**Permittees.** DMR preparation is expected to require about 2 hours per outfall. Some permittees, especially industrial facilities, have multiple outfalls. The required frequency of DMR reporting (monthly, bimonthly, quarterly, semi-annually, or yearly) depends on facility type and permit type. The implementation of the Electronic Reporting Rule is not expected to change the time necessary to prepare the DMR but will reduce mailing costs. These cost adjustments are calculated separately (see section A.1.8.4) and deducted from the total cost burden estimate.

**States/federal.** The estimated time required for state/federal respondents to review and process DMRs non-electronically is 10 minutes per DMR per outfall; additionally, 20 percent of the submitted DMRs are expected to require 30 minutes for follow-up. The adjustments in burden due to implementation of the Electronic Reporting Rule requirements affect these estimates and are calculated separately and deducted from the total based on pre-rule estimates (see sections A.1.8.4 and A.2.2.9).

**A.1.2.3. Reports**

Report activities in this category can include submission of notices to the permitting authority concerning the following:

- Facility and Permit Transfer Report;
- Permittee Report of Inaccurate Previous Information;
- Alternate Level Reports;
- Permittee Report of Planned Facility Changes;
- Request for Water Quality-Based Effluent Limitations Modification;
- Non-compliance Reports;
- Compliance Schedule Reports; and
- Unanticipated Bypass/Upset Reports.

**Permittees.** In general, the estimated time required per response for these activities ranges from 1 to 5 hours. There is no set frequency because these activities are often triggered by unplanned events. The frequencies used to derive the burden estimates are based on experience and assumptions regarding expected occurrence of each. The estimated time required per respondent for preparing and submitting compliance schedule reports is 0.75 hours and occurs on an annual basis.

September 2017
States/federal. The estimated time required for state/federal respondents to review and process notifications is typically 4 hours per notification but can take up to 20 hours for Permittee Report of Planned Facility Changes. The estimated time required for state/federal respondents to review and process compliance schedule reports is 0.25 hours for municipal and 4 hours for nonmunicipal permits.

A.1.2.4. Permittee Monitoring

Sampling
Permittees. Estimates of the hours per response for DMR sampling are generally based on number of outfalls, reporting frequency, and duration and number of sampling episodes per reporting period. Typical sampling episodes are estimated to require about 2 to 2.75 hours each.

States. Any state activities related to monitoring data are covered under the analyses section below.

Analyses
Permittees. This category refers to chemical analyses that are conducted in-house. Estimates of the hours per response for DMR analyses are generally based on 0.5 hours per parameter analyzed multiplied by the estimated number of outfalls, number of samples per response and number of parameters per sample.

States/federal. The estimated time required for state/federal respondents to review and process monitoring reports is 10 minutes and 0.5 hours for follow-up. The estimate of 10 hours for state respondents applies only to review of post-baseline monitoring data for coal remining permits.

CSO Permittee Monitoring
Permittees. The estimated time required per respondent for CSO monitoring is 27 hours, 18 hours, 20 hours, and 2 hours for sampling, analysis, estimating flow parameters, and reporting, respectively. The frequency is semi-annually.

States. Any state activities related to CSO monitoring data are covered under section A.1.2.2 (DMRs).

A.1.2.5. CSO Notification
Permittees. The estimated time required per respondent for CSO notification is 0.5 hours per sign for inspection and maintenance of notification signs and 5 hours for public advisories with a frequency of 10 times per year for public advisories. There are capital costs for replacement of signs (see section A.2 for details).

States. The estimated time for state oversight of CSO notification is 4 hours per permit every 5 years.

A.1.2.6. Other
Activities in this category include:
• Request for Modification, Revocation and Reissuance, or Termination;
• Section 308(a) Letters;
• New Introduction of Pollutants to POTWs;
• Notification of New or Increased Discharge;
• Permittee Notice of Regulated Discharge Cessation;
• Variance Request;
• Certifications;
• Documenting Nine Minimum Control Measures;
• Writing Long-term Control Plans;
• Part 435 Certification Oil and Gas Extraction; and
• BMP Development.

**Request for Modification, Revocation and Reissuance, or Termination**

**Permittees.** The estimated time required per respondent for preparing and submitting a request for modification, revocation and reissuance, or termination is 5 hours and occurs on an as-needed basis.

**States/federal.** The estimated time required for state/federal respondents to review and process request for modification, revocation and reissuance, or termination is 40 hours for each request.

**Section 308 Requests**

**Permittees.** The time required per respondent for preparing responses to Section 308 requests can vary considerably and is estimated to be 5-8 hours, 50 hours, and 1,000 hours for routine requests and letters, medium complexity requests, and complex municipal facility requests, respectively. The frequency is on an as-needed basis.

**States/federal.** The estimated time required for state/federal respondents to review and process submitted information ranges from 1 to 20 hours depending on permit type.

**New Introduction of Pollutants to POTWs**

**Permittees.** The time required per respondent to prepare and submit to the permitting authority a notice of substantial change in the volume or character of pollutants being introduced into that POTW is estimated to be 3 hours and occurs at an approximate frequency of 200 per year.

**States/federal.** The time required to review and process each notice is 4 hours.

**Notification of New or Increased Discharge**

**Permittees.** The time required per respondent to prepare and submit to the permitting authority a notice of new or increased discharge is estimated to be 4 hours and occurs for 5 percent of all major and 3 percent of all minor nonmunicipal permits.

**States/federal.** The time required to review and process each notice is 4 hours.
Permittee Notice of Regulated Discharge Cessation

Permittees. The time required per respondent to prepare and submit to the permitting authority a notice of new or increased discharge is estimated to be 4 hours and occurs annually for 2 percent of all major and 0.8 percent of all minor nonmunicipal permits.

States/federal. The time required to review and process each notice is 4 hours.

Variance Request
Permittees. Variance requests for individual permits include the following:

- Great Lakes Modification and variance request. The estimated burden is 418 hours.
- Variance Request for Fundamentally Different Factors. The estimated burden is 160 hours.
- Variance Request for Nonconventional Pollutants. The estimated burden is 150 hours.
- Variance Request for Innovative Pollution Control Technology. The estimated burden is 60 hours.
- Variance Request Regarding Thermal Discharges (New). The estimated burden is 400 hours.
- Variance Request Regarding Thermal Discharges (Renewal). The estimated burden is 4 hours.

The number of respondents for each type is based on assumed percentages of different types of permits. The frequency of occurrence is on an as-needed basis.

States/federal. The estimated time required for state/federal respondents to review and process variance requests ranges from 44 to 520 hours for each type of variance request. Time for review and processing of thermal discharge variance renewals is 1 hour.

Long-term Control Plans (LTCPs)
Permittees. The estimated time required per respondent to write an LTCP varies considerably depending on system size and on whether the system has already conducted studies. Respondent time can range from 300 hours for a small system that has existing studies to 6,000 hours for a large system without existing studies.

States/federal. The estimated time required for state/federal respondents to review and process LTCPs is 20, 33, and 53 hours for small, medium, and large combined sewer systems, respectively.

Documenting Nine Minimum Control (NMC) Measures
Permittees. The estimated time required per respondent for collecting necessary information for small, medium and large systems is 29 hours, 43 hours and 200 hours, respectively. EPA estimates that no municipalities will submit NMC documentation in the next 3 years.

States. No state respondent burden is anticipated for this activity.

September 2017
Certification for Exemption from Monitoring and Notification of Process Changes
The effluent limitations guidelines and standards regulations for 14 industrial categories (12 categories and 2 subcategories) allow dischargers to submit a certification to exempt them from monitoring one or more pollutants.

Permittees. The estimated time required per respondent for preparing certification for exemption documents will typically be one hour and with a frequency of once per year.

States/federal. The estimated time required for state/federal respondents to review and process certification documents is 1 hour for each certification.

Part 435 Certification Oil and Gas Extraction (Synthetic Based Drilling Fluid)
Permittees. The estimated time required per respondent for activities associated with certification of preparation and implementation of BMP plans for control of discharges of synthetic-based drilling fluids cuttings under 40 CFR Part 435 for oil and gas extraction permits is 787 hours and occurs at a frequency of once per year.

Federal. The estimated time required for federal respondents to review and process certification documents is 5.7 hour for each certification.

Pollution Prevention Alternative Certification (Pesticides Packaging and Repackaging)
Permittees. The estimated time required per respondent for preparing pollution prevention alternative certifications for pesticides formulating, packaging, and repackaging category facilities is 20 hours and occurs annually.

States/federal. The estimated time required for state/federal respondents to review and process certification documents is 1 hour for each certification.

BMP Development
Permittees. The estimated time required per respondent is 50 hours for amendment and review of BMP Plans for certain industrial permits and 40 hours for associated refresher training. Recurrence is on an as-needed basis for the BMP plan and semi-annually for the training.

States. The estimated time required for state respondents for BMP plan review is 5 hours.

A.1.2.7. Great Lakes
The activities in this category apply to NPDES permittees that discharge within the Great Lakes watershed and are subject to EPA's Great Lakes Water Quality Guidance.

Permittees. Activities include:

September 2017
Great Lakes Antidegradation Demonstration with bioaccumulative chemicals of concern (BCCs). The estimated burden is 22.2 hours and 11.1 hours for municipal and nonmunicipal permits, respectively.

Great Lakes Antidegradation Demonstration without BCCs. The estimated burden is 14.8 hours and 7.4 hours for municipal and nonmunicipal permits, respectively.

Great Lakes pollutant minimization plan (PMP) implementation. The estimated burden is 1.2 hours and 1.4 hours for municipal and nonmunicipal permits, respectively.

Great Lakes Approvable Strategy. The estimated burden is 104 hours and 142 hours for municipal and nonmunicipal permits, respectively.

Great Lakes Annual Report. The estimated burden is 20.9 hours and 32.4 hours for municipal and nonmunicipal permits, respectively.

Great Lakes Bioconcentration Studies. The estimated burden is 73 hours.

Great Lakes Collecting Data and Monitoring for WET Limits. The estimated burden is 10,877 hours total and 6,841 hours total for all municipal and nonmunicipal permits, respectively.

Great Lakes WQBEL Compliance Monitoring. The estimated burden is 0.5 hours.

Frequency ranges from ongoing for PMP implementation to annually for monitoring and strategies/studies/reports to once every 5 years for antidegradation demonstrations.

States. The burden applies only to the 7 Great Lake states and the estimated time required per state respondent ranges from 4 to 8 hours for each item.

A.1.3. National Pretreatment Program

The activities in this category are related to the administration of the pretreatment program included in the National Pretreatment Program ICR Supporting Statement (OMB control no. 2040-0009; EPA ICR no. 0002.15). All activities were grouped and allocated on the basis of the type of respondent. Below is a list of the possible types of input variables:

- Total number of SIUs;
- Total number of CIUs;
- Total number of approved pretreatment programs;
- Number of approved states; and
- Estimated number of new pretreatment programs over the next three years.

Burden estimates for each respondent type in the Pretreatment ICR were updated using the current estimate of the number of each respondent type listed above (see Appendix D). Historically, ICIS has been a poor source of information regarding respondent numbers related to the pretreatment program. Consequently, the updated estimates were verified through consultation with the Regional and State pretreatment coordinators. There are no

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3 The criteria for when an antidegradation demonstration must be performed are different for bioaccumulative chemicals of concern (BCCs) and non-BCCs.
capital or start-up costs. Burden estimates for POTWs, IUs, state, and federal government are associated with the following types of activities related to the Pretreatment Program:

- Program development (POTWs and state/federal);
- Program implementation (POTWs, IUs and state/federal);
- Limits modification requests and removal credits (POTWs and IUs);
- POTWs as users of the data (POTWs);
- Recordkeeping (POTWs, IUs and states);
- States as users of the data; and
- Recordkeeping.

Industrial Users. The underlying assumptions regarding burden estimates for industrial users are summarized in Table A.1. Certain industrial user activities are presented as percentages to reflect that they are projections, based on the industrial user universe. In some cases, values are based on estimates that EPA developed for a previous ICR; values were not recalculated as there is no readily available source or indication that these assumptions are incorrect or require revision.

Table A.1 Summary of Burden Assumptions Related to Industrial Users

<table>
<thead>
<tr>
<th>Industrial User Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline monitoring and report</td>
<td>New sources equivalent to 2 percent of CIUs per year</td>
<td>42.3</td>
</tr>
<tr>
<td>IU compliance schedule progress report</td>
<td>25 percent of new sources per year</td>
<td>4</td>
</tr>
<tr>
<td>IU compliance attainment analysis and report</td>
<td>New sources equivalent to 2 percent of CIUs per year</td>
<td>34.3</td>
</tr>
<tr>
<td>IU resampling compliance report</td>
<td>10 percent of all IUs per year excluding 1,500 Pesticides Formulating Packaging &amp; Repacking (PPPR) facilities</td>
<td>17</td>
</tr>
<tr>
<td>IU self-monitoring compliance sampling and report</td>
<td>Once every 5 years excluding PPPR facilities</td>
<td>14.5–16.6</td>
</tr>
<tr>
<td>Pollution prevention plans</td>
<td>10 percent of PPPR facilities per year</td>
<td>20</td>
</tr>
<tr>
<td>Minimum monitoring requirements for Paper Mills in specific categories</td>
<td>10 mills per year</td>
<td>226</td>
</tr>
<tr>
<td>Pollution prevention compliance alternative; transportation equipment cleaning</td>
<td>84 facilities per year</td>
<td>209–235</td>
</tr>
<tr>
<td>Best management practices for Paper Mills in specific categories</td>
<td>10 facilities per year</td>
<td>617</td>
</tr>
<tr>
<td>Request for coverage under a general control mechanism</td>
<td>Once every 5 years for two percent of all IUs</td>
<td>0.5</td>
</tr>
<tr>
<td>Periodic certifications</td>
<td>7,770 IU per year in 12 categories</td>
<td>1</td>
</tr>
<tr>
<td>IU slug load notification</td>
<td>100 SIUs per year</td>
<td>2</td>
</tr>
<tr>
<td>Notification of changed discharge</td>
<td>1,000 SIUs per year</td>
<td>4</td>
</tr>
<tr>
<td>Bypass notification</td>
<td>1,427 SIUs per year</td>
<td>5–7</td>
</tr>
<tr>
<td>Notification of changed monitoring location</td>
<td>50 SIUs per year</td>
<td>1</td>
</tr>
<tr>
<td>Slug control plan</td>
<td>10 percent of all new CIUs and 5 percent of new non-categorical SIUs per year</td>
<td>2</td>
</tr>
<tr>
<td>Alternative limits modification request</td>
<td>10 percent of all new CIUs</td>
<td>2</td>
</tr>
<tr>
<td>Net/gross adjustment request</td>
<td>2 per year</td>
<td>50</td>
</tr>
</tbody>
</table>

* These assumptions are carried forward from the Pretreatment Streamlining ICR.
b Industrial categories include but are not limited to, Electroplating and Metal Finishing; Electrical and Electrical Components; Steam Electric Power Generating; Pulp, Paper, and Paperboard; Centralized Waste Treatment; Pharmaceutical Manufacturing; Pesticide Chemicals; and Aluminum Forming.

**POTWs.** The underlying assumptions regarding burden estimates for POTWs are summarized in Table A.2.

### Table A.2 Summary of Burden Assumptions Related to POTWs

<table>
<thead>
<tr>
<th>POTW Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTW pretreatment program approval request</td>
<td>Once per request. See Appendix D.</td>
<td>250</td>
</tr>
<tr>
<td>POTW pretreatment compliance schedule progress report</td>
<td>46 per year</td>
<td>5</td>
</tr>
<tr>
<td>Annual POTW report</td>
<td>One per year for each POTW</td>
<td>40</td>
</tr>
<tr>
<td>Issuance of discharge permits or other control mechanisms for SIUs</td>
<td>Once every 5 years for each POTW-regulated IU</td>
<td>20</td>
</tr>
<tr>
<td>Inspection and sampling of CIU and SIUs</td>
<td>One per year for SIUs; one per 2 years for CIUs</td>
<td>8</td>
</tr>
<tr>
<td>CIU and SIU effluent analysis</td>
<td>One per year for SIUs; one per 2 years for CIUs</td>
<td>15.2</td>
</tr>
<tr>
<td>Establish mass limits</td>
<td>One percent of estimated 12,000 facilities in 14 industrial categories with pretreatment standards</td>
<td>8</td>
</tr>
<tr>
<td>Establish equivalent concentration limits</td>
<td>4 percent of estimated 420 CIUs in categories eligible for concentration-based limits</td>
<td>8</td>
</tr>
<tr>
<td>Public notification of significant noncompliance</td>
<td>One third of POTWs per year</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation of the need to revise local limits</td>
<td>Once every 5 years for each POTW</td>
<td>50</td>
</tr>
<tr>
<td>Removal credit applications</td>
<td>1.3 per year</td>
<td>125</td>
</tr>
<tr>
<td>Removal credit self-monitoring reports</td>
<td>1.3 per year</td>
<td>40</td>
</tr>
<tr>
<td>Recordkeeping</td>
<td>One per year for each POTW</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table A.3 Summary of Burden Assumptions Related to States

<table>
<thead>
<tr>
<th>State Activity</th>
<th>State Frequency</th>
<th>EPA Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuance of SIU discharge permits</td>
<td>Once every 5 years for each IU with a permit</td>
<td>Same</td>
<td>20</td>
</tr>
<tr>
<td>Inspection and sampling of CIU and SIUs</td>
<td>One per year for 8.5 percent of SIUs; one per 2 year for CIUs</td>
<td>NA</td>
<td>8</td>
</tr>
<tr>
<td>CIU and SIU effluent analysis</td>
<td>One per year for 0.5 percent of SIUs; one per 2 year for CIUs</td>
<td>NA</td>
<td>15.2</td>
</tr>
<tr>
<td>Public notification of significant noncompliance</td>
<td>One third of 85 POTWs in 5 states per year</td>
<td>NA</td>
<td>3</td>
</tr>
<tr>
<td>Evaluation of the need to revise local limits</td>
<td>Once per 5 years for 85 POTWs in 5 states</td>
<td>NA</td>
<td>50</td>
</tr>
<tr>
<td>POTW pretreatment program approval request</td>
<td>34 per year</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td>POTW pretreatment program modification</td>
<td>2.3 per year</td>
<td>NA</td>
<td>40</td>
</tr>
<tr>
<td>POTW pretreatment program modification</td>
<td>234 per year</td>
<td>NA</td>
<td>20</td>
</tr>
</tbody>
</table>

*States/federal. Some activities performed by authorized states are performed by EPA Regions where EPA is the Control Authority. Table A.3 includes assumptions for both.*
### Table A.4 Summary of Burden Assumption Related to EPA Program Oversight

<table>
<thead>
<tr>
<th>Federal Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State pretreatment program approval request</td>
<td>Once per request. See Appendix D.</td>
<td>325</td>
</tr>
<tr>
<td>POTW pretreatment compliance schedule progress report</td>
<td>12 per year</td>
<td>2</td>
</tr>
<tr>
<td>POTW pretreatment program approval request</td>
<td>2 per year</td>
<td>40</td>
</tr>
<tr>
<td>POTW pretreatment program modification approval request</td>
<td>2 per year</td>
<td>20</td>
</tr>
<tr>
<td>Annual POTW reports</td>
<td>405 per year</td>
<td>20</td>
</tr>
<tr>
<td>Pretreatment compliance inspection (PCI)</td>
<td>324 per year</td>
<td>24</td>
</tr>
<tr>
<td>Review of Inspection and sampling of IU and SIU effluent data</td>
<td>5,690 per year</td>
<td>0.5</td>
</tr>
<tr>
<td>Evaluation of the need to revise local limits</td>
<td>81 per year</td>
<td>1</td>
</tr>
<tr>
<td>Categorical determination</td>
<td>0 per year</td>
<td>20</td>
</tr>
<tr>
<td>Fundamentally different factors variance request</td>
<td>0 per year</td>
<td>400</td>
</tr>
<tr>
<td>Removal credit approval request</td>
<td>1 per year</td>
<td>80</td>
</tr>
</tbody>
</table>

*NA* indicates there is no burden to EPA for the activity.

*There is additional burden due to States that act as Control Authorities.*

Federal. Table A.4 below presents the assumptions related to EPA pretreatment program oversight activities.
A.1.4. Stormwater

A.1.4.1. Phase I MS4s

Activities related to Phase I MS4s include:

- Applications;
- Reports;
- Monitoring; and
- Other activities.

Underlying assumptions regarding burden estimates are described below.

**Applications**

*Permittees.* The estimated time per permittee required to prepare and submit an MS4 permit application is 60 hours and 80 hours for small and large MS4 systems, respectively. The frequency is once every 5 years.

*States/federal.* The estimated time required for state/federal respondents to review and process MS4 permit applications is 20 hours for both small and large MS4 systems.

**Reports**

*Permittees.* Reports under this category include compliance schedule reports at 0.75 hours per response, facility and permit transfer reports at 3 hours per response, permittee report of inaccurate previous information at 2 hours per response, and permittee report of planned facility changes at 4 hours per response. The estimated time required per respondent for preparing and submitting annual reports is 250 hours.

*States/federal.* The estimated time required for state/federal respondents to review and process permit reports is 8 hours, 1.6 hours, and 40 hours for petitions, small MS4 reports and Phase I MS4 reports, respectively.

**Permittee Monitoring**

*Permittees.* The estimated time per permittee required for each sampling response is 73 hours. The estimated time per required sampling analysis is 41 hours. Both are estimated to occur 20 times per year.

*States.* State activities related to permittee monitoring data are covered under section A.1.2.3.

**Other Activities**

*Permittees.* Activities and time required in this category include updating stormwater management plans (SWMPs) at 200 hours per response and Section 308(a) Letters at 8

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hours per response. SWMPs are updated once every 5 years and EPA estimates that the Agency will receive 24 petitions for EPA to require industrial facilities discharging through the MS4 to obtain individual NPDES permits and 31 Section 308(a) Letters per year.

States/federal. The estimated time required for state/federal respondents to review and process SWMPs is 20 hours.

A.1.4.2. Non-municipal Stormwater Permits

Activities in this category include only individual permit applications submitted by industrial stormwater dischargers.

Permittees. The estimated time per permittee to complete a Form 1 application is 3 hours for a new permit and 1 hour for a renewal. The estimated time to complete a Form 2F application is 28.6 hours.

States/federal. The estimated time required for state/federal respondents to review and process a Form 1 application is 0.5 hours.

A.1.5. General Permits

A.1.5.1. Phase II MS4s

Permittee activities related to Phase II MS4s include:

- NOIs; and
- Reports.

NOI Permittees. The estimated time to per permittee prepare and submit an NOI is 60 hours and occurs once every 5 years.

States/federal. The estimated time required for state/federal respondents to review and process each NOI is 4 hours.

Reports Permittees. Reports under this category include compliance schedule reports at 0.75 hours per response, facility and permit transfer reports at 3 hours per response, permittee report of inaccurate previous information at 2 hours per response, permittee report of planned facility changes at 4 hours per response, and annual reports at 100 hours per response. EPA estimates that 5% of MS4 permittees will submit compliance schedule reports and all permittees will submit an annual report. Other reports are submitted infrequently.

States/federal. The estimated time required for state/federal respondents to review and process report ranges from 1 to 20 hours per report.

A.1.5.2. Stormwater Industrial Permits

Activities related to Stormwater Industrial General Permits (MSGP) include:

September 2017
• NOIs;
• DMRs;
• Monitoring/Inspections;
• Reports; and
• Other activities.

Underlying assumptions regarding burden estimates are described below.

**NOIs**
Permittees. The estimated average time per permittee to prepare and submit an NOI is a weighted average of 1.6 hours based on 1.5 hours for state-administered permits and 3.9 for EPA-administered permits which includes additional time for the one third that report endangered species. Frequency is once every 5 years.

States/Federal. The estimated time required for state/federal respondents to process NOIs is 0.25 hours.

**DMRs**
Permittees. The estimated average time per permittee to prepare and submit a DMR is 2 hours and occurs 4 times every 5 years for 25% of permits and 8 times every 5 years for the other 75% of permits.

States/federal. The estimated time required for state/federal respondents to process DMRs is 0.16 hours per DMR plus 0.5 hours for follow-up of 20 percent of submissions.

**Permittee Monitoring and Inspections**
Permittees. The estimated average time per permittee to conduct sampling is 2.25 hours and analysis is 1.5 hours. Frequency is the same as for DMRs. The estimated average time to conduct annual site inspections is 4 hours for inspection plus 0.25 hours to submit the annual report.

States/federal. State/federal activities related to monitoring and inspection data are covered under the DMRs and Reports sections.

**Reports**
Permittees: Reports under this category include permittee report of inaccurate previous information at 2 hours per response, permittee report of planned facility changes at 4 hours per response, and permittee report of anticipated noncompliance at 5 hours per response.

States/federal. The estimated time required for state/federal respondents to review and process permit reports ranges from 4 to 20 hours.

**Other Activities**
Activities in this category include NOT submission, updating existing SWPPPs, and Section 308 requests.
Permittees. The estimated average time per permittee to prepare and submit an NOT is 0.5 hours and 8 hours each to update an existing SWPPP or prepare a Section 308 requests.

States/federal. The estimated time required for state/federal respondents to review and process NOTs is 0.25 hours.

A.1.5.3. Stormwater Construction
Activities related to Stormwater Construction General Permits include:

- NOIs/NOTs;
- Inspections;
- Reports; and
- Other activities.

Underlying assumptions regarding burden estimates are described below.

NOI/NOT
Permittees. The estimated average time per permittee to prepare and submit an NOI is 1.5 hours for large sites and 3.7 hours for small sites and occurs once. Those requiring an ESA evaluation will require 6 and 20 hours for informal and formal evaluations, respectively. The estimated average time to prepare and submit an NOT is 0.5 hours.

States/federal. The estimated average time to process and review is 1 hour for NOIs and 0.25 hours for NOTs.

Permittee Inspections
Permittees. The estimated average time per permittee to conduct stormwater site inspections is 0.25 hours for small and 0.5 hours for large construction sites.

States/federal. Site inspection data is normally stored at the construction site. Any related state/federal activities are covered under the Reports section below.

Reports
Reports in this category include: permittee report of planned facility changes, facility and permit transfer report, permittee report of inaccurate previous information, permittee report of anticipated noncompliance, unanticipated bypass/upset reports, maximum daily violation reports, and other noncompliance reports.

Permittees. The estimated average time per permittee to prepare these reports ranges from 2 to 5 hours.

States/federal. The estimated time required for state/federal respondents to review and process permit reports ranges from 4 to 20 hours.

Other Activities
Activities in this category include requesting waiver certification, development of SWPPPs, monitoring, and Section 308(a) letters.

September 2017
Permittees. The estimated average time per permittee to prepare a waiver certification request is 1 hour. The estimated average time to prepare an SWPPP is 22.7 and 36.4 hours for small and large construction sites, respectively.

States/federal. The estimated average time to process and review waiver certification requests and SWPPPs is 1 hour each.

A.1.5.4. Non-Stormwater
The activities in this category apply to general permits issued to cover classes of facilities with similar type discharges with different permits tailored to the class of facility. Activities related to non-stormwater general permits include:

- NOI;
- DMR;
- Monitoring and Inspection;
- Reports; and
- Other activities.

Underlying assumptions regarding burden estimates are described below.

NOI
Permittees. The estimated average time per permittee to prepare and submit an NOI is 1 hour.

States/federal. The estimated average time to process and review an NOI is 0.25 hours.

DMR
Permittees. The estimated average time per permittee to prepare and submit a DMR is 2 hours with frequency ranging from monthly to annually.

States/federal. The estimated average time to process and review DMRs is 0.27 hours (10 minutes plus 30 minutes for follow-up of 20% of DMRs)

Permittee Monitoring and Inspection
Permittees. The estimated average time per permittee to conduct sampling and inspection is 2.25 hours and analysis is 1.5 hours. Frequency is the same as for DMRs.

States/federal. State/federal activities related to permittee monitoring and inspection data are covered under the DMR section above.

Reports
Reports in this category include: permittee report of planned facility changes, facility and permit transfer report, permittee report of inaccurate previous information, permittee report of anticipated noncompliance, unanticipated bypass/upset reports, maximum daily violation reports, and other noncompliance reports.

September 2017
Permittees. The estimated average time per permittee to prepare these reports ranges from 2 to 5 hours.

States/federal. The estimated average time to process and review these reports ranges from 1 to 20 hours.

Other Activities
The only activity in this category is Permittee Notice of Regulated Discharge Cessation.

Permittees. The time required per permittee to prepare and submit to the permitting authority a notice of cessation is estimated to be 1 hour and occurs annually for 1 percent of all non-stormwater general permits.

States/federal. The estimated average time to process each notice 4 hours.

A.1.5.5. Pesticides Applicators
The activities in this category are related to general permits for discharges from the application of pesticides included in the Pesticide Applicators ICR (OMB control no. 2040-0284; EPA ICR no. 2397.02). All activities are related to either the estimated 365,000 pesticide applicators or the NPDES authorized states. Burden estimates were derived for the total responses and total burden hours for each respondent type. There were no O&M, capital, or start-up costs. These estimates were then updated based on a current estimate of the number of pesticide applicators and number of authorized states shown in Appendix D. Burden estimates are associated with the following four types of activities related to the NPDES program:

- Activities directly related to obtaining coverage under a general permit (e.g., NOI);
- Activities associated with development of a plan (or worksheet);
- Monitoring; and
- Reporting.

Underlying assumptions regarding burden estimates are described below.

Pesticide Applicator General Permit NOI filing
Permittees. Pesticide applicators will take 2 hours to complete each NOI. EPA estimates 0.05 percent will require formal EPA-related evaluation by the Services (20 hours) and 0.1 percent requires an informal evaluation by the Services (6 hours). An estimated 2.5 percent of the regulated universe will need to file an NOI. The PGP designates specific applicators required to submit an NOI.

States/federal. Permitting authorities will spend 0.5 hours processing each NOI.

Pesticide Applicator General Permit NOT filing
Permittees. Pesticide applicators will spend 0.5 hours filling out an NOT. As stated above, only certain applicators are required to file an NOI and thus an NOT; representing an estimated 2.5 percent of the regulated universe.
Permittees. Fifty three percent of NOI filers will be required to develop a Pesticide Discharge Management Plan (40 hours). Twenty five percent of the plans will be updated annually with the average time of 2 hours.

Permittee Monitoring
Permittees. Estimated time to perform monitoring ranges from 1 to 16 times per year depending on size of operation. Each monitoring activity is estimated to take 0.25 hours.

Permittees/states/federal. State/federal activities related to monitoring data are covered under the reports section below.

Reports
Permittees/states/federal. Table A.5 below presents a summary of assumptions regarding report submissions.

<table>
<thead>
<tr>
<th>Report</th>
<th>Percent of Permittees</th>
<th>Permittee Hours</th>
<th>Permit Authority Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual report</td>
<td>1.4%</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Adverse incident</td>
<td>0.01%</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Corrective action</td>
<td>0.1%</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Planned facility changes</td>
<td>0.1%</td>
<td>4</td>
<td>0.5</td>
</tr>
<tr>
<td>Anticipated noncompliance</td>
<td>0.1%</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Inaccurate previous information</td>
<td>0.05%</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Noncompliance</td>
<td>0.05%</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

A.1.5.6. Large Vessels
Activities for large vessels include: NOI/NOT filing, permit authorization and record of inspection (PARI) submission, annual report, routine inspections, annual inspections, drydock inspections, and monitoring.

Permittees. The estimated time required per respondent for performing the above items includes: 1 hour for an NOI, 0.25 hours for a PARI and occurs once every 5 years; 2 to 5 hours for various reports that occur on an as-needed basis; one hour for the annual report; 0.5 to 2 hours for self-inspections that occur on an annual basis; 2 to 4 hours for drydock inspections that occur once every 5 years; and 6 hours for semiannual monitoring.

Federal. Reviews are performed electronically at an estimated rate of 25 per hour.
A.1.5.7. Small Vessels (SVGP)

Activities related to the small vessels general permit include: PARI submission and PARI inspection documentation.

Permittees. The frequency of submission for the PARI is once every five years and is estimated to require 15 minutes to complete. Small vessels are required to conduct and document a self-inspection on a quarterly basis which is estimated to require 15 minutes to complete. Performance of these activities is not expected to occur until December 2017, so average annual burden reported in this ICR represents two years (2018 and 2019) of activity divided over three years.

Federal. Federal recordkeeping activities related to small vessels are estimated to be 0.05 hours per permittee once every 5 years.

A.1.6. Animal Sector

The activities in this category apply to activities related to NPDES permits for CAFO and CAAP facilities included in the Consolidated Animal Sectors ICR (OMB control no. 2040-0250; EPA ICR no. 1993-10). All activities were divided and allocated on the basis of the type of respondent. Below is a list of the possible types of respondents.

- Authorized states for CAFOs;
- CAFO facilities;
- New CAFOs per year;
- Authorized states for CAAP; and
- CAAP facilities.

Burden estimates were derived for each respondent type. These estimates were then updated using the current estimate of the number of each respondent type (see Appendix D). There were no capital or start-up costs. Burden estimates are associated with six types of activities related to the NPDES program:

- Activities directly related to individual permit applications or permit coverage under a general permit (NOIs);
- Activities associated with plan development or special studies;
- Reporting, including certification;
- Recordkeeping; and
- Activities resulting from compliance assessments.

EPA has revised the burden estimates based on developments in the industry. Over time, many of the activities required as a result of the 2003 NPDES Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs) have become part of standard business practice and USDA standards and guidelines. USDA standards are specifically designed to guide farmers as they implement improved waste management practices to keep pace with the changing demands of the industry. USDA has issued extensive guidelines on these practices, including the requirements for Comprehensive Nutrient Management Plans, the practice standards...
developed by the USDA Natural Resources Conservation Service (NRCS), the Field Office Technical Guides, and the Agricultural Waste Management Field Handbook. Farmers are motivated to adhere to the USDA guidelines in part because of their own environmental stewardship goals, but also because operations that want to receive USDA financial or technical support are required to follow USDA guidelines to ensure continued eligibility for USDA programs. The combined effect of these external forces is that over time a number of activities required in EPA’s original CAFO regulations have become standard industry practice, including regular visual inspections and manure and soil sampling. Thus, EPA concluded that these activities are no longer directly attributable to the NPDES regulations and should not be included in the ICR burden estimates. As a result, the substantial reductions in CAFO burden estimates shown in this ICR reflect the changes that have occurred since the implementation of the CAFO rule. In addition, there continues to be significant consolidation in the industry, so far fewer facilities exist that might be subject to regulation; this is reflected in the CAFO permit numbers in Appendix D. Burden estimates for CAAP facilities did not change significantly from the previous ICR.

Permittees. Table A.6 presents the underlying assumptions used to derive the source ICR burden estimates. Table A.7 presents burden assumptions for CAFO and CAAP facilities.

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent CAFOs in non-CAFO authorized states (ID, MA, NH, and NM)</td>
<td>6.3%</td>
</tr>
<tr>
<td>Percent CAFOs covered by general permits</td>
<td>70.0%</td>
</tr>
<tr>
<td>Annual CAFO inspection rate</td>
<td>20.0%</td>
</tr>
<tr>
<td>Flow through and recirculating commercial facilities</td>
<td>166</td>
</tr>
<tr>
<td>Flow through and recirculating non-commercial facilities</td>
<td>178</td>
</tr>
<tr>
<td>Net pen facilities</td>
<td>15</td>
</tr>
<tr>
<td>Total number of CAAP permittees in non-authorized states</td>
<td>100</td>
</tr>
<tr>
<td>Percent of CAAP permittees seeking general permit coverage</td>
<td>52%</td>
</tr>
<tr>
<td>Burden to develop/update NMP (hours)</td>
<td>170</td>
</tr>
</tbody>
</table>

Table A.7 Summary of Burden Assumption for CAFO and CAAP Facilities

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Frequency</th>
<th>Hours per Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAFOs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read rule, determine requirements and plan</td>
<td>Once</td>
<td>3</td>
</tr>
<tr>
<td>Complete/renew permit/NOI</td>
<td>Once every 5 years</td>
<td>9</td>
</tr>
<tr>
<td>Develop/update NMP</td>
<td>Once every 5 years</td>
<td>170</td>
</tr>
<tr>
<td>Prepare and submit annual report</td>
<td>Yearly</td>
<td>2</td>
</tr>
<tr>
<td>Recordkeeping</td>
<td>Yearly</td>
<td>80</td>
</tr>
<tr>
<td>Inspection</td>
<td>Once every 5 years</td>
<td>4</td>
</tr>
<tr>
<td>CAAPs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form 28 for CAAP facilities</td>
<td>Once every 5 years</td>
<td>6</td>
</tr>
<tr>
<td>Complete notice of intent for general permit</td>
<td>Once every 5 years</td>
<td>2</td>
</tr>
<tr>
<td>BMP plan development</td>
<td>Once every 5 years</td>
<td>40</td>
</tr>
<tr>
<td>BMP training</td>
<td>Yearly</td>
<td>6</td>
</tr>
</tbody>
</table>
States/federal. Table A.8 presents a summary of the burden assumptions for state/federal respondents.

Table A.8 Summary of State/Federal Burden Assumption for Animal Sector

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>Frequency</th>
<th>Hours per Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program modification</td>
<td>Occasionally/As Needed</td>
<td>80</td>
</tr>
<tr>
<td>Review/process permits and NMPs</td>
<td>Every 5 years</td>
<td>50</td>
</tr>
<tr>
<td>Public hearings/notice</td>
<td>Every 5 years</td>
<td>20</td>
</tr>
<tr>
<td>Process Form 28 for CAAP Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other noncompliance reports (CAFO permittees)</td>
<td>Occasionally/As Needed</td>
<td>2</td>
</tr>
<tr>
<td>Report receipt (INAD program sign-up, spill, structural</td>
<td>Occasionally/As Needed</td>
<td>0.5</td>
</tr>
<tr>
<td>failure)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAFO facility Inspection</td>
<td>Once every 5 years</td>
<td>16</td>
</tr>
<tr>
<td>Annual report review, all permitted CAFOs</td>
<td>Annual</td>
<td>4</td>
</tr>
<tr>
<td>Research on environmental effects of INAD</td>
<td>Occasionally/As Needed</td>
<td>3</td>
</tr>
<tr>
<td>Determination of site specific limits for INAD</td>
<td>Occasionally/As Needed</td>
<td>3</td>
</tr>
<tr>
<td>Notify state fish &amp; wildlife department</td>
<td>Occasionally/As Needed</td>
<td>0.5</td>
</tr>
<tr>
<td>Review cause of failure and past reports to evaluate</td>
<td>Occasionally/As Needed</td>
<td>1</td>
</tr>
<tr>
<td>effectiveness of practices</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A.1.7. Cooling Water Intake Structures

A.1.7.1. Cooling Water Intake Structures Phase I - New Facilities

The activities in this category are related to application and recordkeeping requirements established by the section 316(b) New Facility Rule (66 FR 65256; December 18, 2001). Further, these activities were included in the ICR Supporting Statement Cooling Water Intake Structures Phase I - New Facilities (OMB control no. 2040-0241; EPA ICR no. 1973.06). The rule applies to industrial facilities constructed after January 2002 that withdraw significant quantities of cooling water from waters of the U.S. The rule requires new facilities to submit several distinct types of information as part of their NPDES permit application. In addition, the rule requires new facilities to maintain monitoring and reporting data as outlined by the permitting authority in their NPDES permits.

Below is a list of the types of respondents for which updated estimated respondent numbers were used to develop burden estimates:

- Average annual number of new CWIS facilities;
• Average annual number of new CWIS permits; and
• Average annual CWIS permit renewals.

Burden estimates were derived for each respondent type from the previous ICR and were updated using the current estimate of the number of each respondent (see Appendix D).

Permittees. Table A.9 presents the estimated burden hours and frequency per facility for first-time permit renewal applications and initial compliance activities. Table A.10 presents the estimated burden hours and frequency per facility for recurring activities that apply to all new CWIS facilities.

| Table A.9 Estimated Facility Burden Hours for Initial Application and Compliance Activities for New CWIS Facilities |
|--------------------------------------------------|-----------------|-----------------|
| Permittee Application and Initial Compliance Activity | Frequency | Burden (hours) |
| Start-up activities | Once per new permit | 43 |
| Permit application activities | Once per new permit | 146 |
| Source waterbody flow information | Once per new permit | 104 |
| Source water baseline biological characterization data | Once per new permit | 265 |
| CWIS flow reduction requirements (Track I) | Once per new permit with closed cycle recirculating system (CCRS) | 105 |
| CWIS velocity requirements (Track I) | Once per new permit with CCRS | 135 |
| Design and construction technology plan (Track I) | Once per new permit with CCRS | 105 |
| Comprehensive demonstration study plan (Track II) | Once per new permit without CCRS | 271 |
| Source water baseline biological characterization study (Track II) | Once per new permit without CCRS | 5,196 |
| Evaluation of potential CWIS effects (Track III) | Once per new permit without CCRS | 1,624 |
| Verification monitoring plan (Track II) | Once per new permit without CCRS | 125 |
| Freshwater verification study (Track II) | Once per new permit without CCRS with freshwater | 52 |
| Estuary verification study (Track II) | Once per new permit without CCRS with estuarine water | 122 |
| Initial biological monitoring for impingement (freshwater) | Two years per new permit with freshwater | 379 |
| Initial biological monitoring for impingement (estuary) | Two years per new permit with estuary | 482 |
| Initial biological monitoring for entrainment (freshwater) | Two years per new permit with freshwater | 614 |
| Initial biological monitoring for entrainment (estuary) | Two years per new permit with estuary | 778 |

| Table A.10 Estimated Facility Burden for Recurring Activities for New CWIS Facilities |
|--------------------------------------------------|-----------------|-----------------|
| Permittee Activity | Frequency | Burden (hours) |
| Permit application activities | Once every 5 years | 72 |
| Source waterbody flow information | Once every 5 years | 31 |
| Source water baseline biological characterization data | Once every 5 years | 79 |
| CWIS flow reduction requirements (Track I) | Once every 5 years | 108 |
| CWIS velocity requirements (Track I) | Once every 5 years | 75 |
| Design and construction technology plan (Track I) | Once every 5 years | 43 |
| Comprehensive demonstration study plan (Track II) | Once every 5 years | 80 |

September 2017
### Table A.11 Estimated State Agency and EPA Activity Burden Associated with New CWIS Facilities

<table>
<thead>
<tr>
<th>State/Federal Activities</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting authority permit issuance activities (Track 1)</td>
<td>Once per new permit with CCIS</td>
<td>188</td>
</tr>
<tr>
<td>Permitting authority permit issuance activities (Track 1)</td>
<td>Once per new permit with once-through cooling</td>
<td>646</td>
</tr>
<tr>
<td>Verification study review</td>
<td>Once per new permit</td>
<td>21</td>
</tr>
<tr>
<td>Annual permitting authority activities</td>
<td>Annual per permit</td>
<td>50</td>
</tr>
</tbody>
</table>

#### A.1.7.2. Cooling Water Intake Structures Phase III - New Offshore Oil and Gas Facilities

The activities in this category are related to NPDES application, monitoring, and recordkeeping requirements established by the 316(b) Phase III Rule (71 FR 35006; June 16, 2006). Further, these activities were included in the Supporting Statement for Cooling Water Intake Structures at Phase III Facilities (Renewal) contained in a separate ICR (OMB control no. 2040-0268, EPA ICR no. 2169.05). This regulation applies to offshore oil and gas facilities that commence construction after July 17, 2006. The permitting authority for all offshore oil and gas facilities is the Federal Government and thus there is no burden for state or local governments.

Below is a list of the types of respondents for which updated estimated respondent numbers were used to develop burden estimates:

- Average annual new offshore oil & gas facilities applying for an NPDES permit;
- Average annual new offshore oil & gas re-applying for an NPDES permit; and
- Average annual new offshore oil & gas facilities performing annual activities.
Burden estimates were derived from the previous ICR for each respondent type and were updated using the current estimate of the number of each respondent type (see Appendix D).

Permittees. Table A.12 presents the estimated burden hours and frequency per facility for permit renewal applications. Table A.13 presents the estimated burden hours and frequency per facility for recurring activities that apply to all new Phase III CWIS facilities.

**Table A.12 Estimated Facility Burden for Initial Permit Renewal Applications and Compliance Activities**

<table>
<thead>
<tr>
<th>Permittee Initial Application Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up activities</td>
<td>Once per new permit</td>
<td>49</td>
</tr>
<tr>
<td>Permit application activities</td>
<td>Once per new permit</td>
<td>51</td>
</tr>
<tr>
<td>Source water body flow information</td>
<td>Once per new permit</td>
<td>38</td>
</tr>
<tr>
<td>CWIS velocity information</td>
<td>Once per new permit</td>
<td>150</td>
</tr>
<tr>
<td>Design and construction technology plan</td>
<td>Once per new permit</td>
<td>36</td>
</tr>
<tr>
<td>Source water baseline biological characterization study</td>
<td>Once per new permit</td>
<td>166</td>
</tr>
</tbody>
</table>

**Table A.13 Estimated Facility Burden for Recurring Activities**

<table>
<thead>
<tr>
<th>Permittee Recurring Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-up activities</td>
<td>Once every 5 years</td>
<td>13</td>
</tr>
<tr>
<td>Permit application activities</td>
<td>Once every 5 years</td>
<td>13</td>
</tr>
<tr>
<td>Source water body flow information</td>
<td>Once every 5 years</td>
<td>11</td>
</tr>
<tr>
<td>CWIS velocity information</td>
<td>Once every 5 years</td>
<td>45</td>
</tr>
<tr>
<td>Design and construction technology plan</td>
<td>Once every 5 years</td>
<td>20</td>
</tr>
<tr>
<td>Source water baseline biological characterization study</td>
<td>Once every 5 years</td>
<td>49</td>
</tr>
<tr>
<td>Biological monitoring for impingement</td>
<td>Annual per permit</td>
<td>530</td>
</tr>
<tr>
<td>Biological monitoring for entrainment</td>
<td>Annual per permit with entrainment requirements</td>
<td>370</td>
</tr>
<tr>
<td>Biological monitoring for entrainment (Alaska)</td>
<td>Annual per permit in AK with entrainment requirements</td>
<td>515</td>
</tr>
<tr>
<td>Velocity monitoring</td>
<td>Annual per permit</td>
<td>163</td>
</tr>
<tr>
<td>Visual inspections</td>
<td>Annual per permit</td>
<td>253</td>
</tr>
<tr>
<td>Yearly status report activities</td>
<td>Annual per permit</td>
<td>223</td>
</tr>
</tbody>
</table>

States. Offshore oil and gas facilities operate in federal waters; there is no state burden.

Federal. Table A.14 presents the estimated burden hours and frequency for federal oversight activities.

**Table A.14 Estimated Facility Burden for Federal Oversight**

<table>
<thead>
<tr>
<th>Federal Permit Oversight</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitting authority permit issuance activities (per facility)</td>
<td>Once per new permit</td>
<td>229</td>
</tr>
<tr>
<td>Permitting authority permit renewal activities (per facility)</td>
<td>Once every 5 years</td>
<td>104</td>
</tr>
<tr>
<td>Annual Permitting authority activities (per facility)</td>
<td>Annual per permit</td>
<td>50</td>
</tr>
</tbody>
</table>

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615

A.1.7.3. Cooling Water Intake Structures Existing Facilities

The activities in this category are related to NPDES application and recordkeeping requirements defined under the 316(b) Existing Facility Rule (79 FR 49300; August 15, 2014); which was included in the Supporting Statement for Existing Facilities Final Rule contained in a separate ICR (OMB control no. 2040-0257; EPA ICR no. 2060.07). This regulation applies to industrial facilities constructed prior to January 2002 that withdraw significant quantities of cooling water from waters of the U.S. The rule became effective October 14, 2014. A major component of the burden is associated with the preparation of permit application materials required under 122.21(g)(2)(13) which must be submitted during the first permit renewal that occurs during the five-year period after October 2014. Once the permit has been renewed, the burden will be associated with annual monitoring and reporting activities and the subsequent permit renewal applications for which the burden is significantly reduced compared to the initial renewal. The initial CWIS Existing Facility Rule ICR covered the burden associated with the three-year period from October 2014 through October 2017. Because the initial permit renewal is spread out over a five-year period and the previous ICR assumed minimal application burden in the first year, the burden included in this ICR will include the final three of the initial permit renewal years which correspond to the period with the highest burdens.

Below is a list of the types of respondents for which updated estimated respondent numbers were used to develop burden estimates:

- Total power plants;
- Total power plants with a design intake flow (DIF) greater than 50 MGD;
- Total power plants with an actual intake flow (AIF) greater than 125 MGD;
- Total manufacturers with cooling water;
- Total manufacturers with an AIF greater than 125 MGD;
- Annual new power plant units; and
- Annual new manufacturer units.

Burden estimates were derived from the previous ICR for each respondent type and were updated using the current estimate of the number of each respondent type (see Appendix D).

Permittee. Table A.15 presents the estimated burden hours and frequency per facility for first time permit renewal applications and initial compliance activities. Table A.16 presents the estimated burden hours and frequency per facility for recurring activities that apply to all new CWIS facilities.

Table A.15 Estimated per facility burden hours and frequency for first time permit renewal applications and initial compliance activities

<table>
<thead>
<tr>
<th>Initial permittee application activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit application activities for power plants with DIF&gt;50 MG w/ AIF&lt;125 MGD</td>
<td>Once per first permit renewal</td>
<td>709</td>
</tr>
<tr>
<td>Permit application activities for power plants with AIF&gt;125 MGD</td>
<td>Once per first permit renewal</td>
<td>2,201</td>
</tr>
</tbody>
</table>

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### Table A.16 Estimated per facility burden hours and frequency for recurring activities that apply to all existing CWIS facilities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Burden (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance monitoring - all existing facilities (power plants and manufacturing)</td>
<td>Annual</td>
<td>357</td>
</tr>
<tr>
<td>Recurring reporting and recordkeeping - existing facilities (power plants and manufacturing)</td>
<td>Annual</td>
<td>11</td>
</tr>
<tr>
<td>Compliance monitoring - new units</td>
<td>Annual</td>
<td>90</td>
</tr>
<tr>
<td>Recurring reporting and recordkeeping - new units</td>
<td>Annual</td>
<td>20</td>
</tr>
</tbody>
</table>

**States/federal.** Table A.17 presents the estimated annual number of responses and burden hours per response for state agencies and EPA.

### Table A.17 Estimated annual number of responses and burden by facility type for state agencies and EPA

<table>
<thead>
<tr>
<th>Facility type</th>
<th>Average responses/year</th>
<th>Burden hours/response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit application activities</td>
<td>States</td>
<td>EPA</td>
</tr>
<tr>
<td>Power plants with DIF&gt;50 MGD w/ AIF=125 MGD</td>
<td>925</td>
<td>23.3</td>
</tr>
<tr>
<td>Power plants with DIF&lt;50 MGD w/ AIF&lt;125 MGD</td>
<td>528</td>
<td>15.3</td>
</tr>
<tr>
<td>Power plants with DIF&gt; 2 MGD and ≤ 50 MGD and manufacturers &gt; 2 MGD w/ AIF&lt;125 MGD</td>
<td>1,259</td>
<td>33.7</td>
</tr>
<tr>
<td>Power plants with DIF&gt; 2 MGD and ≤ 50 MGD and manufacturers &gt; 2 MGD w/ AIF&lt;125 MGD</td>
<td>41</td>
<td>26</td>
</tr>
<tr>
<td>New units</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td><strong>Annual activities</strong></td>
<td>2,078</td>
<td>1,065</td>
</tr>
</tbody>
</table>

**A.1.8. Other**

#### A.1.8.1. Industrial Facility "No Stormwater Exposure" Certification

The no exposure provision of the stormwater regulations provides industrial facilities with industrial materials and activities that are sheltered from stormwater a simplified way of complying by certifying that there is no exposure to stormwater.

**Permittees.** An estimated 36,377 industrial facilities are eligible for “no exposure certification” over a 5-year period. The time to complete and submit the certification is 0.75 hours.
Permitting authorities will spend 1 hour reviewing and processing each certification.

### A.1.8.2. Airports

The Airport Deicing ELG allows airports to certify that they are not using deicers containing urea for airfield pavement deicing operations to become exempt from permitting requirements.

**Permittees.** The time to complete and submit the certification is 1 hour.

### A.1.8.3. Alaska Lands

**Permittees.** The estimated total hours per permittee respondent for submission of an application for Transportation and Utility Systems and Facilities on Federal Lands (Alaskan Lands Application) is 30 hours per application.

### A.1.8.4. NPDES Electronic Reporting Rule

The Electronic Reporting Rule ICR included both the initial one-time activities associated with the transition to electronic reporting (primarily in the first three years after promulgation) and ongoing activities, which reflect considerable burden reductions associated with data entry and document mailing. The Electronic Reporting Rule became effective December 21, 2015 and thus the Electronic Reporting Rule ICR covers the calendar years 2016, 2017, and 2018. The various requirements and deadlines are divided into two phases. The corresponding timeframe for today’s ICR is 2017, 2018, and 2019.

Phase 1 of the Electronic Reporting Rule requires authorized state NPDES programs to electronically transmit basic facility and permit information to EPA within the first year. After one year (by December 21, 2016) authorized programs must begin electronically transmitting their state data, including information generated from compliance assessment (e.g., inspections), violation determinations, and enforcement actions. Also, starting on December 21, 2016 permittees must submit DMRs electronically. In addition, by this deadline, facilities permitted under the NPDES biosolids program where EPA is the control authority must submit annual reports electronically. Thus, by the beginning of the three-year period covered by this ICR, the majority of the one-time implementation activities associated with Phase 1 will have been completed. For the purposes of this ICR, the implementation activities are assumed to be mostly completed and only ongoing activities related to the Phase 1 and Phase 2 requirements will be included.

Under Phase 2, authorized programs have until December 21, 2020 to begin electronically collecting, managing, and sharing the Phase 2 NPDES program data. This information includes:

- General permit reports (NOI, NOT, No Exposure Certification (NOE), and Low Erosivity Waiver and Other Waivers from Stormwater Controls (LEW));
- Sewage Sludge/Biosolids Annual Program Report (where the state is the authorized NPDES biosolids program); and
Other NPDES program reports (CAFO Annual Report, MS4 Program Reports, Pretreatment Program Reports, SIU Compliance Reports in Municipalities without approved Pretreatment Programs, Sewer Overflow Event Reports, CWA Section 316(b) Annual Reports).

Thus, the change in burden associated with conversion from paper to electronic reporting will occur over a five-year period, half of which will fall within the three-year period covered by this ICR. As Phase 2 requirements for many other reports are phased in, EPA expects more reports will switch to electronic transmission but this ICR only includes one additional year past the existing ICR.

Permittees. Permitee activities include:

- Passcode reset;
- DMR mailing (O&M savings see section A.2.2.9); and
- Report mailing (O&M savings see section A.2.2.9)).

The ongoing burden for permittees includes 0.4 hours per respondent per year to periodically reset the passcode. Burden for completing DMRs and reports is assumed to be relatively unchanged because the forms need to be completed regardless of whether they are prepared in electronic or paper format.

States. State agency activities include:

- Transfer of data from current state system to EPA system;
- Training and technical support;
- Required programmatic data entry;
- Data entry reduction—DMRs;
- Data entry reduction—reports; and
- DMR printing/mailing (O&M savings see section A.2.2.9).

Underlying assumptions regarding burden estimates are described below.

Transfer of Data
The analysis assumes states currently operating their own systems will bear an ongoing annual cost to manage transfer of data between their system and EPA’s. The annual burden estimate per state is 2,080 hours and is based on an estimate of 1 full-time equivalent (FTE), or 2,080 hours, of programmer/technical labor per state per year.

Training and Technical Support
The analysis also assumes that each authorized NPDES program, whether it operates its own system or uses EPA’s tools, will bear an ongoing annual cost to provide training and technical support to regulated entities. The estimated annual training and technical support burden per authorized state is 2 FTEs of programmer/technical labor per state per year or 4,160 hours of programmer/technical labor. This is a conservative estimate based on the upper end of the range reported in comments submitted by states.
Required Programmatic Data Entry
Ongoing data entry associated with states submitting required programmatic data to EPA is estimated to have a total annual labor cost of $3,857,000 which is equivalent to 85,445 hours.

Data Entry Reduction—DMRs
Estimated reductions for processing DMRs for states are based on 20 minutes (0.33 hours) per DMR form with many facilities submitting multiple forms. The average reduction per facility DMR submission is estimated to be 0.75 hours.

Data Entry Reduction—Reports
Estimated reductions for processing general permit reports and program reports for states are based on 7.5 minutes (0.125 hours) per report.

Federal. Federal activities include:

• Operate and maintain the necessary changes in the ICIS-NPDES system;
• Data entry reduction—DMRs and reports;
• Oversight Letters; and
• DMR printing/mailing (O&M savings see section A.2.2.9).

Underlying assumptions regarding burden estimates are described below.

Operate and Maintain Changes in the ICIS-NPDES System
The estimated annual EPA burden for ongoing activities to operate and maintain the necessary changes in the ICIS-NPDES system required by the rule is estimated at 16,389 hours per year.

Data Entry Reduction—DMRs and Reports
EPA Regions would receive savings from no longer having to enter information submitted by regulated entities on paper DMRs, general permit reports, and program reports. The average burden reduction per region for this activity is -2,481 hours.

Oversight Letters
When an authorized state, tribe, or territory has less than 90% participation rate for one or more data groups, EPA will use its CWA authority and ICR to issue targeted individual notices requiring NPDES-regulated entities to utilize their NPDES program’s electronic reporting system. It is estimated there will be 14,624 letters during the 3 year period or an average of 4,875 per year. It is estimated each letter will require 0.5 hours to prepare and send.

A.1.9. General State Activities
This category applies to permitting authority activities that are not directly attributable to the individual categories described above.
A.1.9.1. Certification of EPA-Issued Permits

When EPA issues NPDES permits, it must ensure that the permits are in compliance with state laws, including WQS. Under CWA Section 401, EPA may not issue a permit until the state certifies that the permit is in compliance with state laws. The respondents to this item are the estimated 637 entities including states, tribes, and U.S. territories that must certify EPA-issued permits. The average respondent burden is estimated to be 4 hours.

A.1.9.2. Inspection and Investigation

Authorized states are required to maintain a "program for periodic inspections of the facilities and activities subject to regulation." 40 CFR 123.2(b)(2). Under EPA’s Clean Water Act National Pollutant Discharge Elimination System Compliance Monitoring Strategy (available at http://www2.epa.gov/compliance/clean-water-act-national-pollutant-discharge-elimination-system-compliance-monitoring), authorized states prepare annual Compliance Monitoring Strategy (CMS) plans that articulate commitments for compliance assessment activities (e.g., inspections) and end-of-year reports that summarize CMS plan implementation over the prior year. EPA has developed a template for states to use when preparing CMS plans and end-of-year reports.

The various types of compliance monitoring activities conducted by permitting authorities include:

- Compliance Sampling Inspection (CSI). The estimated burden for this inspection is 120 hours.
- Compliance Evaluation Inspection (CEI). The estimated burden for this inspection is 24 hours.
- Performance Audit Inspection (PAI). The estimated burden for this inspection is 96 hours.
- Diagnostic Inspection (DI). The estimated burden for this inspection is 128 hours.
- Compliance Biomonitoring Inspection (CBI). The estimated burden for this inspection is 240 hours.
- Toxic Sampling Inspection (XSI). The estimated burden for this inspection is 280 hours.
- Reconnaissance Inspection (RI). The RI is the briefest of all NPDES inspections; the estimated burden for this inspection is 8 hours.

The list of compliance monitoring activities described above is not the complete set of activities that EPA and states conduct pursuant to the CMS. EPA estimates that in an annual basis for major facilities, 9 percent receive CSIs, 68 percent receive CEIs, 6 percent receive PAIs, 1 percent receive CBIs, 0.4 percent receive XSIs, 18 percent receive RIs, and an additional 0.3 percent of municipal major facilities receive DIs*. Of the minor facilities, 3 percent receive CSIs and 17 percent receive CEIs. In addition, 10 percent of industrial stormwater general permittees, 5 percent of large (> 5 acres) construction stormwater...

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*Estimates for majors were revised from the previous ICR based on ICIS data.
general permits, 2.5 percent of small (1-5 acres) construction stormwater general permits, 20 percent of Phase I MS4s, and one-seventh of Phase II MS4s receive RIs.

Also, EPA revised the estimates to include CEIs for 20 percent of MS4 permits, 10 percent of industrial stormwater general permits, and 10 percent of construction stormwater general permits which EPA discovered had not been included in the previous ICR.

A.1.9.3. Submittal of Permit Information to EPA
This item applies to requirements for authorized states to make available to EPA for review any information obtained or used in the administration of a state program. The burden estimate assumes that states must submit all major permits, about 5 percent of minor permits, and all general permits. Time required is estimated to be 10 minutes each and applies to 70 percent of the major permits, 5 percent of the minor permits, and 100 percent of the general permits transmitted to EPA. The remaining 30 percent of major permits require 2 hours of transmittal time.

A.1.9.4. NPDES Program Authorization
This category includes: state requests that an authorized program be transferred back to EPA, with a burden estimate of 480 hours; state requests for NPDES program modifications, with a burden estimate of 250 hours; and state requests for sewage sludge program approval under Part 501, with a burden estimate of 750 hours. EPA estimates that one state will request program authorization, one authorized state over the three-year period will request that an authorized program or program component be transferred, 12 over the three-year period will request program modification to update their legal authorities in response to the regulatory changes (e.g., rulemakings, state water quality standards revisions, etc.) anticipated in the NPDES program, and one over the 3-year period will request a sewage sludge program approval.

A.2. Estimating Respondent Costs
Once burden hours are estimated, the next step is to estimate the labor cost for respondents and the capital costs required to complete each activity. The total cost for each respondent activity is composed of the following:

- Labor cost;
- Operating and maintenance (O&M) cost; and
- Capital/start-up cost.

The results of the respondents’ costs analysis are presented in the Detailed Respondent Burden Results by Category table in Appendix B.

A.2.1. Estimating Labor Costs
When calculating respondent labor costs, EPA makes the following assumptions:
• EPA used a labor rate of $45.14 per hour for all authorized state and territory respondent activities defined in this ICR. This hourly rate was based on the average hourly wage for state and municipal employees as determined by the U.S. Department of Labor.

• The average hourly rate for municipal employees, which account for all POTW and MS4 costs, as determined by the U.S. Department of Labor, Bureau of Labor Statistics, is $37.29 (excluding overhead costs of 50 percent).

• EPA assumes the average hourly rate in the private sector is $57.42.

• EPA determined the hourly employment cost of federal employees using methodology established in previous ICRs. According to the U.S. Office of Personnel Management, 2016 General Schedule (2016-GS), the average annual salary of a government employee at the GS-9, Step 10 level is $55,666. At 2,080 hours per year, the hourly wage is $26.76. Assuming overhead costs of 60 percent, or $16.06 per hour, the fully loaded cost of employment for a federal employee is $42.82.

A.2.2. Operating and Maintenance (O&M) Costs

Most calculations in this ICR account for labor costs only. A facility incurs O&M costs when it uses services, materials, or supplies needed to comply with the rule’s reporting and recordkeeping requirements that the facility will not use otherwise. Another type of O&M cost is for the purchase of contracted services such as laboratory analyses. The purchase of supplies such as filing cabinets and services such as photocopying or boat rental, is also considered O&M costs, and may also be referred to as ODCs. All costs presented in this section have been adjusted with the Consumer Price Index to August 2016 dollars. These costs are linked to the distinctive activities described below.

A.2.2.1. Application Requirements for NPDES Permits (Forms for POTWs and ProTWs)

Assumptions and estimates for these O&M costs (i.e., testing/contractor costs) are detailed in Tables A.18 to A.20. These assumptions come from the prior ICR (OMB Control no. 2040-0086, EPA ICR no. 0226.18).

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Table A.18 Estimate of POTWs that Perform Form 2A Pollutant Testing In-House

<table>
<thead>
<tr>
<th>Facility type</th>
<th>Basic conventional and nonconventional</th>
<th>Additional conventional and nonconventional</th>
<th>Priority pollutants and state WQS</th>
<th>Multiple species blemonitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.1 mgd, no priority pollutants.</td>
<td>60%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.1–1.0 mgd, no priority pollutants.</td>
<td>80%</td>
<td>80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minors, with priority pollutants.</td>
<td>85%</td>
<td>85%</td>
<td>50%</td>
<td>85%</td>
</tr>
<tr>
<td>Majors, no priority pollutants.</td>
<td>85%</td>
<td>85%</td>
<td>10%</td>
<td>75%</td>
</tr>
<tr>
<td>Majors, with priority pollutants.</td>
<td>90%</td>
<td>90%</td>
<td>70%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Table A.19 Estimate of POTWs that Perform Form 2S pollutant Testing In-House

<table>
<thead>
<tr>
<th>Facility type</th>
<th>Basic conventional and nonconventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDES POTWs</td>
<td>95%</td>
</tr>
<tr>
<td>NPDES PrOTWs</td>
<td>95%</td>
</tr>
<tr>
<td>Sludge Only POTWs</td>
<td>50%</td>
</tr>
<tr>
<td>Sludge Only PrOTWs</td>
<td>50%</td>
</tr>
</tbody>
</table>

Table A.20 Testing/Contractor costs (O&M costs)

<table>
<thead>
<tr>
<th>Form 2A</th>
<th>Tests/year</th>
<th>Cost per test ($)</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic conventional and non-</td>
<td>3</td>
<td>$119</td>
<td>$202,419</td>
</tr>
<tr>
<td>conventional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional conventional and non-</td>
<td>3</td>
<td>$237</td>
<td>$250,983</td>
</tr>
<tr>
<td>conventional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority pollutants/state WQS</td>
<td>3</td>
<td>$1,365</td>
<td>$3,144,960</td>
</tr>
<tr>
<td>Multiple species blemonitoring</td>
<td>1</td>
<td>$9,496</td>
<td>$2,032,144</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form 2S</th>
<th>Tests/year</th>
<th>Cost per test ($)</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDES and sludge-only facilities</td>
<td>1</td>
<td>$237</td>
<td>$68,493</td>
</tr>
<tr>
<td>Section 308 Requests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal (complex)</td>
<td>1</td>
<td>$1,365</td>
<td>$4,778</td>
</tr>
<tr>
<td>Nonmunicipal (medium)</td>
<td>1</td>
<td>$3,187</td>
<td>$5,638</td>
</tr>
</tbody>
</table>

A.2.2.2. Baseline Determination and Estimate of the incremental Monitoring Burden and Cost for Remining Sites (DMR Sampling Analysis)

EPA assumes that baseline determination monitoring and annual monitoring costs will be required for all the reporting requirements for mining sites in Indiana (5), Kentucky (7), and Tennessee (9). EPA assumes a sample analysis and mileage cost of $34/sample adjusted to August 2016 using the CPI (Source: Baseline Standards and BMPs for the Coal Mining Point Source Category-Coal Remining Subcategory and Western Alkaline Coal Mining Subcategory ICR; OMB control no. 2040-0239; EPA ICR no. 1944.03).
A.2.2.3. Minimum Monitoring Requirements for Direct Discharging Mills in the Bleached Papergrade Kraft and Soda Subcategory and the Papergrade Sulfite Subcategory of the Pulp, Paper, and Paperboard Point Source Category (DMR Sampling Analysis)

To estimate O&M costs associated with these activities, EPA assumes that mills will send their collected samples to outside laboratories for analysis. Some facilities could perform in-house analysis for some pollutants (i.e., adsorbable organic halides (AOX) and/or chloroform). However, for the purposes of this ICR, EPA assumed that all analyses will be contracted to outside laboratories to express the full potential analytical costs of minimum monitoring on Subparts B and E mills. In the future, facilities might elect to conduct analysis in house, particularly AOX analyses, because the monitoring requirement is daily.

Analytical costs performed at outside laboratories were taken from the Minimum Monitoring Requirements for Direct Discharging Mills in the Bleached Papergrade Kraft and Soda Subcategory and the Papergrade Sulfite Subcategory of the Pulp, Paper, and Paperboard Point Source Category ICR (OMB control no. 2040-0243, EPA ICR no. 1878.02). These costs are $183 for AOX, $1,326 for TCDD/TCDF, $757 for chlorinated phenolics, and $408 for chloroform.

Seventy-five Subpart B Bleached Papergrade Kraft & Soda mills perform daily sampling for AOX, weekly sampling for chloroform, and monthly grab sampling for TCDD, TCDF, and chlorinated phenolics. Thirty-eight Subpart B Bleached Papergrade Kraft & Soda mills perform monthly composite sampling for TCDD, TCDF, and chlorinated phenolics. Five of the Subpart E Ca/Sodium/Mg Sulfite mills perform daily AOX sampling. Two each for the Subpart E Ammonium Sulfite and Specialty Grade perform monthly sampling for TCDD, TCDF, and chlorinated phenolics.

A.2.2.4. Animal Sector Testing/Analysis and Public Notice Costs

The Animal Sector includes O&M costs that account for state agencies issuing public notices and certain testing and analysis costs incurred by respondents that perform activities outside the normal operation practices. O&M costs are based on costs from the Consolidated Animal Sectors ICR (OMB control no. 2040-0250, EPA ICR no. 1989.10). The average cost for state agencies to issue a public notice was $1,410 per notice and the average testing and analysis cost was $76 per event. O&M for recordkeeping was assumed to be 10% of recordkeeping labor costs.

A.2.2.5. Pretreatment

There are O&M costs incurred by IUs for discharge monitoring. The total annual respondent O&M costs associated with this ICR are estimated to be $2,565,555.

A.2.2.6. CWIS Phase I O&M and ODC Costs

O&M and ODC costs are associated with multiple activities including flow, velocity and biological monitoring. EPA assumes that samples taken for the Source Water Baseline Biological Characterization Study to be included with the application will be analyzed by a contracted laboratory. For annual O&M costs, EPA assumes that entrainment monitoring
sampling analysis will be performed by an outside laboratory. Table A.21 presents a summary of average O&M and ODC costs per permit for each activity category.

<table>
<thead>
<tr>
<th>Activity category</th>
<th>O&amp;M/ODC Cost (August 2016 Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs for NPDES permit application activities</td>
<td>$34,696</td>
</tr>
<tr>
<td>Costs for NPDES permit renewal activities</td>
<td>$29,820</td>
</tr>
<tr>
<td>Costs for NPDES permit annual activities</td>
<td>$10,853</td>
</tr>
</tbody>
</table>

**A.2.2.7. Cooling Water Intake Structures Phase III - New Offshore Oil and Gas Facilities O&M Costs**

Estimated O&M costs for permit application and permit renewal activities include $993 for various ODCs. For annual O&M costs, EPA assumed that the analysis of impingement monitoring samples will be done on-site, while entrainment monitoring samples is performed by an outside laboratory. Laboratory analysis for entrainment samples is estimated to cost $3,963 per year per facility. The ODCs associated with biological monitoring are estimated to be approximately $869 per facility. Table A.22 presents a summary of the estimated annual O&M costs across all CWIS Phase III Facilities.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>O&amp;M/ODC Cost (August 2016 Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total facility cost estimates for NPDES permit application activities</td>
<td>$5,960</td>
</tr>
<tr>
<td>Total facility cost estimates for NPDES permit renewal activities</td>
<td>$5,960</td>
</tr>
<tr>
<td>Total facility cost estimates for annual monitoring and inspection activities</td>
<td>$847,934</td>
</tr>
</tbody>
</table>

**A.2.2.8. Cooling Water Intake Structures Existing Facility O&M Costs**

O&M costs include costs for the operation and upkeep of capital equipment, cost for the purchase of contracted services, such as laboratory analyses, and the purchase of supplies such as filing cabinets and services such as photocopying or boat rental which are referred to as other direct costs (ODCs). Table A.23 presents a summary of the estimated annual O&M costs across all CWIS Existing Facilities.

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>O&amp;M/ODC cost (August 2016 Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total facility cost estimates for NPDES permit application activities</td>
<td>$13,415,373</td>
</tr>
<tr>
<td>Total facility cost estimates for annual activities</td>
<td>$1,135,294</td>
</tr>
</tbody>
</table>

**A.2.2.9 Electronic Reporting Rule**

Once regulated entities establish their electronic accounts, they will experience savings because they no longer have to mail their submissions to the permitting authority. Regulated entities submitting DMRs electronically will save on paper and postage. According to EPA program experts, the average DMR form is five pages long. DMRs are partially filled out by the regulated entity, sent to an independent laboratory for
completion, and then sent to the permitting authority. Therefore, electronic DMR submission will save two standard envelopes, two first class stamps and five to 20 pages of paper. The average total was $1.15 per submission. Estimated paper and mailing saving for program reports is $0.56 per submission. In the source ICR, the report savings applied to each sludge report, pretreatment report, and CSO report only. Using data from "year 2" (third year - 2018) in the existing ICR, the estimated annual number of DMRs is 249,156 for municipal respondents and 809,361 for private respondents. The estimated annual number of program reports is 7,175.

EPA Regions with NPDES authority and authorized state NPDES programs will also experience savings from no longer sending pre-populated DMR forms to regulated entities. Prior to the implementation of electronic reporting, authorized states would mail DMR forms with regulated entity-specific limits to an estimated 50% of all NPDES-regulated entities. EPA estimates electronic DMR submission will save EPA and state agencies an average of $4.12 per DMR in paper and mailing costs.

A.2.3. Capital/Start-up Costs
Most calculations in the ICR account for labor costs only. The ICR does, however, account for certain capital and start-up costs incurred by respondents that perform activities outside the normal operating practices. All costs presented in this section have been adjusted with the Consumer Price Index to August 2016 dollars. These costs are linked to several distinctive activities.

A.2.3.1. CSO Control Policy (CSO Notification)
The capital costs associated with public notification of CSO locations, events, and public health and environmental effects are included in this ICR. The costs are for municipalities to replace notification signs. From estimates presented in the previous CSO Control Policy ICR (OMB control no. 2040-0170; EPA ICR no. 1680.04) each sign will be replaced every 10 years which is equal to an average annual cost of $12.

A.2.3.2. Baseline Determination and Estimate of the Incremental Monitoring Burden and Cost for Remining Sites (DMR Sampling Analysis)
EPA assumes that flow metering from an installed weir is required for mining sites in Indiana and Tennessee. For all other states, EPA assumes that flow metering is already required and installed as part of the state Rahall remining permit program.

For Indiana and Tennessee, EPA assumes installed weir costs of $1,568 on the basis of an escalation of 2004 cost estimates from previous the Baseline Standards and BMPs for the Coal Mining Point Source Category-Coal Remining Subcategory and Western Alkaline Coal Mining Subcategory ICR (OMB control no. 2040-0239; EPA ICR no. 1944.03) (originally from Weir & Flume Sales Company and Tarco Tech Industries). Indiana will have 5 sites/year × 4 preexisting discharge points/site. Tennessee will have 9 sites/year × 4 preexisting discharge points/site. These costs are annualized using a 7 percent discount rate and an estimated 10-year life for the weir.

September 2017

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A.2.3.3. Start-up Costs for the Animal Sector
Start-up capital costs for Animal Sector facilities include the $36 purchase of a soil auger to collect soil samples and the $43 purchase of a manure sampler. CAFOs will also need pay $43 to install depth markers in their lagoons. All operations will need to expend an estimated $1,397 to develop the NMP elements that pertain to the production area, including performing an engineering analysis of the waste storage volume requirements needed to comply with the CAFO rule.

A.2.3.4. CWIS Phase I Purchase and Installation of Pilot Study Technology
EPA anticipates that Track II facilities that operate once-through cooling intakes will perform pilot studies to determine the effectiveness of their chosen technology. For costing purposes, EPA is assuming that a pilot study will be performed using a Gunderboem system. EPA estimated the pilot study would cost $307,000.

A.2.3.5. CWIS Phase III New Offshore Oil and Gas
EPA estimated that the initial permit application capital costs for installing a remote monitoring device for impingement monitoring at each facility was $25,392.
APPENDIX

DESCRIPTION OF AMICI CURIAE

The Chamber of Commerce of the United States of America (the "Chamber") is the world’s largest business federation. It represents 300,000 direct members and indirectly represents the interests of more than 3 million companies and professional organizations of every size, in every industry sector, and from every region of the country. An important function of the Chamber is to represent the interests of its members in matters before Congress, the Executive Branch, and the courts. To that end, the Chamber regularly files amicus curiae briefs in cases that raise issues of concern to the nation’s business community.

The Tennessee Chamber of Commerce & Industry ("Tennessee Chamber") is a statewide, non-profit association for Tennessee businesses, with more than 500 members. Founded over 100 years ago in 1912, the Tennessee Chamber traces its roots to a group of Tennessee business leaders who came together to speak against unfair taxes with a common, unified voice. Today, the Tennessee Chamber continues to represent the interests of companies doing business in Tennessee as to matters of public policy. It fosters a community of businesses and industries that speak collectively on matters of interest to its members across the state. Among the Tennessee Chamber’s objectives are promoting Tennessee businesses, creating a collaborative vision for Tennessee business and industry, increasing productivity
through an educated and highly-skilled workforce, advocating for a balanced and predictable tax system, and promoting a favorable business climate and successful business community for all Tennesseans.

The Kentucky Chamber of Commerce is the major catalyst, consensus builder, and advocate for a thriving economic climate in the Commonwealth of Kentucky. The Kentucky Chamber of Commerce supports a prosperous business climate in the state and works to advance Kentucky through advocacy, information, program management and customer service in order to promote business retention and recruitment. Representing the interests more than 68,000 employers across the Commonwealth, the Kentucky Chamber of Commerce advocates for growth-oriented tax reform, infrastructure investment, workforce solutions, a sensible regulatory approach, and a sustainable state government to ensure Kentucky is positioned for growth and opportunity.

The National Association of Manufacturers (the “NAM”) is the largest manufacturing association in the United States, representing small and large manufacturers in every industrial sector and in all 50 states. Manufacturing employs more than 12 million men and women, contributes $2.25 trillion to the U.S. economy annually, has the largest economic impact of any major sector and accounts for more than three-quarters of all private-sector research and development in the nation. The NAM is the voice of the manufacturing
community and the leading advocate for a policy agenda that helps manufacturers compete in the global economy and create jobs across the United States.

American Chemistry Council ("ACC") represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people’s lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®; common sense advocacy designed to address major public policy issues; and health and environmental research and product testing. The business of chemistry is a $768 billion enterprise and a key element of the nation’s economy.

American Iron and Steel Institute ("AISI") serves as the voice of the North American steel industry. AISI is comprised of 19 member companies, including integrated and electric furnace steelmakers, and approximately 124 associate members who are suppliers to or customers of the steel industry. AISI’s member companies represent over 75 percent of both U.S. and North American steel capacity.

The American Public Power Association is the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. It represents public power before the federal government to protect the interests of the more than 49 million people that public power utilities serve, and the 93,000
people they employ. The association advocates and advises on electricity policy, technology, trends, training, and operations. Its members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.

National Rural Electric Cooperative Association (“NRECA”) is the association of not-for-profit energy cooperatives supplying central station service through generation, transmission, and distribution of electricity to member-owners, especially those in rural areas of the United States. On behalf of its members, NRECA participates in administrative and judicial proceedings involving or affecting its members’ interests. NRECA members will be directly affected by the decision in this case. TVA is the wholesale power provider for 50 NRECA members serving 1.9 million consumers with combined retail sales of 45.5 million MWh in 2016, more than 10 percent of electric cooperative sales nationally. Sales to electric cooperatives account for more than a quarter of TVA’s total sales.

The Energy Institute of Alabama (“EIA”) is an association of energy industry stakeholders operating throughout the State of Alabama. EIA promotes the interests and perspective of the energy industry, including formulating, communicating, and advocating for constructive energy policies. EIA’s mission is to promote reliable, affordable, and clean energy to help grow Alabama’s economy, create high-paying jobs, and build public support for Alabama’s energy
industry. EIA is supported by an advisory council of state energy experts that includes academic and industry professionals. EIA also serves as a voice for the energy industry in cases before courts and on issues being considered by policymakers.

The Mississippi Energy Institute is a private, non-profit organization with a mission of developing state level policies that support a reliable and expanding energy portfolio that is environmentally responsible; to understand and engage in the national energy debate; and to take advantage of the market opportunities ensuring Mississippi’s economic development competitiveness. Membership is made up of companies and organizations with a common interest in an energy policy to support economic growth.

The Association of Tennessee Valley Governments is an advocate for local governments that reside in the Tennessee Valley region. Founded in 1981, the Association of Tennessee Valley Governments is a not-for-profit, 501(c)(4) public interest organization that advances the interests of our members at the national, regional, and state levels, using our voice to work on a nonpartisan basis for solutions to critical issues that affect us all.

The Tennessee Farm Bureau Federation has more than 650,000 family members, making it the largest agricultural organization in Tennessee and the largest state Farm Bureau in the nation. Its mission is to “develop, foster, promote
and protect programs for the general welfare, including economic, social, educational and political well-being of farm people of the great state of Tennessee.” Its positions on laws affecting agriculture, developed by its farmer members, support the amici parties’ interpretation of the CWA in this case.

For nearly one hundred years, the Kentucky Farm Bureau has served as the “Voice of Kentucky Agriculture,” representing the interests of agricultural producers and rural communities across the Commonwealth. Today, this voluntary organization of more than 478,000 farm families and their allies are dedicated in identifying problems, developing solutions and taking actions which will improve net farm income, achieve better economic opportunities and enhance the quality of life for all. Being one of the largest Farm Bureaus in the country, this organization stands ready to be a strong advocate at all levels for the benefit of its members, the agriculture industry and all Kentuckians.

The Utility Water Act Group (“UWAG”) is a non-profit, unincorporated group of 162 companies and three national trade associations of energy companies: the Edison Electric Institute, the National Rural Electric Cooperative Association, and the American Public Power Association. UWAG’s and its trade association members’ utility members operate power plants and other facilities that generate, transmit, and distribute electricity to residential, commercial, industrial, and institutional customers in Tennessee and nearly every other State. One of
UWAG’s purposes is to participate on behalf of its members in CWA litigation involving issues of importance to them.

Kentucky Industrial Utility Customers, Inc. ("KIUC") is comprised of 27 energy intensive industrial manufacturers with plants in Kentucky. KIUC member companies purchase approximately 14 million Mwh of electricity annually for their Kentucky plants. These plants produce steel, aluminum, paper, automobiles, chemicals and other products. Because the cost of electricity is essential in maintaining the competitiveness of Kentucky manufacturers in global and national markets, KIUC actively participates in regulatory and legal actions at the state and federal level that could impact electricity pricing.
UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

Tennessee Clean Water Network, et al.,
Plaintiffs-Appellees,

v.

Tennessee Valley Authority,
Defendant-Appellant.

On Appeal from the United States District Court for the Middle District of
Tennessee in Case No. 3:15-cv-00424 (Hon. Waverly D. Crenshaw)

BRIEF OF AMICI CURIAE THE UTILITY SOLID
WASTE ACTIVITIES GROUP, THE EDISON ELECTRIC
INSTITUTE, AND THE NATIONAL MINING ASSOCIATION
IN SUPPORT OF DEFENDANT-APPELLANT TENNESSEE
VALLEY AUTHORITY AND REVERSAL

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Dated: February 6, 2018
Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155

Name of counsel: Douglas H. Green, Margaret K. Fawal

Pursuant to 6th Cir. R. 26.1, Utility Solid Waste Activities Group

makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

2. Is there a publicly owned corporation, not a party to the appeal, that has a financial interest in the outcome? If yes, list the identity of such corporation and the nature of the financial interest:

   No

CERTIFICATE OF SERVICE

I certify that on February 6, 2018, the foregoing document was served on all parties or their counsel of record through the CM/ECF system if they are registered users or, if they are not, by placing a true and correct copy in the United States mail, postage prepaid, to their address of record.

/S/ Douglas H. Green
Venable LLP, 500 Mass. Ave. NW
Washington, DC 20001

This statement is filed twice: when the appeal is initially opened and later, in the principal briefs, immediately preceding the table of contents. See 6th Cir. R. 26.1 on page 2 of this form.
Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit Case Number: 17-6155

Case Name: Tenn. Clean Water Network v. TVA

Name of counsel: Douglas H. Green, Margaret K. Fawal

Pursuant to 6th Cir. R. 26.1, National Mining Association makes the following disclosure:

1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

   No

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I certify that on February 6, 2018 the foregoing document was served on all parties or their counsel of record through CM/ECF if they are registered users or, if they are not, by placing a true and correct copy in the United States mail, postage prepaid, to their address of record.

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Disclosure of Corporate Affiliations and Financial Interest

Sixth Circuit
Case Number: 17-6155  Case Name: Tenn. Clean Water Network v. TVA

Name of counsel: Douglas H. Green, Margaret K. Fawal

Pursuant to 6th Cir. R. 26.1, Edison Electric Institute
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1. Is said party a subsidiary or affiliate of a publicly owned corporation? If Yes, list below the identity of the parent corporation or affiliate and the relationship between it and the named party:

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   No

CERTIFICATE OF SERVICE

I certify that on February 6, 2018, the foregoing document was served on all parties or their counsel of record through the CM/ECF system if they are registered users or, if they are not, by placing a true and correct copy in the United States mail, postage prepaid, to their address of record.

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CONSENT OF ALL PARTIES TO FILING

The Defendant-Appellant and Plaintiffs-Appellees have consented to the filing of this brief. Appellees' counsel have conditioned their consent on Amici not seeking to participate in oral argument and not exceeding the prescribed word limit. Amici do not intend to request time at oral argument, and the following brief does not exceed the prescribed word limit.

INTEREST OF AMICI CURIAE

The Utility Solid Waste Activities Group ("USWAG") is an association of approximately 130 individual electric utilities, as well as the Edison Electric Institute ("EEI"), the National Rural Electric Cooperative Association, and the American Public Power Association, that represents the electric industry in solid waste-related rulemakings and litigation arising from matters affecting its members, including matters arising under the Resource Conservation and Recovery Act ("RCRA") as to which USWAG has substantial expertise. USWAG members own and operate landfills and surface impoundments for the disposal of coal combustion residuals ("CCR" or "coal ash") and other solid wastes.

1 Pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), counsel for the Amici state that no counsel for a party authored this brief in whole or in part, no party's counsel or party made a monetary contribution intended to fund the preparation or submission of this brief, and no person other than the amici, its members, or its counsel made a monetary contribution for its preparation or submission.
EEI is the association of U.S. shareholder-owned electric utilities, their affiliates, and industry associates worldwide. Its members provide electricity in fifty states and the District of Columbia. They generate approximately seventy percent of all electricity generated by electric companies and service about seventy percent of all retail customers in the United States. EEI members own and operate landfills and surface impoundments for the disposal of coal ash and other solid wastes.

The National Mining Association ("NMA") is a not-for-profit association consisting of more than 300 corporations and organizations involved in various aspects of mining. Headquartered in Washington, D.C. and incorporated in Delaware, NMA represents the interests of the mining industry before Congress, the administration, federal agencies, the judiciary, and the media. NMA’s membership includes the producers of most of the nation’s coal, metals, industrial, and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment, and supplies; and the engineering and consulting firms, financial institutions, and other firms serving the coal and hardrock mining industry. NMA members provide the fuel source for the electric generating utilities that own and operate solid waste landfills and surface impoundments and thus have a vested interest in the outcome of this case.
Because members of USWAG and EEI own and operate surface impoundments and landfills used for the disposal of coal ash and other solid wastes, and because NMA members provide the fuel source for the electric generating utilities that own and operate such facilities, Amici have a strong interest in the outcome of this case.

INTRODUCTION AND SUMMARY OF ARGUMENT

Amici endorse the arguments in the Brief of Defendant-Appellant Tennessee Valley Authority (“TVA”). Amici are participating in this case to elaborate on an issue of critical importance to this Court and our members; specifically, that the District Court’s erroneous decision has the perverse result of upending the regulations specifically promulgated by the U.S. Environmental Protection Agency (“EPA”) to address groundwater contamination caused by coal ash impoundments and replacing those regulations with the ill-suited Clean Water Act (“CWA”) National Pollutant Discharge Elimination System (“NPDES”) permitting program.

In 2015, EPA promulgated a rule under RCRA designed in part to control and remediate groundwater contamination from coal ash impoundments: the Federal Coal Combustion Residuals Rule (“CCR Rule”). The District Court here—without considering the CCR Rule or its specific application to groundwater impacts associated with coal ash impoundments—mischaracterized seepage from coal ash impoundments to groundwater with a direct, immediate, and readily
traceable hydrologic connection\textsuperscript{2} to a “ navigable water”\textsuperscript{3} as regulated “point source discharges” subject to the CWA’s NPDES program. That decision, in addition to unlawfully expanding the scope of the CWA, also unwittingly undermines application of the CCR Rule and the groundwater protections it provides.

RCRA provides EPA with the authority to regulate “solid wastes.” Therefore, the provisions of the CCR Rule—including those related to the regulation of groundwater contamination from CCR disposal units—apply only to “solid wastes.” RCRA’s definition of “solid waste,” however, explicitly excludes industrial discharges from point sources subject to CWA NPDES permits. Thus, if the District Court’s decision stands, it would have the perverse effect of precluding application of the CCR Rule’s stringent groundwater protection requirements to the very groundwater impacts they were tailored to address. Moreover, it would instead require such groundwater seepage to be regulated under the NPDES program, which, as an “end of pipe” permitting regime, is ill-suited to deal with groundwater contamination and other such diffuse migration of pollutants.

Further complicating matters is the fact that, under the District Court’s decision, while the groundwater seepage at issue would be excluded from coverage

\textsuperscript{2} Throughout this brief, \textit{Amici} use the term “hydrologic connection” to mean a “direct, immediate, and readily traceable” hydrologic connection, as that phrase was used by the District Court.

\textsuperscript{3} The term “navigable waters” means the waters of the United States, including the territorial seas. 33 U.S.C. § 1362(7).
under the CCR Rule, the impoundments themselves would remain subject to the CCR Rule’s other requirements, including those related to closure. But the District Court’s remedy—removal of all coal ash from TVA’s surface impoundments—would take over two decades to complete, which is substantially longer than the CCR Rule’s timeframes for completing closure. The District Court’s decision therefore directly conflicts with the CCR Rule’s carefully tailored closure requirements. Worse still, in ordering such a remedy, the District Court failed to recognize that the CCR Rule’s closure in place requirements could in fact result in a faster, safer, and equally protective remedy as the complete removal of all coal ash from the impoundments.

In short, by looking solely through the prism of the CWA without considering the distinct role that RCRA serves in protecting groundwater and downgradient surface water, the District Court missed the forest for the trees. In doing so, the District Court improperly expanded the scope of the CWA and unwittingly eviscerated application of the CCR Rule’s stringent groundwater protections to TVA’s coal ash impoundments. The perverse result is the removal of a focused and stringent groundwater protection scheme targeted specifically at coal ash disposal units in favor of a CWA permitting program that is both ill-suited to protect groundwater and impractical to implement. Importantly, these
ramifications extend far beyond TVA’s surface impoundments to other similarly situated impoundments across the country.

For the above reasons, and for all the reasons advanced in TVA’s Brief, this Court should reverse the District Court’s decision to upend the CCR Rule’s groundwater protection regime and replace it with the CWA’s NPDES program. In the event that the Court upholds the District Court’s interpretation of the scope of the CWA, it should nevertheless vacate the court-ordered remedy requiring removal of all coal ash from TVA’s surface impoundments with instructions to consider further evidence regarding the appropriate remedy and closure options.

ARGUMENT

I. The CCR Rule Provides a Comprehensive Groundwater Monitoring and Corrective Action Scheme.

In 2015, EPA promulgated comprehensive and protective new federal standards governing the disposal of coal ash in surface impoundments and landfills. 80 Fed. Reg. 21,302 (Apr. 17, 2015). The CCR Rule, issued pursuant to RCRA’s non-hazardous waste “Subtitle D” provisions, is designed to ensure “no reasonable probability of adverse effects on health or the environment” from the disposal of coal ash. See id. at 21,311; 42 U.S.C. § 6944(a). The Rule is the result of over two decades of robust study into the risks associated with coal ash disposal practices and represents EPA’s determination of how best to regulate these practices in light of those risks. The Rule touches all aspects of coal ash
disposal, including the structural stability of CCR disposal units, monitoring for
and remediation of any releases of CCR constituents into groundwater, and proper
unit closure.

The Rule’s extensive groundwater monitoring and corrective action
requirements were designed specifically to address the attendant risks from coal
ash disposal, including potential impacts to downgradient surface water. EPA put
this comprehensive groundwater protection scheme in place to “ensure that
groundwater contamination at new and existing CCR units will be detected and
cleaned up as necessary to protect human health and the environment.” 80 Fed.
Reg. at 21,396. For example, the specific constituents for which monitoring is
required are those found in coal ash. Id. at 21,397; 40 C.F.R. Part 257, Appendices
III and IV. If groundwater contamination is detected above background levels, the
facility must undertake more “targeted” groundwater monitoring to determine
whether the relevant contaminants are above the Rule’s strict groundwater
protection standards. 80 Fed. Reg. at 21,404; 40 C.F.R. § 257.95(a). If those
standards are exceeded, corrective action to remediate the groundwater is required
and must continue until all contaminant levels are at or below the standard. 40
C.F.R. §§ 257.96(a), 257.98(c). The “point of compliance”—that is, the point at
which the standards must be met—is the boundary of the coal ash disposal unit
itself. Id. § 257.91(a)(2).
The groundwater protection standards imposed by the CCR Rule are stringent and inflexible. For most contaminants, the groundwater protection standard is set at the “maximum contaminant level” or “MCL,” (Id. § 257.95(h)(1)), which is the maximum level of a contaminant allowable in groundwater delivered to a user of a public water system (Id. § 141.2). In other words, MCLs are drinking water standards set by EPA. Standards for monitored contaminants for which no MCL has been established are set at background levels for the site in question. Id. § 257.95(h)(2).

The Rule’s comprehensive corrective action requirements are likewise stringent. Upon detecting an exceedance of a groundwater protection standard, a facility must undertake an assessment of potential corrective measures that will achieve the ultimate remedy required under the Rule, and hold a public meeting to discuss such measures. Id. § 257.96. The remedy selected must not only attain the groundwater protection standard, but also (1) be protective of human health and the environment; (2) control the source(s) of the releases to reduce or eliminate further releases of CCR constituents from the unit; (3) remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible; and (4) comply with all applicable RCRA requirements for the management of wastes. Id. § 257.97(b). The CCR Rule’s corrective action provisions thus require the remediation of groundwater impacted by releases from
CCR units and abatement of future groundwater contamination and any resulting downgradient impacts to surface water.

Put simply, the CCR Rule is the result of EPA’s informed, reasoned analysis of proper coal ash disposal and identifies how to address groundwater contamination from coal ash disposal in a comprehensive manner that provides robust protections for human health and the environment.

II. The District Court’s Ruling Eliminates the CCR Rule’s Groundwater Monitoring and Corrective Action Scheme and Perversely Results in Decreased Environmental Protection.

Under the District Court’s holding that NPDES permitting requirements apply to discharges from point sources to groundwater that is hydrologically connected to a “navigable water,” the groundwater seepage at issue in this case would be statutorily excluded from RCRA’s definition of “solid waste” and, as a result, the CCR Rule’s groundwater protection program. Thus, the District Court’s ruling erroneously replaces the CCR Rule’s groundwater monitoring and corrective action program—which was intentionally devised to address releases to groundwater (and potential downgradient surface water impacts) from CCR disposal sites such as TVA’s—with the CWA’s NPDES permitting program that is not structured to regulate diffuse migration of contaminants into or through groundwater.
A. Under the District Court's Ruling, the CCR Rule’s Groundwater Protection Measures Cannot Be Applied to TVA's Surface Impoundments.

The scope of RCRA's regulatory reach is limited to "solid wastes," as that term is defined by the statute. See 42 U.S.C. § 6901 et seq. Importantly, RCRA's definition of "solid waste" expressly excludes "industrial discharges which are point sources subject to permits" under [the CWA Section 402 NPDES permitting program].” Id. § 6903 (emphasis added). Thus, point source discharges subject to NPDES permitting requirements are not subject to regulation under any rule promulgated pursuant to RCRA.

This statutory exclusion from RCRA regulation, commonly referred to as the "industrial wastewater exclusion," is designed to avoid duplicative regulation of point source discharges under RCRA and the CWA. See 45 Fed. Reg. 33,084, 33,098 (May 19, 1980). While wastewaters held on-site in treatment and holding facilities—such as surface impoundments—are subject to RCRA and its implementing regulations, point source discharges from those treatment and holding facilities fall solely within the province of the CWA. See id.; see also 40 C.F.R. § 261.4(a)(2) cmt. (“This exclusion [from RCRA's “solid waste” definition] applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge . . .
Notably, the industrial wastewater exclusion applies to point sources that should have an NPDES permit in place, whether in fact they do or not.\footnote{See e.g. State v. PVS Chemicals, Inc., 50 F. Supp. 2d 171, 177-78 (W.D. N.Y. 1998) (finding that RCRA’s industrial wastewater exclusion applies to unauthorized discharges of pollutants in violation of the CWA).}

Courts have consistently applied the RCRA industrial wastewater exclusion to “point source” discharges regulated under CWA Section 402, including district courts which, like the lower court here, erroneously found that discharges to groundwater hydrologically connected to “navigable waters” are point source discharges subject to the CWA. \textit{Williams Pipe Line Co. v. Bayer Corp.}, 964 F. Supp. 1300, 1328-29 (S.D. Iowa 1997) (dismissing the plaintiff’s RCRA claim on the grounds that the groundwater discharges at issue were subject to CWA NPDES permitting requirements); \textit{Coldani v. Hamm}, Civ. No. S-07-660 RRB EFB, 2007 WL 2345016, at *10 (E.D. Cal. Aug. 16, 2007) (same); \textit{State v. PVS Chemicals, Inc.}, 50 F. Supp. 2d at 177-78 (dismissing the plaintiff’s RCRA claim on account of the industrial wastewater exclusion because otherwise the discharges at issue would be subject to duplicative regulation under both the CWA and RCRA).

While \textit{Amici} believe the district courts in \textit{Williams} and \textit{Coldani}\footnote{Neither case was appealed.} wrongly decided the issue of CWA liability, the decisions nevertheless appropriately held that if
such groundwater discharges are regulated under the CWA, they are statutorily excluded from RCRA regulation.\textsuperscript{6}

In light of this statutory scheme, therefore, the District Court’s decision leads to an absurd result: the stringent groundwater protection standards and corrective action requirements EPA developed to address groundwater contamination from CCR units are statutorily barred from being applied to TVA’s

\textsuperscript{6} In 1995, EPA’s Office of Solid Waste and Emergency Response ("OSWER") issued a memorandum articulating the erroneous position that wastewater releases from treatment and holding facilities to groundwater that is hydrologically connected to a “navigable water” do not fall within RCRA’s industrial wastewater exclusion despite the fact that they are subject to the CWA’s NPDES permitting requirements. \textit{See} Interpretation of Industrial Wastewater Discharge Exclusion from the Definition of Solid Waste, 1995 WL 911821 (Feb. 17, 1995) ("memorandum"). This position—which to \textit{Amici’s} knowledge has never been applied in practice or subject to judicial review—is contrary to RCRA’s plain language at 42 U.S.C. § 6903, as well as subsequent judicial precedent (\textit{see, e.g.}, \textit{Williams}, 964 F. Supp. at 1328-39; \textit{Coldani}, 2007 WL 2345016, at *10). The position also cannot be reconciled with the long-standing position of EPA’s Office of Water that, in the case of groundwater with a direct hydrological connection to surface water, the discharge to groundwater itself is the regulated discharge. \textit{See}, \textit{e.g.}, 56 Fed. Reg. 64,876, 64,892 (Dec. 12, 1991). The flawed logic espoused in EPA’s OSWER memorandum underscores the issues facing this Court. EPA flatly asserts that, even if “such groundwater discharges are subject to CWA jurisdiction,” the industrial wastewater exclusion does not apply to such groundwater discharges because “groundwater contamination cannot be controlled under the [CWA].” Memorandum at 2. As exemplified by the District Court’s decision here, however, if CWA liability attaches to a discharge, it must be controlled by the CWA, no matter how infeasible application of the NPDES permitting program to such discharges may be. The government cannot have its cake and eat it too. If a discharge is subject to NPDES requirements, it is not subject to RCRA, even if RCRA clearly provides the more appropriate vehicle to address that discharge.
CCR units precisely because those units leak contaminants to groundwater. Specifically, under the District Court’s reasoning, the moment CCR constituents are discharged from TVA’s “point source” surface impoundments into hydrologically-connected groundwater, they are “industrial discharges which are point sources subject to permits under [the CWA]” and thus no longer a “solid waste” under RCRA. As such, under the District Court’s ruling, TVA is no longer responsible for groundwater monitoring under the CCR Rule for the affected CCR surface impoundments, nor is it obligated to achieve the CCR Rule’s ultimate remedy: remediating the groundwater to the stringent groundwater protection standards expressly developed to provide for robust environmental and public health safeguards. This ironic and perverse result underscores the problematic practical effects of the District Court’s flawed reasoning.

**B. The District Court’s Decision Replaces the CCR Rule’s Groundwater Protection Measures with a Permitting Regime Ill-Suited to Address Groundwater Contamination.**

Further compounding the practical effects of the District Court’s error is the fact that the CCR Rule’s groundwater monitoring and corrective action provisions are unquestionably the more appropriate regulatory vehicle for identifying and remediating groundwater contamination from CCR units as compared to the CWA’s NPDES permitting program. Indeed, as discussed in TVA’s Brief, because NPDES requirements are developed specifically for “end-of-pipe”
discharges directly into surface waters, it is far from clear whether NPDES permitting requirements can even be practically applied to diffuse groundwater migration.

Under the NPDES program, permits are developed to include applicable technology-based effluent limitations, as well as any additional limitations required to ensure that a permitted discharge does not cause or contribute to the violation of an applicable water quality standard of the receiving “navigable water.” 40 C.F.R. § 122.44(a), (d). Such standards consist of the designated uses of a “navigable water,” as well as the water quality criteria—including, among others, aquatic life, human health, and biological criteria—necessary to achieve those uses. 33 U.S.C. §§ 1313, 1314. Importantly, because the standards discharges must meet under the NPDES permitting scheme are developed solely for the receiving “navigable water,” they are not—as the CCR Rule was—designed to protect the groundwater itself. Indeed, depending on the “designated uses” of the “navigable water,” the standards applied to groundwater seepage under the CWA may be less protective than those of the CCR Rule, which applies the same protective groundwater standards to all CCR impoundments, regardless of location.

There are likewise significant practical hurdles to applying NPDES permitting requirements to groundwater seepage. For example, the NPDES permitting process often entails significant scientific studies and calculations.
With respect to diffuse groundwater migration, however, it may be difficult if not impossible to determine where the groundwater ultimately connects with a “navigable water.” As such, there may not be any readily identifiable points that can be used for purposes of calculating effluent limitations and conducting necessary sampling and monitoring. See 40 C.F.R. Part 122 Subpart C. Likewise, the owner or operator of a CCR impoundment or other “point source” may not be able to conduct required sampling and monitoring because those locations may be miles away and beyond the owner or operator’s control. Additionally, groundwater will likely contain contaminants from a host of other sources, making permit limits and compliance difficult to determine, and aspects such as flow rates and chemistry could further make applying NPDES regulations impractical. By way of example, unlike traditional “end of pipe” discharges, at various times of year, flows can change and surface water can flow back into groundwater—a contingency that NPDES regulations do not account for.

RCRA, by contrast, allows regulators to take a more comprehensive approach to environmental protection, and the CCR Rule was specifically

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designed and promulgated to address the environmental, health, and safety risks associated with CCR disposal units, including risks to both groundwater and surface water. While the CCR Rule’s groundwater monitoring protections are directly applicable to the groundwater, they necessarily operate to protect downgradient surface waters as well. Placing the point of compliance at the waste unit boundary ensures that both the groundwater itself and any downgradient receptors, including surface waters, are adequately protected.

The District Court’s decision disregarded the role of RCRA and the CCR Rule in protecting groundwater and downgradient surface water, and threatens to weaken the very groundwater protections EPA developed to promote the more uniform and comprehensive regulation of coal ash disposal in landfills and surface impoundments. Importantly, these implications extend beyond CCR units to all other similarly situated disposal units. RCRA’s Subtitle C hazardous waste program and the Subtitle D regulations for municipal solid waste landfills have groundwater monitoring and corrective action programs similar to the CCR Rule. Under the District Court’s flawed rationale, seepage from any solid waste disposal unit into groundwater that is hydrologically connected to a “navigable water” would require a NPDES permit, and thus not be subject to the groundwater quality. [RCRA aimed to] eliminate this problem and permit the environmental laws to function in a coordinated and effective way.”
monitoring and corrective action requirements issued pursuant to RCRA. This Court should avoid such a nonsensical result and should reverse the District Court’s decision that the CWA regulates seepage from TVA’s surface impoundments to groundwater with a hydrologic connection to “navigable waters.”

III. The District Court Failed to Consider the CCR Rule’s Closure Requirements When Crafting Its Remedy, Resulting in a Conflict with the CCR Rule and an Unwarranted Mandate for Full Excavation.

The remedy imposed by the District Court—removal of all coal ash from TVA’s impoundments—directly conflicts with the closure obligations imposed by the CCR Rule. While RCRA and the CCR Rule do not require closure of all CCR impoundments, which continue to be an important waste management system, the CCR Rule does specify how closure is to be undertaken when the option to close an impoundment is chosen, requirements TVA must still comply with. Additionally, the safeguards available under the CCR Rule’s “closure in place” option, which EPA itself determined was protective and a valid choice for closure, is as protective as the full removal remedy, and will allow for closure to be completed in both a faster and safer manner than the District Court’s remedy.

Therefore, should this Court find that seepage from CCR surface impoundments to hydrologically-connected groundwater are in fact point source discharges subject to CWA permitting requirements, the ultimate remedy ordered
by the District Court—excavation of all coal ash from TVA’s impoundments—must be rejected.

A. The Record Shows that TVA Cannot Completely Excavate All Coal Ash Within the Time Period Required By the CCR Rule.

The District Court ordered TVA to “fully excavate the coal ash waste” in the waste disposal units at issue and “move the waste to a lined site that offers reasonable assurances that it will not discharge waste into the waters of the United States.” Tenn. Clean Water Network v. Tenn. Valley Auth., No. 3:15-cv-00424, 2017 WL 3476069, at *63 (M.D. Tenn. Aug. 4, 2017). Although recognizing the draconian nature of this remedy, and the fact that it would take longer than two decades to complete, the District Court nonetheless concluded that it was “impelled” to do so. Id. at *62. It found that “[w]hile the burden of closure by removal may be great, it is the only adequate resolution to an untenable situation.” Id. at *63.

In making this determination, however, the District Court failed to consider TVA’s closure obligations under the CCR Rule. As noted above, while discharges from CCR units subject to the NPDES program are not regulated under RCRA, the surface impoundments themselves are. As such, TVA must still comply with the applicable provisions of the CCR Rule that do not relate to groundwater protections, including the Rule’s closure performance standards and timeframes.
But by ordering TVA to “fully excavate the coal ash waste,” the District Court has bypassed application of the CCR Rule’s closure provisions and effectively mandated TVA to close its CCR disposal units under the CCR Rule’s “closure by removal” option, as opposed to the “closure in place” option. See 40 C.F.R. § 257.102(c) & (d) (setting the performance standards for closure by removal and closure in place). Apart from the fact that the CCR Rule explicitly gives the owner or operator of a CCR unit the option of using either closure alternative—an option eliminated by the District Court—the CCR Rule generally requires closure under both options to be completed within five years. Id. § 257.102(f)(1)(ii). Extensions are possible in certain circumstances, but the largest surface impoundments are provided a maximum of only fifteen years to complete closure.8

Information presented to the District Court, however, shows that TVA cannot complete closure by removal within fifteen years. TVA presented evidence at trial that such excavation would take at least twenty-four years. Tenn. Clean Water Network, 2017 WL 3476069, at *32. Thus, if required to excavate, TVA simply would not be able to meet even the most extended CCR Rule closure timeframes. As such, TVA’s compliance with the court-ordered remedy would

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8 For surface impoundments 40 acres and smaller, a two-year extension is possible. Id. § 257.102(f)(2)(ii)(A). For surface impoundments greater than 40 acres, a total of five two-year extensions may be obtained. Id. § 257.102(f)(2)(ii)(B).
automatically conflict with the CCR Rule and—at the end of the CCR Rule’s
closure timeframe—cause the impoundments in question to be classified as “open
dumps” subject to immediate EPA enforcement and RCRA citizen suits.\textsuperscript{9} Such a
result is untenable. A court-ordered remedy that forces a party into non-
compliance with federal law simply cannot stand. See \textit{Am. Hosp. Ass’n v. Price},
867 F.3d 160, 167 (D.C. Cir. 2017) (“[I]f the necessary means [to comply with the
court’s order] were unlawful, the Court could not have mandated them . . . .”); \textit{In
te Sealed Case}, 825 F.2d 494 (D.C. Cir. 1987) (“[I]t causes us considerable
discomfort to think that a court of law should order a violation of law . . . .”).
Even if this Court upholds the lower court’s finding of CWA liability, it must
vacate the remedy imposed and remand the case with the instruction that any
remedy be consistent with TVA’s obligations under RCRA and the CCR Rule.

\textbf{B. The Remedy of Excavating All Ash Ignores the CCR Rule’s
Closure Performance Standards and Is Not Necessary or
Warranted.}

The District Court determined that complete removal of the coal ash from
TVA’s surface impoundments was the only available remedy to prevent ongoing
discharges to hydrologically-connected groundwater. \textit{Tenn. Clean Water
Network}, 2017 WL 3476069, at *61. A key part of this conclusion was the
possibility that CCR in TVA’s surface impoundments is located within the

\textsuperscript{9} See 42 U.S.C. § 6945(a).
groundwater table. *Id.* At bottom, the District Court assumed that removal of CCR would be the only way to stop further seepage from the impoundments into hydrologically-connected groundwater. *Id.* at *61-63.* But in making this assumption, the District Court failed to take into account the technical requirements behind the CCR Rule’s closure in place performance standard. This standard provides a closure alternative that could in fact prevent contamination of surface water via hydrologically connected groundwater more quickly and more safely than full excavation, which even the District Court acknowledged is an extreme requirement.

EPA concluded when it promulgated the CCR Rule that closure in place and closure by removal can be equally protective. 80 Fed. Reg. at 21,412. In fact, EPA correctly recognized that most facilities will *not* elect to close their CCR units by removing all coal ash. *Id.* (emphasis added). Indeed, while EPA offered the removal option under the CCR Rule because it could be useful for facilities with an interest in certain site-specific land reuse or redevelopment, EPA clearly found that both closure in place and closure by removal ensure that “there [will] be no reasonable probability of adverse effects from the wastes that remain after a CCR unit ha[s] closed.” 80 Fed. Reg. at 21,409.

Under the closure in place option, an impoundment must be closed in a manner that will “[c]ontrol, minimize or eliminate, to the maximum extent
feasible" further releases from the unit. 40 C.F.R. § 257.102(d)(1)(i). Closure also must “preclude the probability of future impoundment of water, sediment, or slurry” and “provide for major slope stability to prevent the sloughing or movement of the final cover system.” Id. § 257.102(d)(1)(ii)-(iii). Any remaining wastes must be sufficiently stabilized, and the cover system must comply with detailed design and permeability standards. Id. § 257.102(d)(2)-(3).10

Shortly after promulgation of the CCR Rule, Amicus USWAG sponsored a study specifically evaluating the degree of groundwater protection provided under the CCR Rule’s closure in place versus closure by removal options. See Attachment A, Evaluation of the Groundwater Protectiveness of Potential Surface Impoundment Closure Options, Gradient (Nov. 2016) (“Gradient Report”).11 The study concluded that, while both closure options in the CCR Rule can provide significant beneficial impacts to groundwater quality, in many cases, closure in place can “provide[] a greater degree of contaminant reduction in downgradient groundwater monitoring wells” as compared to closure by removal. Gradient Report at 16.

10 At trial, TVA submitted testimony from a qualified professional engineer certifying that TVA's closure in place plans meet or exceed the requirements of the CCR Rule and would address the seeps and leaks to groundwater at issue in this case. See Direct Testimony of Gabriel W. Lang, P.E., RE 229-1, Page ID # 8565-79.

11 The Gradient Report was submitted as a trial exhibit to the District Court. See Exhibit and Witness List, Exhibit J189, RE 238, Page ID # 9585.
Notably, the presence of CCR in the groundwater table “largely [does] not affect which closure option [is] more favorable”; rather, the time required to complete closure is one of the “key factor[s]” in determining whether closure in place or closure by removal is more favorable. *Id.* at 16–17. Accordingly, the report finds that in some cases—particularly for large impoundments like those at issue in the current case—the closure in place option, in light of its shorter completion timeframe, will result in a greater and more rapid reduction of contaminant concentrations in downgradient waters than the closure by removal option. *Id.* at 18.

Additionally, closure by removal poses other significant environmental and safety risks that must be considered on a site-specific basis. For example, closure by removal requires the transport of CCR to another site, which brings with it the pollution and public safety issues associated with hundreds of daily truck shipments occurring for decades. Likewise, closure by removal poses the risk of a “catastrophic event such as a spill during removal or the accidental triggering of a larger failure in the pond floor.” *See Tenn. Clean Water Network*, 2017 WL 3476069, at *61.

The Court’s conclusion that the closure in place option could not achieve the objective of preventing further contamination of downgradient surface water is therefore incorrect from a technical perspective and lies in direct contravention to
EPA’s own conclusions in the CCR Rule. In fact, given the size of the CCR units in question, the closure in place option likely offers the quickest and safest remedy.\textsuperscript{12}

Thus, the District Court has erroneously concluded that excavation of coal ash from TVA’s ash impoundments is the only way to adequately prevent further contamination of downgradient surface water. Rather, closure in place—which can be accomplished in a much faster period of time—will likely result in a faster yet equal reduction of contamination in the groundwater and downgradient surface water than closure by removal. When considered in light of the significant risks associated with closure by removal—which the District Court itself acknowledged—it is questionable whether closure by removal of the TVA’s CCR surface impoundments is even prudent, much less the only, or even the best, “adequate resolution.” This Court should, at a minimum, vacate that flawed remedy.

\textsuperscript{12} Amici note that District Court’s reliance on the “history of the Non-Registered Site” to find that closure in place was not an adequate remedy was improper here. While the District Court reasoned that closure in place was inadequate because the Non-Registered Site has been “closed” for almost twenty years and “water infiltrates it” and “it leaks pollutants,” the Non-Registered site was not “closed” in accordance with the CCR Rule’s closure requirements. See Tenn. Clean Water Network, 2017 WL 3476069, at *61. The history of the Non-Registered Site is therefore not relevant to the protectiveness of closure in place under the CCR Rule.
CONCLUSION

For these reasons, in addition to those presented in the Opening Brief of TVA, the Court should reverse the District Court’s decision and hold that seepage from CCR surface impoundments to groundwater that is hydrologically connected to “navigable waters” are not point source discharges subject to the CWA NPDES permitting requirements, thereby preserving the CCR Rule’s protections for groundwater and downgradient surface water from CCR units. In the event this Court upholds the District Court’s interpretation of the scope of the CWA, it should vacate the court-ordered remedy requiring removal of all CCR from TVA’s surface impoundments.

February 6, 2018

Respectfully submitted,

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I certify that the foregoing brief complies with the type-volume limitation of Fed. R. App. P. 29(a)(5) and Fed. R. App. P. 32(a)(7)(B) because it contains 5,666 words excluding the parts of the brief exempted by Fed. R. App. P. 32(f), and complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared using Word 2013 in Times New Roman (14 point) proportional type.

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Pursuant to Fed. R. App. P. 25 and 6 Cir. R. 25, I hereby certify that on February 6, 2018, I served a copy of the foregoing Brief of Amici Curiae on the following counsel of record electronically through the Court’s CM/ECF system:

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United States Court of Appeals
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26 CROWN STREET ASSOCIATES, LLC, 26 CROWN
MASTER TENANT, LLC, PMC PROPERTY GROUP,
INC.,

Plaintiffs-Appellants,

against

GREATER NEW HAVEN REGIONAL WATER
POLLUTION CONTROL AUTHORITY, CITY OF NEW
HAVEN,

Defendants-Appellees.

On Appeal from the United States District Court
for Connecticut (New Haven)

BRIEF FOR AMICI CURIAE CITY OF NEW YORK AND OTHER
MUNICIPALITIES, PUBLIC WASTEWATER UTILITIES, AND NATIONAL
AND REGIONAL ASSOCIATIONS OF MUNICIPALITIES AND UTILITIES
IN SUPPORT OF DEFENDANTS-APPELLEES TO AFFIRM THE
DISTRICT COURT’S DECISION

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Amici represent that no parent corporation(s) or publicly held corporation(s) own 10% or more of the stock in any Amici.
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RULE 29(A) CONSENT TO FILING

Pursuant to Rule 29(a) of the Federal Rules of Appellate Procedure, Amici Curiae have obtained the consent of all parties to file this brief. The parties consented as follows:

Plaintiffs-Appellants 26 Crown Street Associates, LLC, 26 Crown Master Tenant, LLC, and PMC Property Group, Inc. consent to the filing of this amicus brief on the condition that Amici inform the Court that Appellants have not agreed with the Amici's legal arguments;

Defendants-Appellees Greater New Haven Regional Water Pollution Control Authority and City of New Haven consent to the filing.

INTEREST OF AMICI CURIAE

Wastewater utilities provide services that are essential to protecting public health and the environment; regulatory certainty is necessary to allow utilities to make and plan prudently for investments of public funds. The Amici municipalities and public wastewater
utilities, and associations that represent them, submit this brief in support of Defendants-Appellees Greater New Haven Regional Water Pollution Control Authority and City of New Haven based on their compelling interest in ensuring that the National Pollutant Discharge Elimination System ("NPDES") permitting scheme, and attendant Clean Water Act liability, remains predictable and lawfully within the scope of the Act.

Amici municipalities and public utilities operate publicly owned sewage treatment works ("POTWs") that are subject to stringent NPDES permit requirements for discharges from POTWs to surface waters. These permits include limits on the pollutants in those discharges to meet water quality standards in the receiving waters.

Amici also operate the collection systems that convey wastewater to the POTWs. Many of these collection systems include “combined sewers,” which convey both wastewater and stormwater. NPDES permits generally require utilities to properly operate and maintain their systems to achieve discharge limitations, and explicitly authorize discharges of mixed stormwater and sewage during wet weather via
combined sewer overflows (“CSOs”). Meeting these permit requirements involves billions of dollars of investment from taxpayers and ratepayers.

A variety of factors can cause backups, many of which are beyond the scope of normal system maintenance. When the volume of wastewater exceeds the system’s capacity due to periods of heavy rainfall or snow melt, untreated wastewater can be discharged directly into basements; this is exacerbated by aging infrastructure and increasingly frequent severe storms. Moreover, clogs or blockages in a sewer line resulting in basement backups can be caused by items flushed down the toilet or washed down the drain, and by tree roots, grease, and other obstructions. Such blockages can occur in either a public main sewer line or in a private sewer service line, which the property owner owns and maintains. Wastewater utilities strive to prevent sewer backups onto private property through system maintenance, infrastructure improvements, community education and enforcement of rules prohibiting discharges of substances likely to cause obstructions. Yet even with these efforts, backups may still occur.

Amici seek to provide this Court with the perspective that subjecting backflow to basements to independent Clean Water Act
("CWA") jurisdiction is not only contrary to law, but unmanageable. Such an unwarranted expansion of CWA jurisdiction could have broad implications for Amici utilities’ ability to run their systems to best protect public health and the natural environment while meeting all applicable CWA and other legal requirements. Under the scheme propounded by Plaintiffs-Appellants, Amici could be forced to address each potential backflow location, rather than investing limited municipal and public utility resources on prioritized improvements that will provide the greatest benefits.

Amici’s specific interests are summarized as follows:

The City of New York, a political subdivision of the State of New York, is the largest municipal water and wastewater utility in the country. The City’s Department of Environmental Protection ("DEP") treats roughly 1.3 billion gallons of wastewater a day and supplies and distributes more than one billion gallons of drinking water each day to over nine million people. To meet these demands and ensure compliance with all legal requirements, including the CWA, the DEP’s nearly 6,000 employees operate and maintain an extensive source water protection program; a world-renowned water supply system; and a wastewater
system comprised of 7,400 miles of sewers, 96 pump stations, four CSO detention facilities, and 14 in-City wastewater treatment plants. Despite considerable investment, and a program to reduce such instances, the City’s system occasionally produces sewage backflows into building basements.

The National Association of Clean Water Agencies ("NACWA") is a not-for-profit trade association representing the interests of publicly owned wastewater and stormwater utilities across the United States. NACWA's members include nearly 300 municipal clean water agencies that own, operate, and manage POTWs, storm sewer systems, water reclamation districts, and all aspects of wastewater collection, treatment, and discharge.

The National League of Cities ("NLC") is the country’s largest and oldest organization serving municipal governments and represents more than 19,000 U.S. cities, towns and villages. Many of NLC’s members provide water and wastewater services. NLC advocates on behalf of municipalities on critical issues that affect local governments and warrant action.
Central Davis Sewer District, a 10 million gallon per day ("MGD") annual capacity utility, is an award-winning, publicly-owned collection system and treatment plant serving the Farmington, Fruit Heights and Kaysville, Utah, areas and discharging onto the shores of the Great Salt Lake. First created in 1961, the District produces 1,350 tons of compost annually, land applies 290 tons annually, farms 130 acres, and has 160 miles of pipes.

The District of Columbia Water and Sewer Authority ("DC Water") is an independent authority of the District of Columbia government that serves over 680,000 residents and 17.8 million annual visitors in the District by collecting and treating wastewater. DC Water also provides wastewater treatment services for 1.6 million people in Maryland and Virginia. To collect and transmit wastewater, DC Water operates 1,900 miles of sanitary and combined sewers, 22 flow-metering stations, and nine off-site wastewater pumping stations. Occasionally, DC Water's wastewater system experiences backups into building basements due to clogged building sewer laterals, illegal discharges of fats oils and grease, tree roots, and other illicit discharges. To treat wastewater, DC Water operates the Blue Plains Advanced Wastewater
Treatment Plant (the “Plant”), the largest advanced wastewater treatment facility in the world, and is expending $2.7 billion dollars of ratepayer funds to implement its Clean Rivers Project, upgrading the Plant and the District’s combined sewer system to reduce CSO discharges.

The City of Lowell, Massachusetts, through its Lowell Regional Wastewater Utility, operates a wastewater system that is designed to transport, treat, and dispose of wastewater, stormwater, and domestic septage from the City of Lowell and the surrounding towns of Chelmsford, Dracut, Tewksbury, and Tyngsborough. That system includes the Duck Island Wastewater Treatment Facility. The collection systems comprise over 250 miles of sewerage and drainage piping and include nine diversion stations and thirteen pump stations that are located throughout the city. The City actively addresses sewer and drainage backups, and has an ongoing program to inspect the collection systems’ many miles of pipes. The City’s program includes substantial, costly efforts to control and reduce both CSOs and Sanitary Sewer Overflows.
The Louisville and Jefferson County Metropolitan Sewer District ("MSD") is a public body corporate and political subdivision created and established pursuant to Kentucky State law for the purpose of providing adequate sewer and drainage facilities. MSD operates and maintains a collection, transmission and treatment system that includes more than 3,300 miles of sewer lines, 259 pumping stations, five general regional water quality treatment centers and thousands of sanitary and combined sewer manholes and catch basins. MSD serves over 250,000 customers (residents, businesses and industries) in its service area, which consists of approximately 385 square miles. Sporadically, MSD’s customers may experience backups into their homes or buildings due to sewer obstructions that result from illegal discharge of fats, oils and grease, tree roots and other illicit discharges.

The County of Maui, a political subdivision of the State of Hawaii, is comprised of the islands of Maui, Molokai, Lanai, and Kahoolawe. The County’s five wastewater reclamation facilities treat approximately 14 MGD of wastewater. On the island of Lanai, 100 percent of the recycled water is land applied; system-wide, the County’s average annual recycled water use is 30 percent with excess recycled water
disposed of via deep injection wells. Due to a variety of circumstances, the County of Maui experiences sewer backups onto private property from time-to-time.

The Metro Wastewater Reclamation District, a political subdivision of the State of Colorado, provides wastewater services to approximately 1.8 million people across a 715-square mile service area that spans much of the metropolitan Denver area. The Metro Wastewater Reclamation District owns and operates two wastewater treatment plants which collectively treat an average of 135 MGD of wastewater, with the capacity to treat up to 248 MGD. The mission of the Metro Wastewater Reclamation District is to protect the region's health and environment by cleaning water and recovering resources and executes this mission through resource stewardship, infrastructure management, process optimization, and regulatory engagement and compliance.

The Narragansett Bay Commission owns and operates the two largest wastewater treatment facilities in Rhode Island: the Field’s Point Wastewater Treatment Facility in Providence and the Bucklin Point Wastewater Treatment Facility in East Providence, serving all or
part of ten cities and towns in metropolitan Providence and the Blackstone Valley. The Commission owns 110 miles of interceptors and four miles of deep rock CSO tunnel and associated conduits, and treats over 30 billion gallons of wastewater every year. Established in 1980 by state law, the Commission has 250 employees. Repeatedly recognized for its commitment to improving water quality, robust scientific monitoring, renewable energy, and fiscal excellence, the Commission has been named a *Utility of the Future* and has won *Excellence in Management* designations from NACWA, *Best Places to Work* awards from the Providence Business News, and numerous awards from the Government Finance Officer Association.

The City and County of San Francisco, a political subdivision of the State of California, provides water and wastewater services to San Francisco and neighboring communities. The City’s San Francisco Public Utilities Commission treats roughly 65 MGD of wastewater and, as a public water utility, supplies and distributes more than 180 million gallons of drinking water each day to over 2.7 million people. San Francisco’s wastewater services include municipal sewage and rainwater collection systems, treatment plants and disposal facilities.
The San Francisco Public Utilities Commission is actively engaged in ensuring that it complies with all regulatory requirements, including those under the CWA, and in developing substantial capital improvement plans to assist the City in maintaining the reliability and high quality of the services it provides.

The City of Tacoma, a political subdivision of the State of Washington, is the third largest city in the State with a population of 198,000 people. Tacoma's sewer system is separated into two utilities, the wastewater and surface water utilities. The City's wastewater utility operates and maintains two wastewater treatment plants, 45 pumping stations and more than 700 miles of sewer pipe serving over 90,000 customer accounts. The treatment plants clean about 10 billion gallons of wastewater each year ensuring that only clean water is released into Commencement Bay. The City's surface water utility maintains more than 500 miles of public storm water pipe, 22,000 storm drains (catch basins), four pump stations and numerous detention ponds/structures. The Utilities jointly operate the Center for Urban waters, a joint venture between the Puget Sound Partnership, the University of Washington, and the City of Tacoma, whose mission is to
protect the Puget Sound and Commencement Bay through research and implementation of water quality initiatives as well as community and public education and outreach.

The City of Worcester, a political subdivision of the State of Massachusetts, is the second largest city in New England. Worcester's water infrastructure serves approximately 250,000 people in the City and surrounding towns. The Worcester sewer system includes 365 miles of sanitary sewer, 55 miles of combined sewer, 330 miles of surface drain, 32 pumping stations and a CSO treatment facility. Wastewater is treated at the regional Upper Blackstone Water Pollution Abatement District ("UBWPAD") which receives 85 percent of both its flow and operating revenue from Worcester. Portions of Worcester's sewer system in use today were constructed in the mid-1800s. Despite millions of dollars in annual capital expenditures to repair, replace and upgrade sewer system components, sewer blockages and collapses do occur and may lead to basement backups and sanitary sewer overflows. Worcester is currently subject to CWA NPDES permitting for CSOs, stormwater, drinking water treatment plant filter backwash and wastewater treatment plant discharge via UBWPAD.
The Association of Missouri Cleanwater Agencies ("AMCA") is a statewide association of 22 public water/sewer/stormwater utilities representing a significant majority of the sewer population of Missouri. AMCA strives to achieve environmentally responsible solutions to urban wet weather water quality issues in an affordable and cost-effective manner.

The Association of Ohio Metropolitan Wastewater Agencies ("AOMWA") is a statewide organization that represents the interests of Ohio's public wastewater treatment agencies. Its members include 20 large- and medium-size public utilities that construct, operate, maintain and manage public sewer collection and treatment systems throughout Ohio. Collectively, AOMWA's members successfully treat more than 300 billion gallons of wastewater each year for more than 4 million Ohioans. AOMWA's and its members' fundamental purpose is to protect the water resources on which Ohio's communities depend. Consistent with its important public role, AOMWA appears before state and federal courts to advocate on behalf of its members on issues impacting their ability to deliver efficient and cost-effective wastewater collection and treatment services to Ohio's residents and businesses.
The California Association of Sanitation Agencies ("CASA") is a nonprofit mutual benefit corporation organized and existing under the laws of the State of California. CASA is comprised of more than 110 local public agencies throughout California, including cities, sanitation districts, sanitary districts, community services districts, sewer districts, county water districts, water districts, and municipal utility districts. CASA's member agencies provide wastewater collection, treatment, water recycling, renewable energy, and biosolids management services to millions of California residents, businesses, industries, and institutions.

The Maryland Association of Municipal Wastewater Agencies ("MAMWA") is a Maryland non-profit corporation comprising 23 local governments, commissions, wastewater authorities, and districts that own and operate wastewater treatment plants throughout Maryland. MAMWA's membership serves approximately 95 percent of Maryland's sewer population, as well as business and industry throughout the State. For over 20 years, MAMWA has worked to ensure that federal and state water quality programs are scientifically robust, affordable, and cost-effective.
The Massachusetts Coalition for Water Resources Stewardship ("MCWRS") is a non-profit organization representing the interests of municipalities in Massachusetts within the world of water infrastructure. MCWRS members include over 30 municipalities and districts which own and operate wastewater, stormwater and drinking water systems for public benefit. While they continually invest in capital improvements, the municipalities and districts are also burdened by unfunded regulatory demands which often divert finances from the most pressing local needs to those with much less obvious benefits. MCWRS advocates on their behalf for the use of sound science, fiscal responsibility and a cost-beneficial approach to water resources management.

The Neuse River Compliance Association ("NRCA"), a 501(c)(3) not-for-profit corporation, is comprised of local government and private corporations that hold major NPDES discharge permits into the Neuse River basin. The local governments also hold state issued permits to operate sewage collection systems. The NRCA was formed to comply with the Neuse Management Strategy implemented in 1998 to control nitrogen delivered to the Neuse Estuary, within the Neuse River basin,
by point and nonpoint sources. The NRCA has invested over $400 million in facility improvements to meet and exceed the required nitrogen reductions. The impaired waters are not improved despite these reductions and the local governments are confronted with the potential for future extremely expensive additional nitrogen reduction requirements and need to conserve resources for that anticipated financial burden on their consumers.

The New England Water Environment Association ("NEWEA") is a dynamic 501(c)(3) organization of over 2400 highly qualified and motivated water and wastewater professionals located throughout New England, who volunteer their time, energy, and expertise in order to preserve, protect, and manage one of our most precious resources here in New England, our water environment. Our members contribute to "the friendly exchange of information and experience." NEWEA's mission is to promote education and collaboration while advancing knowledge, innovation, and sound public policy for the protection of the water environment and our quality of life. NEWEA is a not-for-profit professional member association.
The New York Water Environment Association ("NYWEA") was founded in 1929 by professionals in the field of water quality as a nonprofit educational organization, and has over 2,500 members statewide who historically have helped lead the way for state and national clean water programs. NYWEA promotes sustainable clean water quality management through science, education, and training, and has a mission to educate and assist those involved in the water environment industry in New York State. NYWEA administers the State’s wastewater operator certification program, and its members include technical and policy experts willing to offer objective scientific information and facts regarding environmental legislation.

The North Carolina Water Quality Association, Inc. ("NCWQA") is a statewide association of 39 public water, sewer, and storm water utilities throughout North Carolina, serving a significant majority of the sewered population in the state. Its primary purpose is to ensure that federal and state water quality programs are based on sound science and regulatory policy so that its members can protect public health and the environment in the most affordable and cost-effective manner possible.
The South Carolina Water Quality Association, Inc. ("SCWQA"), is a statewide association of 33 publicly-owned sewer utilities. Its primary purpose is to ensure that federal and state water quality programs are based on sound science and regulatory policy so that its members can protect public health and the environment in the most affordable and cost-effective manner possible.

The Virginia Association of Municipal Wastewater Agencies ("VAMWA") is a Virginia non-profit corporation comprising 64 local governments, wastewater authorities, and districts that own and operate wastewater treatment plants throughout Virginia. VAMWA's membership serves approximately 95 percent of Virginia's sewered population, as well as business and industry throughout the Commonwealth. For over 20 years, VAMWA has worked to ensure that federal and state water quality programs are scientifically robust, affordable, and cost-effective.

The West Virginia Municipal Water Quality Association, Inc. ("WVMWQA") is a statewide association of 26 owners and operators of POTWs. Its primary purpose is to ensure that state and federal water quality programs are based on sound science and regulatory policy so
that its members can protect public health and the environment in the most affordable and cost-effective manner possible.

The Wet Weather Partnership ("WWP") is an association of communities with combined sewer systems, similar to the City of New Haven, from across the country. The WWP seeks environmentally responsible solutions to all urban wet weather issues in a fiscally prudent manner. It is dedicated to ensuring that federal and state water quality regulatory programs are scientifically based, affordable, and cost-effective. Like virtually all other wastewater utilities, all of the WWP member utilities experience sewer backups onto private property, from time-to-time, due to a variety of circumstances.

The WaterReuse Association is a not-for-profit trade association representing the interests of POTWs, community water systems, businesses, and non-governmental organizations that engage and/or are interested in water recycling. Water recycling includes the treatment, discharge and reclamation of wastewater effluent through underground aquifers for use as potable or non-potable water supply.
SUMMARY OF THE ARGUMENT

The District Court rightly rejected Plaintiffs-Appellants’ claim that wastewater backflow from the New Haven wastewater collection system into their basements violates the Clean Water Act (“CWA” or “Act”), 33 U.S.C. §§ 1251 et seq. The CWA prohibits the addition of pollutants from a “point source” to “waters of the United States” except as authorized by a National Pollutant Discharge Elimination System (“NPDES”) permit. 33 U.S.C. §§ 1311(a), 1342(a), 1362(7), (12). As the District Court correctly recognized, and Plaintiffs-Appellants do not contest, backflow into basements is not a regulated discharge itself, even if cracks in the basement foundation allow sewage from backflows to enter the soil beneath and “eventually work[] their way to the water table beneath the properties,” as the basements themselves are not waters of the United States. See Second Amended Complaint, ¶ 28.

This Court should also reject Plaintiffs-Appellants’ attempt to mischaracterize any addition of wastewater from their basements into the groundwater as prohibited by the CWA. As explained below, groundwater is not a point source since it is not a “discernible, confined and discrete conveyance”; nor is groundwater a water of the United
States as a matter of law. Likewise, the hydrologic connection theory of liability advanced by Plaintiffs-Appellants and potential Amici Waterkeeper Alliance et al.\(^2\) is contrary to the Act's text, structure, and legislative history. The rigorous NPDES permitting requirements of the CWA, and broad attendant liability for failing to seek a permit, are appropriately reserved for point source discharges, not the diffuse migration of pollutants through groundwater alleged here. Any wastewater that may enter soil and groundwater from cracks in a basement is beyond the scope of CWA liability and permitting requirements even if it eventually reaches surface waters.

**ARGUMENT**

**PLAINTIFFS-APPELLANTS' ALLEGATIONS ARE INSUFFICIENT TO STATE A CLAIM UNDER THE CWA**

The CWA prohibits the “discharge of any pollutant” unless it complies with the statute. 33 U.S.C. § 1311(a). The CWA defines discharge of a pollutant as “any addition of any pollutant to navigable waters from any point source.” *Id.* § 1362(12). Thus, to come within the

scope of the CWA, a discharge must meet two core requirements: the discharge must be (1) from a point source, defined as “any discernible, confined and discrete conveyance,” and (2) to navigable waters, defined as “waters of the United States.” Id. §§ 1362(7), (14). Here, as the District Court correctly found, Plaintiffs-Appellants’ allegations about backflow into their basement do not plausibly meet these two requirements and do not establish a discharge of pollutants that could give rise to a claim under the CWA either directly or under a hydrologic connection theory.

POINT I

GROUNDWATER IS NOT A DISCERNIBLE, CONFINED AND DISCRETE CONVEYANCE AND, AS SUCH, CANNOT BE A POINT SOURCE

The Supreme Court has recognized that the release of pollutants from a point source may require an NPDES permit under certain circumstances even if it is not directly into navigable waters. However, those circumstances exist only if “the pollutants discharged from a point source . . . pass ‘through conveyances’ in between” the source of the pollutants and the navigable water. Rapanos v. United States, 547 U.S. 715, 743 (2006) (quoting United States v. Velsicol Chemical Corp., 438

As the District Court correctly found, the “diffuse medium” of groundwater cannot plausibly be a “point source.” 26 Crown Assoc., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., 2017 U.S. Dist. LEXIS 106989, *21-22 (D. Conn. July 11, 2017). The CWA defines point source as:

any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

33 U.S.C. § 1362(14) (emphasis added). While noting that “the definition of a point source is to be broadly interpreted’ . . . ,” this Court has emphasized that, “discernible, confined and discrete conveyance'
cannot be interpreted so broadly as to read the point source requirement out of the statute.” Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 219 (2d Cir. 2009) (quoting Dague v. City of Burlington, 935 F.2d 1343, 1354-55 (2d Cir. 1991) rev’d on other grounds 505 U.S. 557 (1992)); United States v. Plaza Health Lab., Inc., 3 F.3d 643, 646 (2d Cir. 1993). Finding that the groundwater itself is a discernible, confined and discrete conveyance erases any meaning of the definition of point source and limitations from it, and is contrary to the instruction by this Court.

District courts in the Second Circuit have declined to define point sources so broadly that they no longer resemble the types of conveyances described in the statutory definition. In Hudson Riverkeeper Fund v. Harbor at Hastings Associates, the Southern District of New York considered a claim that the trash and rainwater entering a river from a building on an industrial site constituted discharge of a pollutant from a point source. 917 F. Supp. 251, 253, 257 (S.D.N.Y. 1996). The court looked to Plaza Health Lab’s statement that “the words use to define the term [point source] and the examples given (‘pipe, ditch’ . . . etc.) evoke image of physical structures and
instrumentalities that systematically act as a means of conveying pollutants” in correctly holding that the building was not a point source. Id. at 257 (quoting Plaza Health Lab., 3 F.3d at 646); see also United States EPA ex rel. McKeown v. Port Auth., 162 F. Supp. 2d 173, 189 (S.D.N.Y. 2001) (rejecting a claim that toll booths were point sources for vehicle tailpipe emission collected in the area due to the toll booths’ presence there).

Similarly, here, the groundwater beneath Plaintiffs-Appellants’ basements is not a point source “channel” as Plaintiffs-Appellants argue. See Cordiano, 575 F.3d at 219. As the District Court correctly held, it is “basic science” that groundwater “is widely diffused by saturation within the crevices of underground rocks and soil.” 26 Crown Assoc., 2017 U.S. Dist. LEXIS 106989, *21. Pollutants that may travel through groundwater are accordingly nonpoint source pollution and not addressed by the Act. See Upstate Forever v. Kinder Morgan Energy Partners, L.P., 2017 U.S. Dist. LEXIS 85053, at *10-11 (D.S.C. Apr. 20, 2017) (“The migration of pollutants through soil and groundwater is nonpoint source pollution that is not within the purview of the CWA.”); Tri-Realty Co. v. Ursinus Coll., No. 11-5885, 2013 U.S. Dist. LEXIS
165471, at *8 (E.D. Pa. Nov. 21, 2013) (“Diffuse downgradient migration of pollutants on top of or through soil and groundwater . . . is nonpoint source pollution outside the purview of the CWA”).

To hold that the ordinary diffuse groundwater here is a point source because it was alleged to be a channel to the Long Island Sound would read the “defined, discrete conveyance” requirement out of the CWA, eliminating any statutory distinction between point and nonpoint sources and undermining Congress’ decision to leave the regulation of groundwater to local control.

**POINT II**

**GROUNDWATER IS NOT A WATER OF THE UNITED STATES**

Groundwater is not a water of the United States as a matter of law. As the District Court correctly found, Plaintiffs-Appellants’ allegations that the groundwater beneath their basements constitute waters of the United States is beyond plausible. Environmental Protection Agency (“EPA”) and U.S. Army Corps of Engineers (“Corps”) regulations do not include groundwater in the definition of waters of the United States. 40 C.F.R. § 230.3(o)(2)(v); 33 C.F.R. § 328.3(b)(5). Moreover, Circuit Courts that have considered whether groundwater
could be waters of the United States have rejected those claims. See
Rice v. Harken Exploration Co., 250 F.3d 264, 269-70 (5th Cir. 2001);
Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 964-65
(7th Cir. 1994) (The CWA does not “assert[] authority over ground
waters”).

Courts have struggled with deciding the limits of waters of the
United States, but that has been in the context of the categories of
surface waters that EPA and the Corps identified in their regulations as
being waters of the United States. See Rapanos (adjacent wetlands);
Solid Waste Agency of N. Cook County v. U.S. Army Corps of Eng’rs, 531
U.S. 159 (2001) (intrastate ponds); United States v. Riverside Bayview
Homes, Inc., 474 U.S. 121 (1985) (abutting wetlands). Groundwater is
categorically different from the surface waters at issue in these cases.

Plaintiffs-Appellants’ argument that Justice Kennedy’s fact-
specific “significant nexus” test from Rapanos should apply to this case
misses the mark. First, the text of the Act is clear that groundwater is
not a water of the United States. See Vill. of Oconomowoc Lake, 24
F.3d at 966 (J. Mannion, concurring) (action by Congress necessary to
include groundwater as water of the United States; “would take more
than a simple amendment of regulations” by EPA). Next, because EPA’s and the Corps’ regulations do not include groundwater in their definition, there are no facts that would support a finding that groundwater is a water of the United States. See San Francisco Baykeeper v. Cargill Salt Div., 481 F.3d 700, 707 (9th Cir. 2007) (“not permissible to conclude . . . that a court is authorized to conclude, when the administering agencies have reasonably ruled to the contrary, that other non-navigable bodies of water, which are not wetlands, are waters of the United States” based on their relationship to such waters) (emphasis in original).

POINT III

ALLEGATIONS THAT THE GROUNDWATER HAS A HYDROLOGICAL CONNECTION TO WATERS OF THE UNITED STATES ARE NOT SUFFICIENT TO FIND A CWA VIOLATION

Plaintiffs-Appellants try nonetheless to bring the backflows of wastewater into their basements within the scope of the CWA by arguing that leaks from their basements that reach the groundwater below fall under the Act’s jurisdiction, based on the groundwater’s alleged hydrological connection to the Long Island Sound. They suggest that this hydrological connection, which could allow pollutants to reach
waters of the U.S., is sufficient to establish a discharge of pollutants within the meaning of the CWA. Their theory is contrary to the Act’s text, framework, and legislative history, and this Court should reject it.

A. Alleging a Hydrological Connection to Waters of the United States Does Not Extend the CWA’s Reach to Include Purported Discharges to Groundwater

Plaintiffs-Appellants allege that a hydrological connection between groundwater and surface water is sufficient to confer CWA jurisdiction because of the groundwater’s potential effects on the surface water. Brief of Plaintiffs-Appellants at 42-43. The District Court correctly rejected this argument because “the passive migration of pollutants” through “a diffuse medium like ground water” is nonpoint source pollution beyond the jurisdiction of the CWA. 26 Crown Assoc., 2017 U.S. Dist. LEXIS 106989, *21-22. This is the case “even though non-point-source pollution is a major contributor to the pollution of the nation’s navigable waterways.” Id. The allegation that pollutants may enter groundwater through cracks in basements that may eventually reach a waterbody is exactly the type of diffuse nonpoint source pollution that was intentionally left beyond the scope of the CWA. See Or. Nat. Res. Council v. U.S. Forest Serv., 834 F.2d 842, 849 (9th Cir.
1987) ("Nonpoint sources, because of their very nature, are not regulated under the NPDES.").

This Court should affirm the District Court’s refusal to extend—CWA jurisdiction—in order to address a source of pollution not covered by the Act—beyond what is supported by the operative language of the statute. See Cordiano, 575 F.3d at 218 ("Our construction of the CWA 'begins with [the] statutory text and its plain meaning.'” (quoting Bonime v. Avaya, Inc., 547 F.3d 497, 503 (2d Cir. 2008)).

The CWA’s legislative history makes it clear that Congress intentionally left the regulation of discharges to groundwater to local control. Although the EPA administrator sought authority to regulate groundwater because polluted groundwater could impact surface water, both the Senate and the House instead rejected proposals for the CWA to regulate groundwater.

Specifically, EPA requested authority over groundwater to "maintain control over all the sources of pollution, be they discharged directly into any stream or through the ground water table." Water Pollution Control Legislation – 1971 (Proposed Amendments to Existing Legislation): Hearing before the Comm. on Pub. Works, 92 Cong. 230
(1971) (statement of Hon. William Ruckelshaus, Administrator, Environmental Protection Agency). But, as courts have emphasized, Congress rejected amendments that would have “provided authority to establish Federally approved standards for groundwaters which permeate rock, soil and other surface formations” because “the jurisdiction regarding groundwaters is so complex and varied from State to State.” See, e.g., Exxon Corp. v. Train, 554 F.2d 1310, 1325-29 (5th Cir. 1977) (describing the legislative history); S. Rep. No. 92-414, at 73 (1971), reprinted in S. Comm. on Public Works, 93rd Cong., Legislative History of the Water Pollution Control Act Amendments of 1972, at 1491 (1973). Indeed, Congress specifically rejected the seepage theory that Plaintiffs-Appellants espouse in this case. See 118 Cong. Rec. 10,666 (1972) (Rep. Aspin, the sponsor of a rejected amendment to regulate pollution to groundwater, argued it was needed because “[i]f we do not stop pollution of ground waters through seepage and other means, ground water gets into navigable waters, and to control only the navigable water and not the ground water makes no sense at all.” (emphasis added)). Congress thus intentionally declined to require NPDES permits for the addition of pollutants into groundwater that
eventually enter surface waters, and this Court should uphold this distinction.

Plaintiffs-Appellants’ reliance on Peconic Baykeeper, Inc. v. Suffolk County, 600 F.3d 180 (2d Cir. 2010), in support of their “hydrological connection” theory is misplaced. Peconic Baykeeper simply held that the discharge of pesticides from trucks and helicopters into navigable waters is a direct discharge from a point source. Id. at 188; see also No Spray Coal., Inc. v. City of New York, 2005 U.S. Dist. LEXIS 11097, *25 (S.D.N.Y. 2005) (pesticide application “directly over or into [surface] water” would be a discharge from a point source (emphasis added)); League of Wilderness Defenders v. Forsgren, 309 F.3d 1181, 1185 (9th Cir. 2002) (aircraft equipped with tanks spraying pesticide from mechanical sprayers “directly over covered waters” was a discharge from a point source (emphasis added)). Groundwater was not at issue in that case, and Peconic Baykeeper does not support Plaintiffs-Appellants’ theory.

The district court cases Plaintiffs-Appellants cite to support their theory are also unavailing. See Brief of Plaintiffs-Appellants at 43. First, many of these cases rely on generalized appeals to the goals of the
CWA for their finding of CWA jurisdiction over the groundwater in question. See, e.g., Wash. Wilderness Coal. v. Hecla Mining Co., 870 F. Supp. 983, 990 (E.D. Wash. 1994) (characterizing cases that adopt a hydrological connection theory as being driven by the “logic” of the goal of the CWA in adopting that theory). Such generalized appeals should be rejected because they are unsupported by the operative language and legislative history of the CWA.

Importantly, no Circuit Court has adopted such an imprecise theory of jurisdiction due to the alleged effects of groundwater on surface waters. This Court should not become the first to do so, particularly under the highly attenuated theory that Plaintiffs-Appellants advance here. They have failed to allege with any specificity how the groundwater under their basements is connected to any waters of the United States. Plaintiffs-Appellants do not point to a single case—at any level—that extends the “hydrological connection” theory to pollutant migration into diffuse groundwater with such an implausible connection to waters of the United States.

Plaintiffs-Appellants and potential Amici Curiae Waterkeeper Alliance et al. also rely on an EPA statement on an unrelated proposed
rule—in the description of a regulatory option that was never adopted—to support their “hydrologic connection” theory. Brief of Plaintiffs-Appellants at 43-44; Waterkeeper Brief at 11-14. However, the EPA statements they cite are contrary to the text, structure and legislative history of the CWA and are not the type of administrative agency statements that are accorded deference. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984) (Since Congress has directly spoken to the “precise question at issue,” the Act’s text controls).

The EPA statements that the parties erroneously claim reflect a definitive legal interpretation were made in 2001, as part of a proposal to update unrelated CWA regulations regarding Concentrated Animal Feeding Operations (“CAFOs”). EPA proposed, among various regulatory options, to require groundwater monitoring and discharge controls unless the CAFO could show that the groundwater beneath manure storage areas or stockpiles did not have a direct hydrological connection to surface waters (“Option 3”). See *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 514 (2d Cir. 2005). Plaintiffs-Appellants cite EPA’s legal analysis in support of that option, which EPA decided not to
adopt. See 66 Fed. Reg. 2960, 3015-18 (Jan. 12, 2001) (legal analysis); 68 Fed Reg. 7176, 7216 (Feb. 12, 2003) (final rule). The legal analysis, therefore, does not underpin any final EPA regulation. See Waterkeeper Alliance, 399 F.3d at 515 (upholding EPA’s decision not to adopt Option 3). As the legal analysis supporting Option 3 was not at issue in the proceeding, Waterkeeper Alliance does not speak to a hydrological connection theory generally, much less to any potential applicability to Plaintiffs-Appellants’ basements, which are wholly distinct from the CAFOs at issue in that case.

Potential Amici Curiae Waterkeeper Alliance et al. claim that the same 2001 statement by EPA, and a subsequent response to comments in EPA’s 2015 Clean Water Rule, are entitled to Chevron deference. Waterkeeper Brief at 16-17. This argument fails for two reasons. First, because the regulatory option in question was never adopted, the statement is not the product of notice-and-comment rulemaking and lacks the force of law that Chevron deference requires. United States v. Mead Corp., 533 U.S. 218, 226-27 (2001). It is particularly inappropriate to apply Chevron deference to a statement on an un-
adopted proposed rule when that rule addresses such different circumstances from the ones at issue in this litigation.3

Second, the statement is contrary to the CWA’s plain language. The statute is unambiguous that the NPDES permit program applies only where there is a discharge of a pollutant from a point source to a navigable water. 33 U.S.C. §§ 1311(a), 1362(12). Under Plaintiffs-Appellants theory of liability, there can be no discharge “from a point source” since groundwater is neither a point source or navigable water. Since Congress has directly spoken to the “precise question at issue,” the Act’s text controls. Chevron, 467 at 837.

For these reasons, this Court should affirm the District Court decision and decline to adopt Plaintiffs-Appellants’ “hydrological connection” theory of liability.

B. Applying the Hydrological Connection Theory to Ordinary Operations of POTWs Could Impose Significant Costs on Amici and the Public

By shifting away from discrete outfalls to more nebulous “connections,” adopting the hydrological connection theory here could

3 For the same reason, a response to comments is not subject to Chevron deference, contrary to the argument of potential Amici Curiae Waterkeeper Alliance et al. See Waterkeeper Brief at 14.
have serious and costly implications for municipal utilities and the permitting authorities that regulate them, in an end run around Congress’ decision not to regulate groundwater under the CWA, even groundwater with a hydrological connection to surface waters. The NPDES program is designed to be an “end-of-pipe” program where pollutants can be effectively monitored and reported to permitting authorities; Plaintiffs-Appellants are effectively asking this Court to rewrite the CWA.

Wastewater and stormwater utilities operate and maintain massive infrastructure networks that are already subject to NPDES permitting with detailed end-of-pipe requirements for their known discharge points. The unpredictable and sporadic nature of basement backflows would be unworkable additions to the discharge permits, since it would be impossible to determine in advance if any particular backup had the requisite hydrological connection to a surface water to establish CWA liability under this theory.

Moreover, even in the best run system, some backflows and leaks will occur, and subjecting these incidents to potential CWA liability could force utilities to divert limited resources from other necessary
programs protecting public health and the environment to address events with only speculative or attenuated impacts on jurisdictional waters. Any costs associated with liability for—or prevention of—backflows and leaks would ultimately be borne by ratepayers.

Finally, because backflows can also be caused by blockages or defects in the building’s own plumbing, this theory could subject private building owners to potential CWA liability and permitting requirements whenever their own systems cause basement flooding and attendant pollutant “seepage.” Indeed, there could be any number of pollutants present in basements besides sewage backflow that could filter into the groundwater beneath the building; adopting the Plaintiffs-Appellants’ hydrological connection theory could make building owners subject to CWA enforcement for any pollutants that seep through cracks in their basements.

POINT IV

NO FACTUAL INQUIRY IS NECESSARY THEREFORE DISMISSAL OF THE COMPLAINT WAS APPROPRIATE

The District Court correctly determined that a factual analysis was not necessary before dismissing the Amended Complaint. See Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) (to survive a motion to
dismiss a complaint must allege sufficient fact to “allow[] the court to draw the reasonable inference that the defendant is liable”).

Plaintiffs-Appellants cite to several inapposite cases to argue that CWA jurisdictional questions should not be resolved on motions to dismiss. Brief of Plaintiffs-Appellants at 47-51. Those cases involve allegations that could, as a matter of law, form the basis of CWA jurisdiction and therefore fact finding could have been appropriate. See, e.g., Cordiano, 575 F.3d at 218-19 (focus on whether the site contained jurisdictional wetlands). Here, by contrast, there is no plausible basis for CWA jurisdiction that would warrant a factual inquiry. As explained above, the groundwater could not itself be a “discernible, confined and discrete conveyance;” groundwater is not a water of the United States as a matter of law, and Plaintiffs-Appellants’ hydrologic connection theory of liability is contrary to the Act and not a basis to find a violation of the CWA. The District Court did not need any fact-finding to dismiss the Amended Complaint.
CONCLUSION

This Court should affirm the District Court’s decision and decline to extend the CWA’s jurisdiction to pollutants that may enter groundwater beneath Plaintiffs-Appellants’ basements.

Dated: New York, NY
November 13, 2017

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I hereby certify that this brief was prepared using Microsoft Word 2010, and according to that software, it contains 6,967 words, not including the table of contents, table of authorities, this certificate, and the cover.

_/s/ Sarah Kogel-Smucker_
SARAH KOGEL-SMUCKER*
This is a citizen enforcement action brought by Plaintiffs Kentucky Waterways Alliance and Sierra Club against Defendant Kentucky Utilities Co. ("KU"). [Record No. 1] The plaintiffs allege that KU’s handling, storage, treatment, transportation, and disposal of coal combustion residuals at the E.W. Brown Generating Station presents an imminent and substantial endangerment to human health and the environment in violation of the Resource Conservation and Recovery Act ("RCRA"), and has led to the unpermitted discharge of pollutants into navigable waters in violation of the Clean Water Act ("CWA"). [Id.] KU has moved to dismiss the Complaint on the grounds that the plaintiffs do not have standing to bring an RCRA claim, that the RCRA claim is barred by the abstention doctrine of Burford v. Sun Oil, 319 U.S. 315 (1943). The defendant also contends that the plaintiff’s CWA claim fails as a matter of law. [Record No. 16] For the reasons that follow, the motion to dismiss will be granted.
The E.W. Brown Generating Station ("E.W. Brown") is a three unit coal-fired power plant owned and operated by KU. [Record No. 1, ¶¶ 36-37] It is located on the west side of the Dix River, beside the hydroelectric dam that created Herrington Lake in Harrodsburg, Kentucky. It has been in operation since the 1950s. [Id. ¶¶ 37-38] E.W. Brown generates coal combustion residuals ("CCR"), consisting principally of fly ash (fine, powdery coal ash particles that are carried up the smokestack by exhaust gases) and bottom ash (larger coal ash particles that fall to the bottom of the furnace) as a result of the coal burning process. [Id. ¶ 38] To dispose of the CCR waste, KU has historically transported it by water through a sluice system to coal ash ponds known as "settling ponds" or "treatment ponds." [Id. ¶ 40] The heavier particles settle at the bottom of the ponds, while the more buoyant particles are channeled out through permitted discharges into Herrington Lake. [Id.]

An unlined area known as the Main Ash Pond served as the primary settling pond for many years. [Id. ¶ 40] It was built in the 1950s by damming a valley leading to Herrington Lake, and was twice expanded to accommodate the growing mass of CCR. [Id.] It now has a surface area of one hundred and fourteen acres and contains approximately six million cubic yards of CCR. [Id.] KU switched the sluicing operation from the Main Ash Pond to an Auxiliary Ash Pond in 2008, which was constructed as a lined temporary settling pond until the Main Ash Pond could be expanded again. [Id.] The Auxiliary Ash Pond is expected to be full by 2019. [Record No. 16, Exhibit 1, 1-1]

Due to surrounding land use, KU determined that further expansion of the CCR waste disposal area would be undesirable. [Record No. 16, p. 3] Instead, KU sought to continue to use the land occupied by the Main Ash Pond for CCR disposal by capping the pond and
installing a special waste landfill located physically on top of it. [Record No. 1, ¶ 41] Newly generated CCR waste would be dried and conditioned in a CCR treatment area and then deposited in the landfill. [Id.; Record No. 16, Exhibit 1, l-1]

KU submitted a landfill permit application to the Kentucky Division of Waste Management ("KDWM") in 2011, and was required to submit a groundwater assessment plan ("GWAP") as part of the application process. [Record No. 16, p. 3, Exhibit 1] The GWAP was designed to provide a hydrogeologic characterization of the site, evaluate groundwater quality conditions, and assess water quality in the surface water bodies receiving groundwater discharges from the site. [Id. at Exhibit 1, l-1]

The Sierra Club submitted public comments in opposition KU’s landfill application. It argued that the GWAP revealed that the settling ponds were contaminating the groundwater at E.W. Brown and represented a danger to human health and the environment. [Record No. 16, Exhibit 5] The Sierra Club also believed that further study was necessary, in part, because the settling ponds are located over a fractured and permeable karst region which makes the water flow less predictable and the area more vulnerable to contamination. [Id. at 5-6] And despite the limited data, the Sierra Club claimed that initial testing indicated that the groundwater was likely contaminated with boron, sulfate, total dissolved solids ("TDS"), selenium, arsenic, cadmium, lead, and other coal ash metals. [Id. at 7-8]

The Sierra Club also alleged that contaminated groundwater was discharging via a network of springs into Herrington Lake, a major recreational and fishing area. [Id. at 3] As a result, the Sierra Club asked the KDWM to: (i) deny the landfill permit application until the existing contamination was more delineated and a corrective action plan was developed and implemented; and (ii) require KU to construct the landfill elsewhere on-site or off-site. [Id. at
1-2] KDWM reviewed the application, the GWAP, and the public comments, and issued a permit to construct the landfill in July 2014. [Record No. 16, Exhibit 3] However, in response to the Sierra Club’s comments, it required KU to submit a groundwater remedial action plan (“GWRAP”) before it would issue a permit to operate the landfill. [Record No. 16, p. 4]

The GWRAP noted that groundwater flow through the watershed containing the CCR ponds emerges in the Briar Patch and HQ Springs, which discharge into Herrington Lake at HQ Inlet via HQ Stream. [Record No. 16, Exhibit 1, 2-3, 2-5] Arsenic was detected in Briar Patch and HQ Springs, and concentrations of calcium, chloride, magnesium and sulfate were generally higher in that area. [Id. at 2-7] However, according to the GWRAP, KU’s ongoing modifications, including closing and dewatering the Main Ash Pond, capping it with low permeability materials, and converting to dry CCR disposal in the special waste landfill, would help to ameliorate this condition because they would “significantly reduce the amount of contact between water and CCR, and therefore reduce the mobilization of CCR constituents in water with the potential to be discharged to the environment.” [Id. at 2-9, 2-10]

Still, the GWRAP noted that “[s]ome flow of natural groundwater through the existing CCR in the Main Pond is expected to continue over time, as the natural flow of water that existed before the Pond was filled with CCR continues into the buried valley.” [Id. at 2-10] As a result, KU stated that it would work with the Division of Water “to develop a comprehensive approach to risk management that addresses the totality of surface water impacts from both groundwater and surface water discharges.” [Id. at 3-1] In the meantime, it proposed a series of interim remedial actions designed to reduce the total mass of CCR constituents entering Herrington Lake via the groundwater flow system. [Id.]
The Sierra Club objected to the GWRAP, arguing that “the interim remedial measures . . . while all appropriate and necessary, do very little to address the flow of contaminants from the ash ponds into Lake Herrington and in all other directions from the ash ponds.” [Record No. 16, Exhibit 10, Attachment 1, p. 11] In its view, KU should have been required to conduct a more complete characterization of the groundwater contamination at the site, and then collect and treat the contaminated water. [Id.] However, after reviewing the public comments, the KDWM approved the GWRAP in October 2015. [Record No. 16, Exhibit 11]

Shortly thereafter, the plaintiffs sent a notice of intent to file a citizen suit under the Clean Water Act (“CWA”) to KU, the United States Environmental Protection Agency (“EPA”), and the Kentucky Department of Environmental Protection (“KDEP”), a division of the Kentucky Energy and Environment Cabinet (the “Cabinet”). [Record No. 1, Exhibit A] The notice alleged that KU has discharged and continues to discharge pollutants into the waters of the United States without a permit in violation of the CWA. [Id. at 1] According to the notice, these discharges originate from both the now-buried Main Ash Pond and the Auxiliary Ash Pond, and migrate through groundwater which emerges in HQ and Briar Patch Springs and discharges into HQ Stream, a jurisdictional surface water that flows into Herrington Lake at HQ Inlet. [Id. at 2-3]

The plaintiffs also sent a notice of intent to file a citizen suit under the Resource Conservation and Recovery Act (“RCRA”) on October 26, 2016. [Record No. 1, Exhibit C] The RCRA notice alleged that KU’s handling, storage, treatment, transportation, and/or disposal of CCR waste at E.W. Brown has resulted in contamination in the ground and surface waters, presenting an imminent and substantial endangerment to human health and the environment. [Id. at 2] It also alleged that KU’s remedial actions were inadequate to abate..."
the risk of endangerment because they failed to characterize the full extent of contamination, failed to adequately monitor ground and surface water quality, and failed to halt, abate, or otherwise adequately address the ongoing contamination. [{id at 4}]

After receiving the RCRA notice, the Cabinet reviewed the available data regarding the ground and surface water quality near E.W. Brown and conducted additional surface water testing. [Record No. 16, Exhibit 15, ¶ 7-8] It determined that water samples collected from HQ and Briar Patch Springs identified selenium levels above Kentucky’s selenium water criterion, and fish samples collected from Herrington Lake adjacent to HQ Inlet contained selenium in excess of Kentucky’s whole body fish tissue selenium criteria. [Record No. 16, Exhibit 14] Based on these results, the Cabinet issued a notice of violation (“NOV”) to KU alleging that E.W. Brown “directly or indirectly discharged, or caused or permitted to be discharged, a pollutant or substance that has caused or contributed to pollution of a water of the Commonwealth” in violation of Kentucky Revised Statutes (“KRS”) 224.70-110, and aesthetically or otherwise degraded surface waters in violation of Kentucky Administrative Regulations (“KAR”) Title 401, Chapter 10:031, Section 2. [{id}]

KU and the Cabinet entered into an Agreed Order on January 30, 2017, to resolve the NOV and to “address any threat or potential threat to human health and the environment associated with management and storage of CCR at [the] E.W. Brown Station.” [Record No. 16, Exhibit 15, ¶ 12] The Agreed Order required KU to continue to implement the GWAP, the GWRAP, and the Main Ash Pond Closure Plan previously approved by the Cabinet, and imposed a $25,000 civil penalty for the alleged violations. [{id, ¶ 13, 22}] Additionally, KU was required to submit two Corrective Action Plans (“CAPs”) “detailing the steps KU has taken and will take to address the matters raised in this Agreed Order and the notice of violation
dated January 11, 2017.” [Id. ¶¶ 13-15] The first CAP was to investigate the risks associated with the contamination, its potential sources, and to consider additional remedial actions. [Id. ¶ 14] The second CAP was to address the discharge of ash transport water at the Auxiliary Ash Pond. [Id.] The CAPs require the Cabinet’s approval, and are subject to a thirty day public comment period. [Id. ¶¶ 16, 19]

KU submitted its CAP addressing the groundwater contamination on April 14, 2017, which called for groundwater studies consisting of field sampling and site characterization, a human health risk assessment, and an ecological risk assessment. [Record No. 16, Exhibit 16; id. at p.12 n.7] The proposed studies may last through 2019, at which time KU would evaluate and implement remedial actions as warranted. [Record No. 16, Exhibit 16, p. 40-42]

The plaintiffs filed this action on July 27, 2017, alleging violations of the CWA and the RCRA. [Record No. 1] The plaintiffs' CWA claim alleges that KU is discharging and has discharged pollutants from the Main Ash Pond and the Auxiliary Ash Pond to HQ Stream, a navigable water, without a permit, causing irreparable harm to the plaintiffs' members and their communities. [Id. ¶¶ 70-78] These pollutants allegedly include arsenic, lead, selenium, and cadmium, which pose well-documented environmental and health risks. [Id. ¶ 43] The plaintiffs' RCRA claim contends that KU has contributed and is contributing to the handling, storage, treatment, transportation, or disposal of solid waste at E.W. Brown that may present an imminent and substantial endangerment to human health and the environment. [Id. ¶¶ 79-85] The plaintiffs claim that the remedial steps taken by KU are inadequate, and that their members will suffer irreparable harm unless KU eliminates the endangerment. [Id.]

KU argues that the Complaint should be dismissed because: (i) the Cabinet is already redressing the harms alleged in the Complaint, depriving the plaintiffs of standing to bring an
RCRA claim; (ii) Burford abstention applies because these matters are the subject of the Cabinet’s ongoing regulatory proceedings; and (iii) the plaintiffs’ CWA claim fails as a matter of law because the movement of contaminants from groundwater to surface water is not subject to regulation under the CWA. [Record No. 16, p. 2]

II.

KU’s argument that the plaintiffs’ RCRA claim should be dismissed for lack of standing contests this Court’s subject matter jurisdiction under Federal Rule of Civil Procedure 12(b)(1). Lyshe v. Levy, 854 F.3d 855, 857 (6th Cir. 2017) (citations omitted). A 12(b)(1) motion “can either attack the claim of jurisdiction on its face, in which case all allegations of the plaintiff must be considered as true, or it can attack the factual basis for jurisdiction, in which case the trial court must weigh the evidence and the plaintiff bears the burden of proving that jurisdiction exists.” DLX, Inc. v. Kentucky, 381 F.3d 511, 516 (6th Cir. 2004). KU’s standing argument is based on administrative records that are not referenced in or attached to the Complaint, but are attached to KU’s motion to dismiss. The Court may consider these records to determine whether it has jurisdiction over this case. See Ohio Nat. Life Ins. Co. v. United States, 922 F.2d 320, 325 (6th Cir. 1990) (explaining that when a 12(b)(1) motion hinges on facts outside of the Complaint, “a trial court has wide discretion to allow affidavits, documents and even a limited evidentiary hearing to resolve disputed jurisdictional facts”).

KU’s argument that the plaintiffs’ CWA claim should be dismissed contests the sufficiency of the Complaint under Federal Rule of Civil Procedure 12(b)(6). A 12(b)(6) motion requires the Court to determine whether the Complaint alleges “sufficient factual matter, accepted as true, to state a claim to relief that is plausible on its face.” Ashcroft v. Iqbal, 556 U.S. 662, 678 (2009) (quoting Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 -8-
The plausibility standard is met “when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Id.* (citing *Twombly*, 550 U.S. at 556). Although the Complaint need not contain “detailed factual allegations” to survive a motion to dismiss, the “plaintiff’s obligation to provide the grounds of his entitlement to relief requires more than labels and conclusions, and a formulaic recitation of the elements of a cause of action will not do.” *Twombly*, 550 U.S. at 555 (internal quotation marks and citation omitted); see also *Iqbal*, 556 U.S. at 678 (“[T]he tenet that a court must accept as true all of the allegations contained in a complaint is inapplicable to legal conclusions.”).

In general, where “matters outside the pleadings are presented to and not excluded by the court, the motion will be treated as one for summary judgment under Rule 56” and the “parties must be given a reasonable opportunity to present all the material that is pertinent to the motion.” Fed. R. Civ. P. 12(d). However, a court may consider “exhibits attached to the complaint, public records, items appearing in the record of the case and exhibits attached to the defendant’s motion to dismiss so long as they are referred to in the complaint and are central to the claims therein without converting the motion to one for summary judgment.” *Rodigio, L.L.C. v. Twp. of Richmond*, 641 F.3d 673, 680-81 (6th Cir. 2011) (internal quotation marks and citation omitted).

**III.**

The RCRA is “a comprehensive regulatory system designed to promote the safe handling of solid and hazardous wastes.” *Coal. for Health Concern v. LWD, Inc.*, 60 F.3d 1188, 1190 (6th Cir. 1995). Like similarly-structured environmental laws, the RCRA is “a model of cooperative federalism.” *Ellis v. Gallatin Steel Co.*, 390 F.3d 461 (6th Cir. 2004).

In addition to state and federal enforcement, the RCRA’s citizen suit provision provides that “any person” may commence a civil action against any person “who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6972(a)(1)(B). This provision confers the Court with jurisdiction “to restrain any person who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste . . . . to order such person to take such other action as may be necessary, or both . . . .” Id. § 6972(a).

“[T]o strike a balance between encouraging citizen enforcement of environmental regulations and avoiding burdening the federal courts with excessive numbers of citizen suits,” Congress limited the scope of the citizen suit provision. Hallstrom v. Tillamook Cnty., 493 U.S. 20, 29 (1989). A private party may not bring suit under § 6972(a)(1)(B) without giving ninety days’ notice to the Administrator of the EPA, the State in which the alleged endangerment may occur, and the potential defendants. Meghrig, 516 U.S. at 486 (citing 42 U.S.C. §§ 6972(b)(2)(A)(i)-(iii)). Further, no citizen suit can proceed if either the EPA or the State has commenced, and is diligently prosecuting, a separate enforcement action. Id. (citing -10-
42 U.S.C. §§ 6972(b)(2)(B) and (C)). These limitations prevent unnecessary citizens’ suits by allowing government agencies to take responsibility for enforcing environmental regulations, and by giving the alleged violator an opportunity to comply with the RCRA. *Hallstrom*, 493 U.S. at 29 (quotation marks and citations omitted). As the Sixth Circuit has explained, “[t]he notice provisions demonstrate that Congress has authorized citizen suits only when environmental officials ‘fail to exercise their enforcement responsibility’ and has provided an ‘interstitial’ role for private parties in enforcing the statute.” *Ellis*, 390 F.3d at 475 (quoting *Gwaltney*, 484 U.S. at 60-61).

As with every lawsuit filed in federal court, plaintiffs seeking to bring an RCRA citizen suit must also satisfy Article III of the Constitution’s “case” or “controversy” limitation. *See Envl. Conservation Org. v. City of Dallas*, 529 F.3d 519, 526 (5th Cir. 2008). “The doctrine of standing is one of several doctrines that reflect this fundamental limitation.” *Summers v. Earth Island Inst.*, 555 U.S. 488, 493 (2009). An association has standing to bring suit on behalf of its members when: “[(i)] its members would otherwise have standing to sue in their own right, [(ii)] the interests at stake are germane to the organization’s purpose, and [(iii)] neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2009) (citing *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343 (1977)). An association member has standing to sue in its own right when it can demonstrate that: “(1) it has suffered an ‘injury in fact’ that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury
will be redressed by a favorable decision.” *Id.* at 180-81 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992)).

KU does not dispute that the plaintiffs provided ninety days’ notice to KU, the EPA, and the KDEP, and that neither the EPA nor the KDEP has commenced, or is diligently prosecuting, a separate enforcement action. [Record No. 1, ¶¶ 13-15, Attachment C] Likewise, KU does not contest the plaintiffs’ assertion that some of their members live near and recreate in and around Herrington Lake, and that those members have suffered an “injury in fact” that is “fairly traceable” to KU’s alleged conduct as KU’s alleged conduct may endanger their health, that of their families and communities, and their environment (including the fish, other aquatic life, and wildlife they observe, consume, and enjoy). [id. ¶¶ 19-21; Record No. 27, p. 16-17]

To redress these injuries, the plaintiffs ask the Court to declare that KU’s past and present handling, storage, treatment, transportation or disposal of CCR at E.W. Brown may present an imminent and substantial endangerment to health or the environment in violation of the RCRA. [Record No. 1, p. 21 (Prayer for Relief (d))] They also seek an injunction ordering KU to take all actions necessary to eliminate the endangerment to health and the environment, including an order “to determine and implement the most expeditious, cost-effective, and environmentally sound means to eliminate the ongoing migration of CCR pollutants into groundwater, surface water, and sediments; and to fully abate the endangerment associated with CCR pollutants that have already migrated into groundwater, surface water, and sediments near the site.” [id. (Prayer for Relief (e))] Although the plaintiffs decline to state in advance of discovery exactly what injunctive relief would be appropriate, they suggest that in addition to the studies and recommendations for remedial measures required by the Cabinet,
the Court could redress their members’ injuries by ordering KU to excavate the six million cubic yards of coal ash buried under the special waste landfill, or to clean up the contamination in Herrington Lake. [Record No. 1, p. 21; Record No. 27, p. 20]

KU argues that the plaintiffs’ members’ alleged injuries are not “redressable” by this Court because they “seek[] to remedy the same conditions the Cabinet and KU are addressing in the [GWRAP], Agreed Order and the CAPs—impacts to groundwater and surface water at and around E.W. Brown resulting from plant operations.” [Record No. 16, p. 15] In its view, “[a] citizen suit plaintiff lacks standing to seek injunctive relief covering the same ground as obligations imposed by a regulatory agency.” [Record No. 28, p. 2] The Agreed Order is designed to “address any threat or potential threat to human health and the environment associated with management and storage of CCR at [the] E.W. Brown Station,” and requires KU to continue to implement the GWRAP, GWAP, and Main Ash Pond Closure Plan previously approved by the Cabinet, and to pay a $25,000 civil penalty. [Id., Exhibit 15, ¶¶ 12, 13, 22] In light of these agency-imposed remedial actions, KU argues that the Court cannot award further injunctive relief. [Record No. 16, p. 15]

“[A] plaintiff must demonstrate standing separately for each form of relief sought.” Laidlaw, 528 U.S. at 181. As a result, the plaintiffs bear the burden of demonstrating that the Court could grant the relief requested and that doing so would remedy their members’ alleged injuries. See Lujan, 504 U.S. at 561. Here, the plaintiffs seek declaratory and injunctive relief.

Federal courts have explicitly held that “declaratory relief is not an appropriate basis to support citizen suit standing,” Little v. Louisville Gas & Elec. Co., 33 F. Supp. 3d 791, 802 (W.D. Ky. 2014), except in “special circumstances . . . such as when a plaintiff is threatened with potential enforcement action.” WildEarth Guardians v. Pub. Serv. Co. of Colo., 690 F.3d -13-
1174, 1191 (10th Cir. 2012). See also Nguyen ex rel. United States v. City of Cleveland, 1:09-cv-452, 2016 WL 1031096 (N.D. Ohio March 15, 2016). As a result, the plaintiffs’ claim for declaratory relief cannot establish standing to bring an RCRA citizen suit.

The plaintiffs’ claim for injunctive relief is also insufficient to confer standing in this matter. In Ellis, the Sixth Circuit held that the district court committed reversible error by awarding injunctive relief when consent decrees between the defendant and the EPA were already addressing the injuries alleged in the complaint. Ellis, 390 F.3d 476. The court noted that “the decrees were just three months old when the district court entered its injunction, meaning that the remedial requirements imposed by the decrees either had just been completed or had not yet been completed at all.” Id. Further, the court was rightly concerned that the plaintiffs “not only sought to obtain an injunction on the same terms as the consent decrees, but they also sought to obtain relief on ‘more stringent terms than those worked out by the EPA.’” Id. at 477 (quoting EPA v. City of Green Forest, Arkansas, 921 F.2d 1394, 1403-04 (8th Cir. 1990)). As the Sixth Circuit explained,

[s]uch second-guessing of the EPA’s assessment of an appropriate remedy—a mere three months after the entry of the decrees—fails to respect the statute’s careful distribution of enforcement authority among the federal EPA, the States and private citizens, all of which permit citizens to act where the EPA has ‘failed’ to do so, not where the EPA has acted but has not acted aggressively enough in the citizen’s view.

Id. (quoting Gwaltney, 484 U.S. at 376). Courts in this circuit have applied Ellis in the standing context. See Little, 33 F. Supp. 3d at 803. When injunctive relief is not available under Ellis, the redressability requirement is not satisfied, and the plaintiff cannot demonstrate that it has standing to seek that form of relief. Id.; see also Laidlaw, 528 U.S. at 181.
All of the factors that made injunctive relief inappropriate in *Ellis* are present in this case. The plaintiffs brought the same concerns that form the basis of this action before the Cabinet during state regulatory proceedings. [See Record No. 1, Exhibits A-C; Record No. 16, Exhibits 5 and 10.] The Cabinet addressed the plaintiffs’ concerns, in part, by requiring KU to submit a GWRAP and two CAPs, and to pay a $25,000 penalty. [See Record No. 16, Exhibits 1, 15, 16, 19.] After receiving the plaintiffs’ RCRA notice, KU and the Cabinet entered into an Agreed Order which was based on the same groundwater studies that underlie this action and was designed to “address any threat or potential threat to human health and the environment associated with management and storage of CCR at [the] CCR Brown Station.” [Record No. 16, Exhibit 15, ¶¶ 4-12] In line with the plaintiffs’ previous demands for further study, the CAPs call for extensive groundwater studies and require KU to recommend remedial actions when the studies are complete. [See Record No. 16, Exhibits 5, 10, 16, 19.]

The plaintiffs filed this action just three months after the Cabinet and KU entered into the Agreed Order. [Compare Record No. 1 with Record No. 16, Exhibit 16.] The studies required by the CAPs have not been completed, and KU has not yet made the required recommendations of what remedial actions are warranted. [See Record No. 16, Exhibit 16.] As a result, “the remedial requirements imposed by the [Agreed Order] either ha[ve] just been completed or ha[ve] not yet been completed at all.” *Ellis*, 390 F.3d 476.

Nonetheless, the plaintiffs claim that the remedial actions required by the Cabinet are “unnecessary, flawed, and unaccompanied by any commitment to implement effective remedial action,” and that therefore the Court could redress their members’ injuries by issuing more appropriate relief, such as ordering KU to excavate the buried coal ash or to clean up the pollution in Herrington Lake. [Record No. 27, p. 19-20] This amounts to little more than an
invitation to "second-guess[]" the state regulatory authority and to award relief on "more stringent terms" than it has imposed.  Id. at 477 (quotation omitted).  Accepting this invitation would "fail[] to respect the statute's careful distribution of enforcement authority among the federal EPA, the States and private citizens, all of which permit citizens to act where the EPA has "failed" to do so, not where the EPA has acted but has not acted aggressively enough in the citizen's view."  Id (quotation omitted).  As a result, the requested injunctive relief is not available to redress the alleged injuries, and cannot support a finding of standing. Accordingly, the plaintiffs' RCRA claims will be dismissed for lack of jurisdiction, as the plaintiffs' members' lack standing to bring an RCRA citizen suit at this time.¹

IV.

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."  33 U.S.C. § 1251(a).  To further this goal, the CWA provides that the "discharge of any pollutant by any person shall be unlawful," unless authorized by a permit under the National Pollutant Discharge Elimination System ("NPDES") or another statutory exception.  33 U.S.C. §§ 1311(a); 1342. The term "discharge of a pollutant" means, as relevant here, "any addition of any pollutant to navigable waters from any point source . . . ." 33 U.S.C. § 1362(12) (emphasis added). The term "pollutant" includes,

¹ Because the Court finds that the plaintiffs lack standing to bring an RCRA claim, it need not consider the defendant’s Burford abstention argument. However, the Court notes that the Ellis court’s concerns regarding the distribution of enforcement authority among the EPA, states, and citizens are similar to the considerations of federalism and comity that underlie the Burford abstention doctrine, and courts in this circuit have abstained under Burford in circumstances similar to those presented in this case. See, e.g., Coal. for Health Concern, 60 F. 3d at 1189; Ellis, 390 F.3d at 480; Ohio Valley Envtl. Coal. v. River Cities Disposal, LLC, 15-cv-47, 2016 WL 1255717, at *5 (E.D. KY Mar. 29, 2016).
among other things, “solid waste,” “chemical wastes,” and “industrial waste” discharged into water. Id § 1362(6). A “point source” is “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharge.” Id. § 1362(14). The term “navigable waters” means “the waters of the United States, including the territorial seas.” Id. § 1362(7).

The plaintiffs contend that KU has violated the CWA by adding pollutants to HQ Stream from the Main Ash Pond and the Auxiliary Ash Pond without an NPDES permit. [Record No. 1, ¶¶ 70-78] KU possesses a permit authorizing it to make regulated discharges from the Main Ash Pond and the Auxiliary Ash Pond through an external outfall designated as Outfall 001. [Id. ¶¶ 44-47] However, the plaintiffs claim that, in addition to these permitted discharges, KU has made and continues to make unpermitted discharges into HQ stream, a surface water body within the jurisdiction of the CWA. [Id. ¶¶ 48-49] These discharges allegedly result from naturally flowing groundwater, which is infiltrating the settling ponds and transporting the CCR pollutants into HQ Stream by way of the hydrologically connected HQ and Briar Patch Springs. [Id. ¶¶ 50-56, 61-67]

KU has moved to dismiss on the grounds that the plaintiffs have not alleged that pollutants are conveyed directly from the Main or Auxiliary Ash Pond to HQ stream, and to the extent that pollutants enter navigable waters after migrating through groundwater, the pollution is non-point source pollution, which cannot form the basis of a CWA citizen suit. [Record No. 16, p. 27] The plaintiffs respond that they have sufficiently alleged that the groundwater is “hydrologically connected” to HQ Spring, and that “discharges of pollutants to navigable waters via a discrete, hydrologically-connected conduit are governed by the CWA.”
Thus, the issue before the Court is whether discharges into groundwater that is hydrologically connected to navigable waters constitute the “addition of any pollutant to navigable waters from any point source” under the CWA. 33 U.S.C. § 1362(12). Other district courts have split on this question. See, e.g., Tenn. Clean Water Network v. Tenn. Valley Auth., 3:15-cv-424, 2017 WL 3476069, *42-43 (M.D. Tenn. August 4, 2017) (collecting cases).

There are three distinct reasons that hydrologically connected groundwater might be subject to regulation under the CWA. First, hydrologically connected groundwater could itself constitute a “navigable water” under the CWA such that an adding a pollutant to hydrologically connected groundwater would constitute the discharge of a pollutant “to navigable waters.” Second, hydrologically connected groundwater could constitute a “point source” under the CWA such that discharging a pollutant to a “navigable water” from hydrologically connected groundwater would constitute a discharge “from any point source.” Third, hydrologically connected groundwater could constitute a non-point source conveyance that falls within the CWA even though it is itself neither a point source nor a navigable water.

The plaintiffs distance themselves from the view that hydrologically connected groundwater itself constitutes a “navigable water.” [See Record No. 27, p. 36.] And for good reason. Courts have overwhelmingly found that groundwater, even if hydrologically connected to navigable waters, is not itself a navigable water under the CWA. See, e.g., Rice v. Harken Expl. Co., 250 F.3d 264, 269 (5th Cir. 2001) (“[G]round waters are not protected waters under the CWA.”); Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994) (“Neither the Clean Water Act nor the EPA’s definition asserts authority over ground waters, just because these may be hydrologically connected with surface
waters.”). (citations omitted); *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014) (“Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that ground water is eventually or somehow ‘hydrologically connected’ to navigable surface waters.”); *Copper Indus., Inc. v. Abbott Labs.*, No. 93-CV-193, 1995 WL 17079612, *4 (W.D. Mich. May 5, 1995) (“[T]he fact that these ground waters are hydrologically connected to some surface waters is insufficient to transform this case to a [CWA] cause of action.”).

The reasons for this are three-fold. First, considering ground waters to be “ navigable waters” would strain the language of the CWA. *See Vill. of Oconomowoc Lake, 24 F.3d at* 965 (“[W]e are confident that the statute Congress enacted excludes *some* waters, and ground waters are a logical candidate.”). Second, the legislative history of the CWA demonstrates that Congress extensively considered whether to extend the CWA to groundwater, and decided against it. *See Exxon Corp. v. Train, 554 F.2d 1310, 1325-29 (5th Cir. 1977)* (discussing the legislative history). The Senate Committee on Public Works recognized “the essential link between ground and surface waters and the artificial nature of any distinction.” *Id. at 1325* (quoting S. Rep. No. 414, 92d Cong., 1st Sess. 73 (1971)). But after a “heated debate,” Congress rejected an amendment that would have extended the CWA to groundwater. *Id. at 1327-29*. Instead, Congress determined that regulation of groundwater should be left to the states. *Id. at 1325-29; see also Kelley ex rel. Mich. v. United States, 618 F. Supp. 1103, 1107* (W.D. Mich. 1985).

Third, in *Rapanos v. United States, 547 U.S. 715 (2006)*, the Supreme Court “eschewed a broad interpretation of ‘navigable waters’ and repeatedly cautioned against ‘attempting to expand the definition of navigable waters to encompass virtually all water, regardless of its

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actual navigability, location, or consistency of flow.”” *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 252 F. Supp. 3d 488, 497-98 (quoting *Chevron U.S.A., Inc. v. Apex Oil Co.*, 113 F. Supp. 3d 807, 817 (D. Md. 2015)). Accordingly, the Court finds that hydrologically connected groundwater does not itself constitute navigable waters. This conclusion finds support in “both the language and legislative history of the CWA and in the Supreme Court’s decision in *Rapanos.*” *Cape Fear River Watch* , 25 F. Supp. 3d at 810.

However, hydrologically connected groundwater could still be subject to regulation under the CWA if the discharge of a pollutant from hydrologically connected groundwater into navigable waters constituted a discharge from a “point source.” Congress “drew a distinct line” between the discharge of pollutants from point sources and non-point sources in the CWA. *Or. Nat’l Res. Council v. United States Forest Serv.*, 834 F.2d 842, 849 (9th Cir. 1987). Discharges from point sources are subject to regulation under the NPDES, whereas the regulation of non-point sources is left to the states. *Id.* The Court must respect the line drawn by Congress, and cannot extend the CWA’s NPDES requirements to non-point source pollution. “This is true even though non-point-source pollution is a major contributor to the pollution of the nation’s waters.” *26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth.* , 2017 WL 2960506, at *8 (D. Conn. July 11, 2017) (citing *Or. Nat’l Res. Council*, 834 F.2d at 849). Courts are divided on whether hydrologically connected groundwater qualifies as a point source under the CWA. *Compare id., with Hawai’i Wildlife Fund v. City of Maui*, 24 F. Supp. 3d 980, 995 (D. Haw. 2014). The undersigned concludes that it is not.

The CWA defines a “point source” as “any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well,
discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharge.” 33 U.S.C. § 1362(14).

Non-point source pollution, by contrast “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.” Cordiano v. Metacon Gun Club, Inc., 575 F.3d 199, 220 (2d Cir. 2009) (quoting EPA Office of Water, Nonpoint Source Guidance 3 (1987)).

Groundwater is, by its nature, “a diffuse medium” and not the kind of discernible, confined and discrete conveyance contemplated by the CWA’s definition of “point source.” See 26 Crown Assocs., 2017 WL 2960506, at *8 (“It is basic science that ground water is widely diffused by saturation within the crevices of underground rocks and soil.”). As a result, the discharge of a pollutant from hydrologically connected groundwater to a navigable water does not constitute the discharge of a pollutant from a point source to a navigable water under the CWA. See id.; Upstate Forever v. Kinder Morgan Energy Partners, L.P., 252 F. Supp. 3d 488, 494 (D.S.C. 2017) (“The migration of pollutants through soil and groundwater is nonpoint source pollution that is not within the purview of the CWA.”).

The final rationale for subjecting hydrologically connected groundwater to the CWA’s permitting requirement is that if there is a close hydrologic connection between groundwater and a navigable water, then the discharge of a pollutant from a point source through the hydrologically connected groundwater to a navigable water could constitute the addition of a pollutant to a navigable water from a point source even though the groundwater itself is neither a point source nor a navigable water. The EPA has sometimes expressed this view. See, e.g., Amendments to the Water Quality Standards Regulations that Pertain to Standards on Indian Reservations, Final Rule, 56 Fed. Reg. 64876, 64892 (Dec. 12, 1991) (“[T]he affected ground
waters are not considered “waters of the United States” but discharges to them are regulated because such discharges are effectively discharges to the directly connected surface waters.”).

Additionally, some courts have held that coal ash ponds qualify as “point sources” and that the discharge of pollutants from a point source ash pond to a navigable water via hydrologically connected groundwater may be subject to the CWA’s permit requirements even if the groundwater itself is neither a navigable water nor a point source, so long as there is a “direct” hydrologic connection. See Tenn. Clean Water Network, 2017 WL 3476069, *42-43; Sierra Club v. Va. Elec. & Power Co., 247 F. Supp. 3d 753 (E.D. Va. 2017).

Adopting this theory would be inconsistent with the text and structure of the CWA. The primary problem with this rationale is that, if adopted, “any non-point-source pollution (such as ordinary surface run-off from the land into navigable waters) could invariably be reformulated as point-source pollution by going up the causal chain to identify the initial point sources of the pollutants that eventually ended up through non-point sources to come to rest in

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2 Although an agency’s interpretation of a statute that it administers is entitled to great deference, see Chevron U.S.A. Inc. v. Nat. Res. Def. Council, 467 U.S. 837, 843–44 (1984), Chevron deference does not apply in this case because the “EPA has offered no formal or consistent interpretation of the CWA that would subject discharges to groundwater to the NPDES permitting requirement.” Umatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc., 962 F. Supp. 1312, 1319 (D. Or. 1997). Since Umatilla was decided, the EPA has interpreted the CWA as applying to hydrologically connected groundwater in proposed rules, manuals, and informal guidances. [See Record No. 27, p. 37 n. 129.] However, interpretations such as these, “all of which lack the force of law—do not warrant Chevron-style deference.” Christensen v. Harris Cty., 529 U.S. 576, 578 (2000). Instead, such interpretations “are ‘entitled to respect,’ . . . but only to the extent that those interpretations have the ‘power to persuade.’” Id. (citation omitted). For the reasons stated in this Memorandum Opinion and Order, the Court does not find the position expressed in these documents to be persuasive.

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navigable waters.” 26 Crown Assocs., 2017 WL 2960506, at *8. This would lead to the extensive regulation of non-point source pollution and would “effectively read the ‘point source’ requirement out of the Clean Water Act.” Id. at *9.

Extending the reach of the CWA in this way also would be inconsistent with its federalist structure. The CWA “does not purport to regulate (or to require a permit for) every act that involves the noxious pollution of clean water. Instead, consistent with long-established principles of federalism, the Clean Water Act’s permitting requirements are limited to regulating the discharge of pollutants into the navigable waters of the United States.” Id. at *6. Regardless of the theory underlying the plaintiffs’ claims, it remains the case that “Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that ground water is eventually or somehow ‘hydrologically connected’ to navigable surface waters.” Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014). Instead, Congress determined that the regulation of groundwater pollution was to be left to the states. See Train, 554 F.2d at 1325-29; see also Kelley, 618 F. Supp. at 1107; Or. Nat’l Res. Council, 834 F.2d at 849.

The courts that have found that hydrologically connected groundwater is subject to the NPDES permit requirement have relied heavily on the purpose of the CWA. See, e.g., Va. Elec. & Power Co., 247 F.3d at 762 (“Congress intended the CWA to protect the water quality

3 Courts have attempted to mitigate this result by stating that non-point source groundwater pollution is only subject to the CWA when there is a “direct” hydrologic connection to navigable waters. See, e.g., Tenn. Clean Water Network, 2017 WL 3476069, at *44. However, because this requirement is not grounded in the text or legislative history of the CWA, the standards courts have employed to determine when a hydrologic connection is sufficiently “direct” to fall within this exception have varied. [See Record No. 28, p. 12 n.13 (collecting standards adopted by different courts).]
of the nation’s surface water. Where the facts show a direct hydrological connection between
ground and surface water, that goal would be defeated if the CWA’s jurisdiction did not extend
to discharges to groundwater.”); Tenn. Clean Water Network, 2017 WL 3476069, at *43
(N.D. Cal. Sept. 1, 2005) (“[I]t would hardly make sense for the CWA to encompass a polluter
who discharges pollutants via a pipe running from the factory directly to the riverbank, but not
a polluter who dumps the same pollutants into a man-made settling basin some distance short
of the river and then allows the pollutants to seep into the river via the groundwater.”)).
However, the Supreme Court has “often criticized,” relying on the statute’s purpose to the
detriment of its text “noting that no law pursues its purpose at all costs, and that the textual
limitations upon a law’s scope are no less a part of its ‘purpose’ than its substantive
authorizations.” Rapanos, 547 U.S. at 752 (plurality opinion). Further, “clean water is not the
only purpose of the statute. So is the preservation of primary state responsibility for ordinary
land-use decisions.” Id. at 755-56 (plurality opinion). If the CWA pursued the goal of
protecting surface water quality at all costs, it would not make sense to exempt any
groundwater from the CWA given “the essential link between ground and surface waters and
the artificial nature of any distinction.” Train, 554 F.2d at 1325 (quoting S. Rep. No. 414, 92d
Cong., 1st Sess. 73 (1971)). Indeed, the distinction between point- and non-point sources
would appear untenable in light of this purpose, given that “non-point sources of pollution
constitute a major source of pollution in the nation’s waters.” Or. Nat’l Res. Council, 834 F.2d
at 849. However, Congress has decided to distinguish between ground and surface waters and
between point- and non-point source pollution, and to regulate them differently. The Court
decides to undermine these choices to effectuate the CWA’s supposed purpose.
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Accordingly, the Court finds that the discharge of pollutants to a navigable water via hydrologically connected groundwater is not subject to the CWA's NPDES permit requirement. As a result, the plaintiffs' allegations are insufficient to state a claim for the unlawful “discharge of a pollutant” without a permit under the CWA, and the plaintiffs' CWA claim will be dismissed. 33 U.S.C. §§ 1311(a); 1362(12).

V.

For the foregoing reasons, it is hereby

ORDERED as follows:

1. The defendant's motion to dismiss [Record No. 16] is GRANTED.

2. The plaintiffs' RCRA claim is DISMISSED, without prejudice.

3. The plaintiffs' CWA claim is DISMISSED, with prejudice.

4. A corresponding Judgment will be entered this date.

This 28th day of December, 2017.

Signed By:
Danny C. Reeves

United States District Judge
No. 17-1640

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

UPSTATE FOREVER and SAVANNAH RIVERKEEPER,
Plaintiffs-Appellants,
v.
KINDER MORGAN ENERGY PARTNERS, L.P., and
PLANTATION PIPE LINE COMPANY, INC.,
Defendants-Appellees.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA, ANDERSON DIVISION
CASE NO. 8:16-cv-04003-HMH

BRIEF OF NATIONAL ASSOCIATION OF COUNTIES, NATIONAL
LEAGUE OF CITIES, NATIONAL ASSOCIATION OF CLEAN WATER
AGENCIES, AMERICAN FOREST & PAPER ASSOCIATION,
AMERICAN IRON AND STEEL INSTITUTE, EDISON ELECTRIC
INSTITUTE, NATIONAL MINING ASSOCIATION, AND
UTILITY WATER ACT GROUP AS AMICI CURIAE
IN SUPPORT OF DEFENDANTS-APPELLEES AND AFFIRMANCE

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Dated: September 8, 2017

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UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT
DISCLOSURE OF CORPORATE AFFILIATIONS AND OTHER INTERESTS

Disclosures must be filed on behalf of all parties to a civil, agency, bankruptcy or mandamus case, except that a disclosure statement is not required from the United States, from an indigent party, or from a state or local government in a pro se case. In mandamus cases arising from a civil or bankruptcy action, all parties to the action in the district court are considered parties to the mandamus case.

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If counsel is not a registered ECF filer and does not intend to file documents other than the required disclosure statement, counsel may file the disclosure statement in paper rather than electronic form. Counsel has a continuing duty to update this information.


Pursuant to FRAP 26.1 and Local Rule 26.1,

National Association of Counties
(name of party/amicus)

who is ______________ amicus ______________, makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☐ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? ☐ YES ☑ NO
   If yes, identify all such owners:
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation (Local Rule 26.1(a)(2)(B))? ☐ YES ☐ NO
   If yes, identify entity and nature of interest:

5. Is party a trade association? (amicus curiae do not complete this question) ☐ YES ☐ NO
   If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? ☐ YES ☐ NO
   If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebetskie Date: __ September 8, 2017 __
Counsel for: National Association of Counties

CERTIFICATE OF SERVICE

I certify that on __ September 8, 2017 __ the foregoing document was served on all parties or their counsel of record through the CM/ECF system if they are registered users or, if they are not, by serving a true and correct copy at the addresses listed below:

/signature/ September 8, 2017
UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT
DISCLOSURE OF CORPORATE AFFILIATIONS AND OTHER INTERESTS

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Pursuant to FRAP 26.1 and Local Rule 26.1,

National League of Cities
(name of party/amicus)

who is __________ amicus __________, makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? □ YES □ NO

2. Does party/amicus have any parent corporations? □ YES □ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? □ YES □ NO
   If yes, identify all such owners:
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation (Local Rule 26.1(a)(2)(B))? □ YES □ NO
   If yes, identify entity and nature of interest:

5. Is party a trade association? (Amici Curiae do not complete this question) □ YES □ NO
   If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? □ YES □ NO
   If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017

Counsel for: National League of Cities

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(date)
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No. 17-1640

Pursuant to FRAP 26.1 and Local Rule 26.1,

National Association of Clean Water Agencies
(name of party/amicus)

who is , makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? YES ☐ NO ☐

2. Does party/amicus have any parent corporations? YES ☐ NO ☐
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? YES ☐ NO ☐
   If yes, identify all such owners:

9/29/2018 SCC - 1 -
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation? (Local Rule 26.1(a)(2)(B))? □ YES □ NO
If yes, identify entity and nature of interest:

5. Is party a trade association? (amici curiae do not complete this question) □ YES □ NO
If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? □ YES □ NO
If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie Date: __September 8, 2017__

Counsel for: Nat’l Ass’n of Clean Water Agencies

CERTIFICATE OF SERVICE

I certify that on __September 8, 2017__ the foregoing document was served on all parties or their counsel of record through the CM/ECF system if they are registered users or, if they are not, by serving a true and correct copy at the addresses listed below:

/s/ Michael R. Shebelskie
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(date)
UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT
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Pursuant to FRAP 26.1 and Local Rule 26.1,

American Forest and Paper Association

who is ___________ amicus ___________, makes the following disclosure:

(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☑ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? ☐ YES ☑ NO
   If yes, identify all such owners:

09/28/2016 SCC
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation (Local Rule 26.1(a)(2)(B))? ☐ YES ☑ NO
    If yes, identify entity and nature of interest:

5. Is party a trade association? (amicus curiae do not complete this question) ☐ YES ☑ NO
    If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? ☑ YES ☐ NO
    If yes, identify any trustee and the members of any creditors' committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017
Counsel for: American Forest & Paper Ass'n

CERTIFICATE OF SERVICE

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No. 17-1640

Pursuant to FRAP 26.1 and Local Rule 26.1,

American Iron and Steel Institute

(name of party/amicus)

who is amicus, makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☑ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? ☐ YES ☑ NO
   If yes, identify all such owners:

08/20/2016 SCC - 1 -
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation (Local Rule 26.1(a)(2)(B))? 
YES □ NO □
If yes, identify entity and nature of interest:

5. Is party a trade association? (amicus curiae do not complete this question) 
YES □ NO □
If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? 
YES □ NO □
If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017
Counsel for: American Iron and Steel Institute

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Pursuant to FRAP 26.1 and Local Rule 26.1,

Edison Electric Institute
(name of party/amicus)

who is __________ amicus __________, makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☑ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? ☐ YES ☑ NO
   If yes, identify all such owners:

09/28/2018 SCC  - 1 -
4. Is there any other publicly held corporation or other publicly held entity that has a direct financial interest in the outcome of the litigation (Local Rule 26.1(a)(2)(B))? □ YES □ NO If yes, identify entity and nature of interest:

5. Is party a trade association? (amici curiae do not complete this question) □ YES □ NO If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member:

6. Does this case arise out of a bankruptcy proceeding? □ YES □ NO If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017
Counsel for: Edison Electric Institute

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(signature) September 8, 2017 (date)
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National Mining Association
(name of party/amicus)

who is amicus, makes the following disclosure:
(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☑ NO
   If yes, identify all parent corporations, including all generations of parent corporations:

3. Is 10% or more of the stock of a party/amicus owned by a publicly held corporation or other publicly held entity? ☐ YES ☑ NO
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09/29/2016 SCC
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6. Does this case arise out of a bankruptcy proceeding? ☐ YES ☐ NO
   If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017
Counsel for: National Mining Association

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No. 17-1640


Pursuant to FRAP 26.1 and Local Rule 26.1,

Utility Water Act Group

(name of party/amicus)

______________________________

who is ______ amicus ______, makes the following disclosure:

(appellant/appellee/petitioner/respondent/amicus/intervenor)

1. Is party/amicus a publicly held corporation or other publicly held entity? ☐ YES ☑ NO

2. Does party/amicus have any parent corporations? ☐ YES ☑ NO

If yes, identify all parent corporations, including all generations of parent corporations:

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   If yes, identify any publicly held member whose stock or equity value could be affected substantially by the outcome of the proceeding or whose claims the trade association is pursuing in a representative capacity, or state that there is no such member.

6. Does this case arise out of a bankruptcy proceeding? ☐ YES ☐ NO
   If yes, identify any trustee and the members of any creditors’ committee:

Signature: /s/ Michael R. Shebelskie
Date: September 8, 2017
Counsel for: Utility Water Act Group

CERTIFICATE OF SERVICE

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/s/ Michael R. Shebelskie
(signature) September 8, 2017 (date)
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EPA, ICR Supporting Statement, Information Collection Request for National Pollutant Discharge Elimination System (NPDES) Program (Renewal), OMB Control No. 2040-0004, EPA ICR No. 0229.21 (Dec. 2015) .................................................. 27


AMICI CURIAE'S INTEREST

Amici curiae ("Amici")—National Association of Counties, National League of Cities, National Association of Clean Water Agencies, American Forest & Paper Association, American Iron and Steel Institute, Edison Electric Institute, National Mining Association, and Utility Water Act Group—represent cities, towns, counties, public clean water utilities, and a cross-section of the nation’s energy, mining, manufacturing, and paper and wood products industries. Amici’s members are subject to the Clean Water Act ("CWA" or "Act"). 33 U.S.C. §§1251 et seq. Amici’s broad perspective will aid the Court understand why Appellants’ arguments ignore the Act’s text, framework, and legislative history. Amici also identify the regulatory uncertainty and costs imposed on their members, and the public broadly, under Appellants’ direct hydrologic connection theory, and why the theory is unnecessary to protect water quality. Amici participation will assist the Court to understand why it should reject Appellants’ arguments and affirm the District Court’s judgment.

1 This brief was submitted with an accompanying motion for leave to file pursuant to Federal Rule of Appellate Procedure 29(a)(3). No counsel for a party authored this brief in whole or in part. No such counsel or party made a monetary contribution intended to fund this brief preparation or submission. Only Amici or their members made a monetary contribution intended to fund its preparation or submission.
ARGUMENT

I. No Unauthorized Addition of Pollutants to Navigable Waters from a Point Source Was Alleged, As Required By the Act

The CWA’s prohibition against “the discharge of any pollutant” unless authorized, in relevant part, by a National Pollutant Discharge Elimination System (“NPDES”) permit, 33 U.S.C. §1311(a), is limited to the addition of pollutants to navigable waters from a “point source,” id. §1362(12), which means “any discernible, confined and discrete conveyance.” Id. §1362(14).

Appellants alleged an unauthorized discharge occurred here because pollutants from Kinder Morgan’s pipeline allegedly entered groundwater with a direct hydrologic connection to navigable waters. Upstate Forever v. Kinder Morgan Energy Partners, L.P., No. 8:16-4003-HMH, 2017 WL 2266875, at *4, 6 (D.S.C. Apr. 20, 2017) (“Kinder Morgan”). While a pipeline can be a point source, the District Court correctly held Appellants must “more than merely identify a possible point source.” Id. at *3. They must allege (and prove) “the point source added pollutants to navigable waters.” Id. at *4.

The District Court was correct: Appellants failed to allege that a point source added pollutants to navigable waters. Id. at *4. The pipeline leaked into soil and groundwater, not navigable waters. Id. at *3. A direct hydrologic connection between groundwater and navigable waters does not eliminate the statutory requirement that the means by which pollutants enter navigable waters
must be a discernible, confined and discrete conveyance. *Id.* at *4. While the CWA prohibits indirect discharges from point sources, pollutants still must enter navigable waters by means of some discernible, confined and discrete conveyance.


A. The Cause of the Addition Must Be a Discernible, Confined and Discrete Conveyance

The District Court was correct that the means by which pollutants enter navigable waters must be a point source. *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004) (the alleged point source must “convey the pollutant to ‘navigable waters’”); *United States v. Plaza Health Labs., Inc.*, 3 F.3d 643, 646 (2d Cir. 1993) (point sources “act as a means” of conveying
pollutants to navigable waters); *Cordiano v. Metacom Gun Club, Inc.*, 575 F.3d 199, 224 (2d Cir. 2009) (Act “requires that pollutants reach navigable waters by a ‘discernible, confined and discrete conveyance’”). If an intervening event causes the addition, then no discharge from the point source occurs. *Sierra Club v. BNSF Ry. Co.*, No. C 13-967-JCC, 2016 WL 6217108, at *8 (W.D. Wash. Oct. 25, 2016) (“discharges to land and [then] from land to water are not point source discharges”).

Appellants’ arguments would eliminate the requirement under Section 301(a) that the cause of the addition be a point source. As one court explained:

[N]onpoint source pollution ... could invariably be reformulated as point-source pollution by going up the causal chain to identify the initial point sources of the pollutants that eventually ended up through nonpoint sources to come to rest in navigable waters.


To illustrate this requirement of the Act: if oil leaks onto the ground, and it subsequently rains, the conveyance of that oil by the rainwater into a navigable water does not constitute a discharge from a point source. *See Ecological Rights*
Found. v. Pac. Gas & Elec. Co., 713 F.3d 502, 508 (9th Cir. 2013) ("most common example of nonpoint source pollution is the residue left on roadways by automobiles") (citation omitted); Plaza Health Labs., 3 F.3d at 654 n.6 ("Sources may be point sources when they deposit waste directly into water; ... [not] when they ... deposit oil in a driveway, leaving it to be washed into nearby rivers.").

Stormwater runoff and groundwater flow are indistinguishable, in this respect. 26 Crown Assocs., 2017 WL 2960506, at *8 ("Ground water migration is no different than surface water run-off for purpose of the ‘point source’ requirement."). Therefore, if oil leaks into the soil, and groundwater flow subsequently conveys the oil to navigable waters, that too is not a discharge from a point source. E.g., Tri-Realty, 2013 WL 6164092, at *8 (oil leaked from underground storage tank not a discharge from a point source).

Importantly, when Congress wanted to establish a discharge prohibition under the CWA without requiring that pollutants enter navigable waters through a discernible, confined and discrete conveyance, it knew how to do so. CWA Section 311 prohibits the discharge of oil or hazardous substances into or upon navigable waters and adjoining shorelines. 33 U.S.C. §1321(b)(1). Congress defined “discharge” for purpose of Section 311 differently, to mean “any spilling, leaking, pumping, pouring, emitting, emptying or dumping.” Id. §1321(a)(2),

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compare, id. §1362(12), (16). Congress left enforcement of such “discharges” exclusively to governmental agencies. Severstal, 794 F. Supp. 2d at 618 (“claims brought pursuant to [CWA Section 311] are not authorized under the CWA citizen suit provision”).

B. No Direct Discharge Occurred Under the Facts Alleged

The District Court correctly held no direct discharge into navigable waters was alleged. Kinder Morgan, 2017 WL 2266875, at *4. Rather, the pipeline leaked into soil, and then groundwater,\(^2\) which eventually carried some of the leaked material to navigable water. As the District Court wrote:

To find that the pipeline directly discharged pollutants into navigable waters under the facts alleged would result in the CWA applying to every discharge into the soil and groundwater no matter its location.

Id. See also BNSF Ry. Co., 2016 WL 6217108, at *8.

Appellants ignore the Act’s text by arguing a leak into groundwater with a direct hydrologic connection to navigable waters is, effectively, a direct discharge from a point source. Appellants’ theory is contrary to the Act’s point source requirement, its framework and legislative history. The Court should reject it.

Congress decided not to extend the CWA prohibition to pollutants entering groundwater, despite knowing that polluted groundwater may enter navigable waters. In fact, the U.S. Environmental Protection Agency (“EPA”) asked

\(^2\) Groundwater is not navigable water. 80 Fed. Reg. 37,054, 37,073 (June 29, 2015) (EPA has “never interpreted [groundwater] to be a [navigable water].”).
Congress for authority over groundwater and explicitly told Congress the authority was necessary because polluted groundwater impacts surface waters, as the then-EPA administrator explained:

The only reason for the request for Federal authority over groundwaters was to assure that we have control over the water table in such a way as to insure that our authority over interstate and navigable streams cannot be circumvented, so we can obtain water quality by maintaining a control over all the sources of pollution, be they discharged directly into any stream or through the ground water table.


Despite being aware that pollutants in groundwater enter navigable waters, the Senate and the House rejected proposals to extend the CWA’s reach. *E.g.*, S. Rep. No. 92-414, at 73 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3739 (“Several bills pending before the [Senate] Committee provided authority to establish Federally approved standards for groundwaters. ... Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation.”).

Representative Aspin introduced the rejected House amendment, arguing it was necessary because “[i]f we do not stop pollution of ground waters through
seepage and other means, *ground water gets into navigable waters*, and to control only the navigable water and not the ground water makes no sense at all.” 118 Cong.Rec. 10,666 (1972) (emphasis added). *See also* *Exxon Corp. v. Train*, 554 F.2d 1310, 1325-29 (5th Cir. 1977) (legislative history discussion). This removes any doubt Congress considered and rejected addressing the addition of pollutants to navigable waters through groundwater.

It is impossible to regulate the addition of pollutants to surface waters via groundwater without in practice regulating groundwater and nonpoint source pollution, which Congress rejected. *Shanty Town Assocs. Ltd. P’ship v. EPA*, 843 F.2d 782, 791 (4th Cir. 1988) (CWA “contains no mechanism for direct federal regulation of nonpoint source pollution”). That legislative decision must be respected.

While protecting the Nation’s waters is unquestionably an objective of the CWA, it was not Congress’ only goal and cannot justify rewriting the Act. *See 33 U.S.C. §1251(a)(7), (b); CTS Corp. v. Waldburger*, 134 S.Ct. 2175, 2185 (2014) (rejection of interpretation based on statute’s objective not grounded in the statute’s text and structure); *Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York*, 273 F.3d 481, 494 (2d Cir. 2001) (“[T]he CWA balances a welter of consistent and inconsistent goals … congressional intent is not served by
elevating one policy above the others, particularly where the balance struck in the text is sufficiently clear to point to an answer."

Contrary to Appellants’ argument, the “overwhelming majority” of courts have not held that the addition of pollutants into hydrologically connected groundwater constitutes a discharge from a point source under Section 301(a). Op.Br. at 9, 26, 31. Many of the cases Appellants cite do not examine the question. Others examine the separate question whether surface water features are navigable waters themselves. E.g., *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 1000 (9th Cir. 2007) (whether pond connected to river via groundwater was navigable water); *Quivira Mining Co. v. EPA*, 765 F.2d 126, 130 (10th Cir. 1985) (whether gullies and arroyos that flowed into streams were navigable waters).

Others find “CWA jurisdiction,” but like Appellants, mistakenly relied on policy preferences about how the Act should be constructed, not what it actually says. E.g., *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319 (S.D. Iowa 1997) (“because [of] the CWA’s goal”). See also, *Plaza Health Labs.*, 3 F.3d at 647 (whether a source is a point source “may not be resolved merely by simple reference to [the CWA’s] admirable goal[s]”); *Nat’l Wildlife Fed’n v. Gorsuch*, 693 F.2d 156, 178 (D.C. Cir. 1982) (“Caution is always advisable in relying on a general declaration of purpose to alter the apparent meaning of a specific
provision.”). A court cannot rewrite the Act to comport with its notion of how Congress ought to have written it. The courts’ “judicial task is only to determine the meaning of the statute as passed by Congress, not to question the wisdom of the provision enacted.” *Worden v. SunTrust Banks, Inc.*, 549 F.3d 334, 347 (4th Cir. 2008).

C. **No Indirect Discharge Occurred Under the Facts Alleged**

The type of “indirect” discharge *Rapanos v. United States*, 547 U.S. 715, 743 (2006) recognized cannot salvage Appellants’ complaint. *Rapanos* recognized that pollutants must still enter navigable waters by means of a discernible, confined and discrete conveyance to come within Section 301(a), and groundwater is the antithesis of such a conveyance.

As *Rapanos* recognized, the release of pollutants from the a point source (that is the original source of the pollutants) may require an NPDES permit under certain circumstances even if it is not directly into navigable waters. However, those circumstances exist only if “the pollutants discharged from a point source ... pass ‘through conveyances’ in between” the source of the pollutants and the navigable water. *Id.* at 743 (each case cited in *Rapanos* concerned an indirect discharge of pollutants to navigable waters through one or more subsequent discrete conveyances).
That is not what allegedly happened here. Appellants do not allege groundwater is a point source, but since groundwater is the only means in this case by which pollutants could enter navigable waters, their indirect discharge argument necessarily depends on groundwater being a discrete conveyance. 26 Crown Assocs., 2017 WL 2960506, at *7 (allegation “necessarily relies on an assumption that ground water must function as a ‘point source’”).

Groundwater is not a point source. EPA agrees. It is “basic science” that groundwater is diffuse. Id. at *8. Groundwater is the opposite of a “discernible, confined and discrete” conveyance. Id. (“Absent exceptional proof of something akin to a mythical Styx-like subterranean river, a diffuse medium like ground water for the passive migration of pollutants to navigable waters cannot constitute a ‘point source’ ...”); Tri-Realty Co., 2013 WL 6164092, at *8 (“[G]iven its natural physical attributes, groundwater [cannot] fairly be described as a ‘discernible, confined and discrete conveyance.’”).

Because groundwater is not a discernible, confined and discrete conveyance, its transportation of pollutants spilled into the soil from the pipeline does not give rise to an “indirect” discharge.

3 Brief for the United States as Amicus Curiae in Support of Plaintiffs-Appellees at 2, Haw. Wildlife Fund v. Cty. of Maui, No. 15-17447 (9th Cir. May 31, 2016), ECF No. 40 (“the United States does not contend that groundwater is a point source”).
II. EPA Statements on Direct Hydrologic Connection Merit No Deference

Appellants rely on EPA statements in 1991, 1998 and 2001 to argue a leak of pollutants into groundwater with a direct hydrologic connection to navigable waters is a direct discharge from a point source. Op.Br. at 34-36. Appellants’ reliance is misplaced. EPA’s interpretation is inconsistent with the Act, conflicts with prior EPA interpretations, is based on inapposite case law, and is not the product of a reasoned analysis. Deference is inappropriate.

A. These Statements Cannot Get Chevron Deference


The following history demonstrates why EPA’s statements lack the force of law.

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1. **EPA’s Contemporaneous Interpretation**

- The modern CWA was enacted in 1972. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972). At the time, EPA interpreted Act as not prohibiting the addition of pollutants into groundwater, even groundwater hydrologically connected to navigable water. As discussed above, that is why EPA asked Congress (unsuccessfully) to amend the legislation. *See Kelley v. E.I. DuPont de Nemours & Co.*, 17 F.3d 836, 847 (6th Cir. 1994) (Nelson, J., concurring) (rejection of an EPA interpretation that was “diametrically opposed” to contemporaneous interpretation).

consistently been EPA's position. *Id.* at 21-22. The court agreed with the United States:

Congress did not intend the [CWA] to extend federal regulatory and enforcement authority over groundwater contamination [even when pollutants in the groundwater migrate to navigable waters]. Rather, such authority was to be left to the states. *Kelley*, 618 F. Supp. at 1107. *See also Kelley v. United States*, No. 1:79-cv-10199, 1980 U.S. Dist. LEXIS 17772, at *3 (E.D. Mich. Oct. 28, 1980) (similar CWA citizen suit based on spill that soaked into the ground and migrated through groundwater to navigable waters; as recounted by the district court, the United States argued that the migration of pollutants through groundwater to navigable waters is not a discharge from a point source).

2. **Subsequent Collateral Comments**

- EPA stated a contrary position for the first time in 1990, in response to comments in an unrelated rulemaking on stormwater permitting. 55 Fed. Reg. 47,990, 47,997 (Nov. 16, 1990). This collateral reference in a final rule preamble was not subject to public comment.

- EPA did not propose to rely on its new position in rulemaking until over ten years later, in 2001. 66 Fed. Reg. 2960, 3017 (Jan. 12, 2001). The proposal generated such criticism, however, that in the final rule EPA rejected the proposed option that relied on its new position. 68 Fed. Reg. 7176, 7216 (Feb. 12, 2003); *Waterkeeper All., Inc. v. EPA*, 399 F.3d 486, 514-15 (2d Cir. 2005)
(recounting rejection of proposal without addressing the merits of EPA’s new position).

- EPA never again proposed to incorporate its new position into a regulation. EPA instead episodically inserted statements as collateral references in unrelated actions. E.g., 56 Fed. Reg. 64,876, 64,892 (Dec. 12, 1991) (Tribal water quality standards).

To give Chevron deference to EPA’s new position in light of this history would be to endorse stealth agency rulemaking. Courts should not give Chevron deference to interpretations in rule preambles on unrelated subject matter, placed where the public could not know about—let alone challenge—the agency’s interpretation. Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 966 (7th Cir. 1994) (“Collateral reference to a problem [in an EPA preamble] is not a satisfactory substitute for focused attention in rule-making or adjudication.”).

B. These Statements Cannot Get Skidmore Deference

While agency interpretations may have the “power to persuade” even if not entitled to Chevron-deference, they must be the product of a careful, thorough, and consistent analysis. Mead, 533 U.S. at 221, 227-28; Skidmore v. Swift & Co., 323 U.S. 134, 140 (1944). EPA’s position here falls short.

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4 Appellants have not argued Skidmore applies, but Amici want to be clear why no deference applies.
EPA’s first statement on its new position, in 1990, is merely *ipse dixit*. EPA did not seek to ground its new position in the Act’s text, structure, or legislative history. See 55 Fed. Reg. at 47,997; *United States v. ConAgra, Inc.*, No. CV 96-0134-S-LMB, 1997 WL 33545777, at *6 (D. Idaho Dec. 31, 1997) (“I do not believe that EPA’s [1990] parenthetical comment in its discussion of storm water permit application regulations, without more, should be accorded the power to reshape the CWA’s plain language and almost twentyfive years of [implementation] ....”).

In 1990, EPA justified its position solely on two inapposite court decisions. 55 Fed. Reg. at 47,997. In the first, *Exxon*, the court explicitly said it was *not* deciding the issue. The court wrote:

EPA has not argued that the wastes disposed of into wells here do, or might, ‘migrate’ from groundwaters back into surface waters that concededly are within its regulatory jurisdiction. ... *We mean to express no opinion on what the result would be if that were the state of facts.*

554 F.2d at 1312 n.1 (emphasis added).

In the second, *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182 (E.D. Cal. 1988), *vacated on other grounds*, 47 F.3d 325 (9th Cir. 1995), the court did not find a direct hydrologic connection results in a discharge from a point source. It examined the different question whether groundwater can be a navigable water because of its “effect” on surface water. *Id.* at 1196; see also

It was over a decade later, as part of its 2001 proposal, that EPA attempted to formulate a more detailed explanation of its new position, but as noted above, in the final rule EPA rejected the proposed option. And even there, EPA’s discussion relied on its passing reference in 1990 and the inapposite case law, or their progeny. 66 Fed. Reg. at 3017. EPA did not explain how its new position comported with the Act’s requirement that the means of pollutants entering navigable waters must be from a discernible, confined and discrete conveyance. EPA merely stated that an addition via groundwater is “effectively” from a point source. 56 Fed. Reg. at 64,892. That interpretation directly conflicts with the Act’s requirement that an addition in fact be from a point source.

Further, EPA did not explain in 2001 how its new position aligned with the balance Congress struck between discharges from point sources and nonpoint source pollution and groundwater. **United States v. Deaton**, 332 F.3d 698, 708 (4th Cir. 2003) (statutory interpretation should not disrupt careful balance struck by Congress). EPA also failed to reconcile Congress’ concern that “uniform federal regulation [is] virtually impossible” when the regulation of the addition of
pollutants is dependent upon site-specific factors, which Appellants acknowledge is the case with the direct hydrologic connection theory. See Shanty Town, 843 F.2d at 791; Op.Br. at 36.

Eschewing the Act’s text, EPA relied on the Act’s objective of protecting water quality, failing altogether to recognize that achieving that objective must be tempered by that text and the Act’s other goals and policies, including the role of states in protecting water quality. Rodriguez v. United States, 480 U.S. 522, 525–526 (1987) (per curiam) (“it frustrates rather than effectuates legislative intent simplistically to assume that whatever furthers the statute's primary objective must be the law”).

EPA also ignored the legislative history and its failed request to obtain authority from Congress to regulate the addition of pollutants into groundwater because they can enter navigable waters. Gulf Oil Corp. v. Copp Paving Co., 419 U.S. 186, 200 (1974) (failure of proposed amendment “strongly militates against a judgment that Congress intended a result that it expressly declined to enact”).

Also, critically, EPA ignored its original, contrary understanding of the Act. Where an agency has changed its interpretation, “the requirement that an agency provide reasoned explanation for its action would ordinarily demand that it display awareness that it is changing position.” FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009). EPA has never acknowledged its about-face after nearly
two decades of consistent application—much less attempt to explain it. EPA’s position does not warrant Skidmore deference.

III. The Direct Hydrologic Connection Theory, If Adopted, Would Have Significant Adverse Consequences to Amici and the Public

The direct hydrologic connection theory is unnecessary to protect water quality and would sow regulatory uncertainty, produce disincentives for critical infrastructure, and impose significant costs on Amici and the public.

A. The Direct Hydrologic Connection Theory Is Unnecessary to Protect Navigable Waters

Congress foresaw that an NPDES permit is not always the solution. 26 Crown Assocs., 2017 WL 2960506, at *6 (CWA does not prohibit “every act that involves the noxious pollution of clean water.”). There are other authorities to utilize. See Catskill Mountains Chapter of Trout Unlimited, Inc. v. EPA, 846 F.3d 492, 529-30 (2d Cir. 2017) (interpretation exempting water transfers reasonable, in part, because “several alternatives could regulate pollution in water transfers even in the absence of an NPDES permitting scheme”).

The CWA itself contains alternatives, including, most notably, CWA Section 311. 33 U.S.C. §1321. Other CWA tools include total maximum daily loads (“TMDLs”);\(^5\) planning;\(^6\) grants;\(^7\) “processes, procedures, and methods to

\(^5\) 33 U.S.C. §1313(d)(1)(C); see also Am. Farm Bureau Fed’n v. EPA, 792 F.3d 281, 299 (3d Cir. 2015), cert. denied, 136 S.Ct. 1246 (2016) (TMDLs “tie
control [nonpoint source] pollution;\textsuperscript{9} and nonpoint source management programs.\textsuperscript{9}

Other federal statutes can also be utilized, such as the Resource Conservation and Recovery Act ("RCRA"). 42 U.S.C. §6973(a); United States v. Waste Indus., Inc., 734 F.2d 159, 164-65 (4th Cir. 1984) (RCRA is “designed to deal with situations in which the regulatory schemes break down or have been circumvented…. Congress expressly intended that [RCRA] … close loopholes in environmental protection.”).

Critically, States may adopt more stringent requirements, see 33 U.S.C. §1370 (preserves States’ ability to adopt any requirement to control pollution), and many States, including South Carolina, have adopted laws relevant to these circumstances.\textsuperscript{10}

Rejection of the direct hydrologic connection theory will not result in “rampant pollution,” as Appellants contend. Op.Br. at 9. Applying the correct interpretation of the Act will prohibit leaks and spills—intentional or unintentional—both above and below ground, from industrial, commercial, together point-source and nonpoint-source pollution issues in a manner that addresses the whole health of the water.\textsuperscript{7}.

\textsuperscript{9} 33 U.S.C. §1288(b).
\textsuperscript{7} Id. §1288(f).
\textsuperscript{8} Id. §1314(f)(2)(A)-(F).
\textsuperscript{9} Id. §1329(b).
residential or public infrastructure, *when* the means of the addition to navigable waters is a discernible, confined and discrete conveyance. E.g., *United States v. Lucas*, 516 F.3d 316, 330-34, n.43 (5th Cir. 2008) (septic system constructed *in* a wetland “making a system that is typically a diffuse, non-point source into a point source”); *Minn. Ctr. for Envr. Advocacy v. EPA*, No. CIV 03-5450(DWF/SRN), 2005 WL 1490331, at *6 (D. Minn. June 23, 2005) (addition from septic system via a pipe to “drain tiles” and “ditches” to navigable waters a prohibited indirect discharge).

**B. The Direct Hydrologic Connection Theory Would Subject Amici and the Public to Regulatory Uncertainty**

Appellants concede the existence of a direct hydrological connection is a fact-specific inquiry. Op.Br. at 36. It depends on site-specific factors, such as topography, climate, the distance to a surface water, geologic factors, and the like, and will require technical assessments. See 68 Fed. Reg. at 7216 (“highly dependent on site-specific variables”); *Umatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc.*, 962 F. Supp. 1312, 1320 (D. Or. 1997) (it is “often not obvious” whether groundwater connects to navigable water).

Yet, there is no guidance on what is “direct.” No clues exist, for example, on the minimum distance to navigable water, or the necessary time for pollutants to travel through groundwater, for a connection to be “direct.” *Umatilla*, 962 F. Supp. at 1320 (this theory would “add a new level of uncertainty ... and would
expose potentially [millions] of ... [sources] to ... litigation and legal liability if they ... happen[ to make the ‘wrong’ choice”).


If it did, this uncertainty would create disincentives for critical private and public infrastructure. For example, groundwater recharge systems are used to convey stormwater or recycled wastewater (which contain “pollutants”) into shallow subsurface aquifers to augment public water supplies, create seawater intrusion barriers, and eliminate surface outfalls, among other benefits. This infrastructure can include spreading basins, natural treatment systems, and

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injection wells,\textsuperscript{14} among others. Another example is green infrastructure, which is used to retain, percolate and infiltrate stormwater into the ground to minimize discharges of municipal stormwater and combined sewer overflows.\textsuperscript{15} This type of infrastructure provides multiple benefits to the public, including improving water quality. If Appellants’ argument is adopted, it will create uncertainty whether NPDES permit requirements apply and will likely impede the application of this type of beneficial infrastructure.

C. If Adopted, the Direct Hydrologic Connection Theory Would Impose Significant Costs on \textit{Amici} and the Public

If Appellants’ argument is adopted, significant costs will be imposed on \textit{Amici} and the public. It would make a detailed technical assessment of hydrologic and geologic conditions necessary for a wide range of activities and sites. \textit{Amici} and the public likely cannot afford to assume otherwise. Just one CWA violation can result in a civil penalty of $52,414 per day,\textsuperscript{16} in addition to injunctive relief and legal fees. 33 U.S.C. §1319(b), (d).

\textsuperscript{13} E.g., http://www.irwd.com/services/natural-treatment-system (last visited Sept. 7, 2017).


EPA once estimated the cost to determine whether groundwater beneath a source has a direct hydrologic connection to navigable water is $4,472. See 66 Fed. Reg. at 3020.\textsuperscript{17} EPA’s cost assumption was very conservative,\textsuperscript{18} and the cost to a specific source will depend on the nature of the facility, its geographic location, and availability of trained hydrogeologists, among other factors; therefore, it is a significant underestimation of the likely cost.

The real significance of this cost arises from the countless number of facilities and people upon which it would be imposed. It is impossible to distinguish the pipeline in this case from other critical infrastructure that may contribute pollutants into soil and groundwater, such as groundwater recharge systems, green infrastructure, treatment ponds, landfills, and other sources above or below ground. Pipelines that could leak due to age or episodic failures include

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public water supply pipelines,\textsuperscript{19} recycled water pipelines,\textsuperscript{20} and sanitary sewer pipelines.\textsuperscript{21}

Septic systems are another ubiquitous example of a source that collects and disperses wastewater into soil and groundwater. Septic systems, generally, have not been understood to require NPDES permits. \textit{United States v. Smithfield Foods, Inc.}, 972 F. Supp. 338, 345 (E.D. Va. 1997) (septic systems are nonpoint sources). But that would change under Appellants’ argument.

Over 22.2 million homes have septic systems. See U.S. Department of Housing and Urban Development and U.S. Census Bureau, American Housing Survey for the United States: 2011 at 14, Table C-04-AO (Sept. 2013) (“Household Survey”) (Exhibit B). Assuming one septic system per home, the cost nationwide to perform assessments (using EPA’s conservative cost estimate) is approximately $89 billion.\textsuperscript{22} These costs would be borne disproportionately by

\textsuperscript{19} Potable water contains, among other things, chloramine, which may be considered a pollutant. See \textit{W.R. Grace & Co. v. EPA}, 261 F.3d 330, 333 (3d Cir. 2001) (describing disinfection process creating chloramines).

\textsuperscript{20} See 2012 Guidelines for Water Reuse at D-132 (reclaimed water system in Cary, NC).

\textsuperscript{21} See e.g., \textit{Cal. River Watch v. E. Mon. Water Dist.}, No. 5:15-cv-01079-VAP-SP (C.D. Cal. filed June 2, 2015), ECF No. 1 (citizen suit complaint alleging sanitary sewer system pipeline exfiltration of wastewater into groundwater with direct hydrologic connection to navigable waters).

\textsuperscript{22} This estimate uses the cost in 2011 dollars (i.e., $4,021) to align the calculation with the U.S. Census Bureau’s most recent Annual Household Survey. As noted, the current cost is $4,472, which means the costs above are
rural, low income populations in the South. Rural communities disproportionately use septic systems rather than public sewer systems to dispose of wastewater: 42% in rural areas compared to 20% in the suburbs and 2% in the cities. *Id.* 11% of septic systems are associated with homes that are below the federal poverty level. *Id.* The 2017 federal poverty level for a family of four in South Carolina is $24,600. *See* 82 Fed. Reg. 8831, 8832 (Jan. 31, 2017). The cost of an assessment would consume *18% or greater* of a family of four’s annual income.23 Many homeowners may choose to not perform an assessment, but they would still risk a citizen suit or agency enforcement.24

Homeowners in the Fourth Circuit are among those that would face the greatest risk should these costs be imposed. A greater percentage of septic systems are in the South than in the rest of the U.S. 23% of homes in the South use septic systems for their sewage disposal, compared to 19%, 19% and 11% for the 

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23 Comparing the $4,472 cost (in 2017 dollars) to the federal poverty level in 2017.

24 Troublingly, EPA has argued that third parties are “free to file citizen suits against [owners of septic systems] to try and establish that they should be subject to federal permitting requirements.” *See* United States’ Memorandum in Support of Defendants’ Motion for Summary Judgment at 2, *Conservation Law Found., Inc. v. EPA*, No. 1:10-cv-11455-MLW (D. Mass. Sept. 21, 2012), ECF No. 37.
Midwest, Northeast and West, respectively; 40% in South Carolina. Household Survey at 14.\textsuperscript{25}

Assessments would be just the beginning of the costs \textit{Amici} and the public would face. There are permit application fees, compliance costs, and other financial and logistical impacts. EPA estimates that the public already spends over 19 million labor hours and over $946 million in annual costs related to applying for NPDES permits and complying with just the monitoring, recordkeeping and reporting requirements. \textit{See EPA, ICR Supporting Statement, Information Collection Request for National Pollutant Discharge Elimination System (NPDES) Program (Renewal), OMB Control No. 2040-0004, EPA ICR No. 0229.21} at 17, Table 12.1, Appendix A (Dec. 2015) (Exhibit C).

Critically, even if \textit{Amici err} on the side of caution and apply for a permit, there is no certainty a permit can be obtained. The NPDES permitting regulations are “end-of-pipe.” \textit{Froebel v. Meyer}, 217 F.3d 928, 937 (7th Cir. 2000) (“The structure of the CWA’s definition of ‘point source’ ... connotes the terminal end of an artificial system for moving water, waste, and other materials.”). The permitting authority must calculate effluent limits,\textsuperscript{26} determine the potential to


\textsuperscript{26} 40 C.F.R. §122.45.
exceed water quality standards,\textsuperscript{27} ensure consistency with antidegradation policies,\textsuperscript{28} allocate load and waste loads as part of TMDLs,\textsuperscript{29} assess the need for mixing zones,\textsuperscript{30} and determine appropriate monitoring,\textsuperscript{31} among other critical functions. See generally, EPA, NPDES Permit Writer’s Manual, EPA-833-K-10-001 (Sept. 2010) (overview of permitting requirements).\textsuperscript{32}

Determinations necessary to issue a permit would be infeasible (if not outright impossible) in the context of groundwater. Groundwater can be a “‘soup’” of pollutants—mixing with pollutants from other sources and those naturally occurring—their fate and transport unknown. \textit{Ecological Rights Found.}, 713 F.3d at 508.

Appellants’ theory could prevent the permitting, and therefore the construction, of critical private and public infrastructure. See, e.g., 40 C.F.R. §122.4(i) (no NPDES permit for a new source or a new discharger when the receiving water is impaired and there is not a sufficient load allocation); \textit{Friends of Pinto Creek v. EPA}, 504 F.3d 1007 (9th Cir. 2007) (EPA violated §122.4(i) by

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{27} 33 U.S.C. §1311(b)(1)(C); 40 C.F.R. §122.44(d).
\item \textsuperscript{28} 40 C.F.R. §131.12.
\item \textsuperscript{29} \textit{id.} §130.7.
\item \textsuperscript{30} \textit{id.} §131.13.
\item \textsuperscript{31} \textit{id.} §122.44(i).
\item \textsuperscript{32} https://www.epa.gov/npdes/npdes-permit-writers-manual (last visited Sept. 7, 2017).
\end{itemize}
\end{footnotesize}
issuing NPDES permit). For septic systems, the result could be a CWA-based prohibition on new housing in watersheds impaired for nutrients (e.g., Chesapeake Bay) because of the inability to obtain a permit. See EPA, Chesapeake Bay TMDL, Section 4 at 4-5, Table 4-1 (Dec. 29, 2010) (impaired for nitrogen; 36% and 24% of the total nitrogen load into the Bay attributed to septic systems from Maryland and Virginia, respectively).33

If a permit cannot be obtained, all addition of pollutants must cease. 33 U.S.C. §1311(a). Significant resources to remove and/or replace infrastructure could be imposed on Amici.34 Approximately $298 billion is needed for infrastructure over the next 25 years to address just the 800,000 miles of aging public sewer pipelines.35 There is no indication Congress intended the CWA to be the tool to remedy this problem. None of these costs to Amici and the public have ever been considered by EPA through rulemaking, which would be necessary if the direct hydrologic connection theory was in fact the rule. See 33 U.S.C. §1314(b)(2)(B) (shall consider “the cost of achieving such effluent reduction”).


34 In this case, even if complete source removal was technically possible, it would upset the State’s existing Corrective Action Plan imposed via state authority after public comment. Kinder Morgan, 2017 WL 2266875, at *1.

CONCLUSION

No pollutants were added to navigable waters by means of a discernible, confined and discrete conveyance. There is no basis for a CWA citizen suit. The Court should affirm the District Court’s judgment.

Dated: September 8, 2017

Respectfully submitted,

/s/ Michael R. Shebelskie

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UNIVERS STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT
Effective 12/01/2016

No. 17-1640 Caption: Upstate Forever v. Kinder Morgan Energy Partners

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(a) Michael R. Shubelskie

Party Name: Nat'l Ass'n of Counties et al.

Dated: Sept. 6, 2017
CERTIFICATE OF SERVICE

I hereby certify that on this 8th day of September 2017, the foregoing document was served on all parties or their counsel of record through the CM/ECF system at the addresses indicated below:

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/s/ Michael R. Shebelskie
Michael R. Shebelskie
April 18, 2018

The Honorable John Barrasso  
Chair  
Senate Committee on Environment and Public Works  
Washington, DC 20510

The Honorable Tom Carper  
Ranking Member  
Senate Committee on Environment and Public Works  
Washington, DC 20510

Dear Chairman Barrasso and Ranking Member Carper:

We, the undersigned associations that collectively represent a diverse group of industries from across the country, write to express our appreciation to the Committee on Environment and Public Works for convening the April 18 hearing on “The Appropriate Role of States and the Federal Government in Protecting Groundwater,” which will examine the U.S. Environmental Protection Agency’s (EPA or Agency) recent request for comment, “Clean Water Act Coverage of ‘Discharges of Pollutants’ via a Direct Hydrologic Connection to Surface Water.”1 We believe that EPA’s request for stakeholder input on this important matter provides the Agency with an unparalleled opportunity to squarely address an issue that has been troubling the courts for years.

The Clean Water Act’s “National Pollutant Discharge Elimination System” permit program simply does not regulate discharges that reach navigable waters via groundwater that has a direct hydrologic connection to those waters. Mechanisms already exist at both the federal and state levels to address this issue.

The undersigned associations thank you for your oversight of this important matter. We believe Congress and EPA should work together to address this issue to protect stakeholders from duplicative and overly-burdensome regulation, and to provide the regulated community, the courts, and the public with clarity on this issue.

Sincerely,

American Coke and Coal Chemicals Institute
American Exploration & Production Council
American Farm Bureau Federation
American Forest & Paper Association
American Fuel and Petrochemical Manufacturers
American Iron and Steel Institute
American Petroleum Institute
Edison Electric Institute

Independent Petroleum Association of America
Industrial Minerals Association – North America
National Association of Chemical Distributors
National Association of Manufacturers
National Association of REALTORS®
National Cattlemen's Beef Association
National Industrial Sand Association
National Mining Association

National Renderers Association
National Rural Electric Cooperative Association
Portland Cement Association
Society of Chemical Manufacturers & Affiliates (SOCMA)

The Fertilizer Institute
Treated Wood Council
U.S. Chamber of Commerce
Utility Water Act Group

cc: Members of the Senate Environment and Public Works Committee
April 17, 2018

The Honorable John Barrasso
Chairman
United States Senate
Committee on Environment & Public Works
Washington, D.C. 20510

The Honorable Tom Carper
Ranking Member
United States Senate
Committee on Environment & Public Works
Washington, D.C. 20510

Dear Chairman Barrasso and Ranking Member Carper:

On behalf of the members of the National Ground Water Association (NGWA), we commend the Senate Environment and Public Works Committee for its hearing on federal and state roles in the regulation of groundwater. Given recent court action and the request for public comment by the U.S. Environmental Protection Agency, a hearing on this topic could not be more timely.

NGWA’s 11,000 members are committed to the management, protection, and use of groundwater. Groundwater is the world’s most extracted resource and represents a source of drinking water for nearly 40 percent of Americans. Over 120,000 U.S. farms rely on groundwater for irrigation.

Groundwater is a hidden resource, and while it is not “navigable,” groundwater-surface water interaction is well-documented, and the interactions between groundwater and surface water support streams and wetlands. Their interactions are complex and controlled by numerous variables that may change over time and change with hydrologic conditions.

Because of variation in geology, climate, and groundwater use, NGWA’s position is that states are best-equipped to determine the level of protection afforded to groundwater. However, coordination with federal regulations and programs in areas like research, technology transfer and funding assistance is necessary.

State primacy for federal permitting programs like the National Pollution Discharge Elimination System (NPDES) or Underground Injection Control (UIC) programs are good examples of how this partnership between state and federal entities can take place to ensure groundwater protection. Where states have inadequate permitting programs, the federal government also plays an important role in ensuring gaps are filled and best practices to a federal standard are followed.

As water resources become more constrained, the role groundwater plays in serving as natural infrastructure only increases the importance of its protection. NGWA looks forward to working

cc: Senate Environment and Public Works Committee
NGWA's members are experts in groundwater science and would be happy to serve as a resource to the committee, as additional information or action is required. Please contact NGWA’s Government Affairs Director, Lauren Schapker, at lschapker@ngwa.org or 202-888-9151 if interested in additional information.

Sincerely,

Terry S. Morse
Chief Executive Officer
National Ground Water Association

cc: Senate Environment and Public Works Committee
Keeping the Clean Water Act Cooperatively Federal—Or, Why the Clean Water Act Does Not Directly Regulate Groundwater Pollution

Damien Schiff
INTRODUCTION

The Clean Water Act is the leading federal environmental law regulating water pollution. In recent years, its scope and application to normal land-use activities have become extremely contentious. Yet, despite the growing controversy, the environmental community continues to try to extend the Act’s reach. One of its most recent efforts has focused on expanding the Act to groundwater pollution. In this Article

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1. Senior Attorney, Pacific Legal Foundation.
3. See, e.g., Paul Boudreaux, Federalism and the Contrivances of Public Law, 77 ST. JOHN’S L. REV. 523, 544 (2003) ("[T]he Clean Water Act has been a major feature of water law for thirty years.").
5. Indeed, one could argue that these controversies have actually embothed the environmental community to step up its efforts to expand the Act’s reach. See, e.g., Michael C. Blumm & Steven M. Thiel, (Ground)waters of the United States: Unlawfully Excluding Tributary Groundwater from Clean Water Act Jurisdiction, 46 ENVT. L. 333 (2016) (arguing that the controversial “Waters of the United States” rule—controversial because of its widely perceived overreach—did not regulate far enough).
6. Notably, all of the cases discussed in this Article that have upheld direct Clean Water Act regulation over groundwater were citizen suits brought by environmental groups against private companies or local governments.
I aim to show that this environmentalist endeavor is legally wrong-headed.\(^6\)

The Clean Water Act was passed to restore “the Nation’s waters.”\(^7\) The Act’s principal prohibition focuses on a subset of those waters—namely, “navigable waters” or “waters of the United States.”\(^8\) This prohibition, as well as the Act’s other proscriptions and mandates, operates within a framework of cooperative federalism.\(^9\) That framework is evidenced in part by how the Act chooses to regulate pollution that reaches regulated waters.\(^10\)

\(^6\) Whether it is also ill-advised policy I do not address, although there is significant scholarship supporting a policy presumption that the environment would do better by less, not more, federal regulation. See Jonathan H. Adler & Andrew P. Morriss, *Introduction*, 58 Case W. Res. L. Rev. 575, 576 (2008) (“Today there is widespread dissatisfaction with many aspects of federal environmental law.”); Roger Meiners & Bruce Yandle, *Common Law and the Conceit of Modern Environmental Policy*, 7 Geo. Mason L. Rev. 923, 925 (1999) (“[M]ost federal pollution control efforts are fundamentally misguided. The common law, combined with various state-level controls, was doing a better job addressing most environmental problems than the federal monopoly, which directed most environmental policy for the last part of this century. America’s move down the track of central environmental planning is incompatible with . . . environmental protection itself.”); Jonathan H. Adler, *Conservative Principles for Environmental Reform*, 23 Duke Envtl. L. & Pol’y F. 253, 278–80 (2013) (contending that “environmental protection efforts would benefit from greater decentralization” because “(i) ‘most environmental problems are local or regional in nature,’ (ii) it ‘creates the opportunity for greater innovation in environmental policy,’ and (iii) the federal government could then focus ‘on those environmental concerns where a federal role is easiest to justify, such as in supporting scientific research and addressing interstate spillovers.’”); William W. Buzebee, *Asymmetrical Regulation: Risk, Preemption, and the Floor/Ceiling Distinction*, 82 N.Y.U. L. Rev. 1547, 1556 (2007) (“The common law system’s independence and private incentives to challenge the status quo are particularly valuable antidotes to complacency and ineffective regulation.”), quoted in Adler & Morriss, supra, at 577 n.15.

\(^7\) See 33 U.S.C. § 1251(n).

\(^8\) See id. § 1311(a) (prohibiting the unpermitted discharge of pollutants); id. § 1362(12)(A) (defining “discharge of pollutants” as “any addition of any pollutant to navigable waters from any point source”); id. § 1362(7) (defining “navigable waters” to include “the waters of the United States”).


\(^10\) It is also demonstrated by the Act’s authorization for the transfer of federal permitting authority to the states. See 33 U.S.C. §§ 1342(b), 1344(g). See New York v. United States, 505 U.S. 144, 167 (1992) (identifying as part of a program of cooperative federalism the
Pollution conveyed to regulated waters by a "point source," i.e., any "discernible, confined and discrete conveyance,"\(^{11}\) the Act directly regulates.\(^{12}\) Pollution conveyed to those waters by something other than a point source, i.e., a "nonpoint source," the Act largely leaves to the states to address.\(^{13}\) This division of responsibility reflects a legislative understanding that "nationwide uniformity in controlling nonpoint source pollution [is] virtually impossible," as well as that "the control of nonpoint source pollution often depends on land use controls, which are traditionally state or local in nature."\(^{14}\) Put another way, the Act’s election not to regulate all sources of pollution—or for that matter all waters of the nation—is rooted in the traditional congressional "reluctance . . . to allow extensive federal intrusion into areas of regulation that might implicate land and water uses in individual states."\(^{15}\)

Extending the Act to directly regulate any pollutant discharges to groundwater would compromise this statutory division of labor.\(^{16}\) Congress carefully distinguished throughout the Act between "navigable

congressional practice of "offering States the choice of regulating [an] activity according to federal standards or having state law pre-empted by federal regulation”.

\(^{11}\) 33 U.S.C. § 1362(14).

\(^{12}\) See id. § 1311(a).

\(^{13}\) Appalachian Power Co. v. Train, 545 F.2d 1351, 1373 (4th Cir. 1976) ("Congress consciously distinguished between point source and nonpoint source discharges, giving EPA authority under the Act to regulate only the former."). This is not to say that the Act is indifferent to nonpoint source pollution, but rather that the Act does not directly regulate it. Pronzolino v. Nastri, 291 F.3d 1123, 1126-27 (9th Cir. 2002) ("[T]he Act ‘provides no direct mechanism to control nonpoint source pollution but rather uses the “threat and promise” of federal grants to the states to accomplish this task’ . . . .") (quoting Or. Nat. Desert Ass’n v. Durnbeck, 172 F.3d 1092, 1097 (9th Cir. 1998)).

\(^{14}\) Or. Nat. Desert Ass’n v. U.S. Forest Serv., 550 F.3d 778, 785 (9th Cir. 2008) (quoting Marc R. Poirier, Non-point Source Pollution, in ENVTL. L. PRACTICE GUIDE § 18.13 (2008)).


\(^{16}\) I do not address whether the Act’s existing approach to groundwater pollution—using the promise of federal grant money to encourage the states to regulate that pollution consistent with federal policies—is permissible. Cf. Jonathan Adler & Nathaniel Stewart, Is the Clean Air Act Unconstitutional? Coercion, Cooperative Federalism and Conditional Spending after NFIB v. Sebelius, 43 ECOLOGY L.Q. 671 (2016) (questioning the constitutionality of a similar conditional grant program in the Clean Air Act).
waters” and “ground waters,” providing for direct federal regulation only of the former. 17 Contrary to the desire of some advocates and courts, the consequences of that congressional choice cannot be avoided by the artifice of classifying groundwater as a point source of pollution—groundwater simply does not fit within the Act’s definition of point source. 18

Neither may the congressional design be reworked through the so-called “conduit” theory, which several district courts recently have explicitly adopted. 19 This theory holds that groundwater, although not itself a point source, nevertheless functions as a liability-maintaining “conduit” for point source pollution that reaches regulated surface waters. 20 The theory’s advocates find support for it in the Clean Water Act’s goal to restore the health of the nation’s waters, 21 an aim that, admittedly, cannot be achieved without taking groundwater into account. 22

Although superficially attractive, the conduit theory falls apart on closer scrutiny. Predicating direct federal regulation based on a rationale of “what makes the best sense for water quality” cannot be reconciled with the compromise—witnessed by the Clean Water Act’s treatment of nonpoint source pollution—between federal interests and states’ traditional regulatory roles that the statute embodies. 23 Undeniably, nonpoint source

17 See infra Section II.A.
18 See infra Section II.B.
20 Given that “point source” is itself defined to include a “conduit,” see 33 U.S.C. § 1362(14), there is a tension between the “conduit” theory and the concession that groundwater is not itself a point source. Sensing this tension, at least one district court of the “conduit” camp has concluded that groundwater can qualify as a point source. Hawaii Wildlife Fund, 24 F. Supp. 3d at 999.
22 See Blumel & Thiel, supra note 4, at 367–69.
23 See Kenneth M. Murchison, Learning From More than Five-and-a-Half Decades of Federal Water Pollution Control Legislation: Twenty Lessons for the Future, 32 B.C. ENVTL.
pollution poses a serious obstacle to achieving federal water quality standards. And for decades the same has been true for a subset of that pollution—groundwater pollution. Yet, despite its acknowledgment that "nonpoint source pollution is... one of the last major barriers to achieving state and national water quality goals[,]... Congress made a conscious decision to leave regulation of nonpoint source pollution to the states" when it passed the Clean Water Act. Hence, a water-quality-based argument for groundwater regulation just boils down to a plain—and unconvincing—disagreement with the congressional policy to allow the states to take on a meaningful role in the national effort to end water pollution.

The Article begins with an introduction to the Act's direct and indirect regulatory framework, explained through the lens of cooperative federalism. The Article then proceeds to present and refute three theories for direct regulation of groundwater pollution: groundwater as among the "navigable waters"; groundwater as a "point source" of pollution added to regulated surface waters; and groundwater as a "conduit" of pollution added to regulated surface waters. The Article concludes with a few thoughts about the difficulty of statutory interpretation in environmental law.

AFF. L. REV. 527, 584 (2005) ("The specific political compromise that produced the [Clean Water Act] has continued to shape the federal framework... ").

54 See William L. Andreen, No Virtue Like Necessity: Dealing With Nonpoint Source Pollution and Environmental Flows in the Face of Climate Change, 34 Va. Envtl. L.J. 255, 257 (2016) ("The water quality problems that nonpoint source pollution can create can be severe, as such discharges often contain nutrients and pesticides, bacteria, and organic materials, as well as sediment and mine acid.").

55 See Robert L. Glickman & George Cameron Coggin, Groundwater Pollution I: The Problem and the Law, 35 Kan. L. Rev. 75 (1988) ("The nation's groundwater supplies... are in serious danger from a wide variety of sources.").


57 The importance of that role is as great today if not more so than when the law was enacted. See Douglas R. Williams, Toward Regional Governance in Environmental Law, 46 Akron L. Rev. 1047, 1052 (2013) (noting that states "play a dominant role in ensuring that water quality is protected," one that has become "central to the overall success of the CWA's regulatory program, representing a fairly dramatic shift from the underlying premises of the program").

58 See infra Part I.

59 See infra Section II.A.

60 See infra Section II.B.

61 See infra Section II.C.

62 See infra Part III.
Without doubt, the question of whether discharges of pollution to groundwater can ever be regulated under the Act is an important and emerging issue concerning the Clean Water Act's scope. As I hope to show in this Article, because the subject of such pollution to the Act's direct control would substantially increase the federal role in groundwater regulation, it would unavoidably upset the statute's cooperative framework. Moreover, and critically in my view, such expansion would undercut the rights of property owners whose land-use activities may affect groundwater.\textsuperscript{33} Therefore, extending direct federal regulatory control to groundwater pollution would constitute an unwarranted inflation of the Act's already bloated coverage.\textsuperscript{34}

I. THE CLEAN WATER ACT'S COOPERATIVE FEDERALISM FRAMEWORK FOR WATER QUALITY REGULATION

What we commonly call today the Clean Water Act was a set of significant amendments enacted in response to the perceived shortcomings of existing federal and state water quality law.\textsuperscript{35} Congress considered the prior approach defective because it had "focused on the tolerable effects rather than the preventable causes of water pollution,"\textsuperscript{36} That is to say, it began with the establishment of water quality standards and worked backwards to the sources of pollution, but only if water quality standards were not being met.\textsuperscript{37} Congress chose to overhaul this approach to include

\textsuperscript{33} See U.S. Army Corps of Eng'rs, at 1817 ("The [Clean Water] Act . . . continues to raise troubling questions regarding the Government's power to cast doubt on the full use and enjoyment of private property throughout the Nation.") (Kennedy, J., concurring).

\textsuperscript{34} See Rapanos, 547 U.S. at 722 (plurality op.) (criticizing "the immense expansion of federal regulation of land use that has occurred under the Clean Water Act—without any change in the governing statute").


\textsuperscript{37} See NDRC v. EPA, 915 F.2d 1314, 1316 (9th Cir. 1990). Thus, a discharger needed no permit to deposit pollutants into a water that had "room to spare" in achieving its water quality standards.
a permitting regime for pollution discharges,\textsuperscript{38} while retaining in modified form the procedure for designating water quality standards.\textsuperscript{39}

A. The Act’s Structure for Direct Regulation

The central aspect of the new regime is the Act’s general prohibition on the unpermitted discharge of pollutants from point sources into “navigable waters.”\textsuperscript{40} These aquatic features are defined—rather cryptically—to include the two “waters of the United States.”\textsuperscript{41} The permitting regime is divided into programs: a discharge of dredged or fill material requires a permit (commonly called a Section 404 permit) from the Army Corps of Engineers,\textsuperscript{42} whereas a discharge of any other pollutant requires a permit (commonly called a Section 402 or “NPDES” permit) from EPA.\textsuperscript{43} A distinctive aspect of the revamped Clean Water Act is the statute’s authorization for permitting authority to be passed to the states.\textsuperscript{44} Although few states have obtained Section 404 permitting authority,\textsuperscript{45} nearly all have obtained Section 402 permitting authority.\textsuperscript{46}

\textsuperscript{38} See Miss. Comm’n on Nat. Res. v. Costle, 625 F.2d 1268, 1272 (5th Cir. 1980) (“The major change was the establishment of the National Pollutant Discharge Elimination System (NPDES), under which it is illegal to discharge pollutants without a permit complying with the Act.”).


\textsuperscript{40} See 33 U.S.C. §§ 1311(a), 1362(12)(A). The prohibition also applies to point source pollution discharged to the water beyond the territorial seas and to the high seas, if from a point source other than a vessel. See id. §§ 1362(9), (10), (12)(B).

\textsuperscript{41} Id. § 1362(7). The statute also deems the “territorial seas”—the water from the beach to three miles offshore, see id. § 1362(9)—to be “navigable waters.” See id. § 1362(7).


\textsuperscript{43} See 33 U.S.C. § 1342(a).

\textsuperscript{44} See id. §§ 1342(b), 1344(g), (b).

\textsuperscript{45} EPA, State or Tribal Assumption of the Section 404 Permit Program, https://www.epa.gov/owa-404/state-or-tribal-assumption-section-404-permit-program [https://perma.cc/9BYB-FNA2] (only Michigan and New Jersey). According to EPA, the reasons for the low number of permit authority transfers include “lack of funding,” “concerns regarding Federal requirements and oversight,” and “the controversial nature of regulation of wetlands and other aquatic resources.” Id.

Violating the Act’s provisions for direct water quality regulation can create significant civil and even criminal liability.\(^7\) Just the maximum daily civil penalty for unpermitted pollutant discharges is currently pegged at $37,500.\(^4\) That is especially onerous when one considers that liability will attach despite the discharger’s exercise of all due care.\(^4\) And the threat of such liability is by no means insignificant, due to the Act’s authorization for enforcement by private citizens,\(^5\) in addition to the EPA\(^5\) and the Corps.\(^5\)

B. Congressional Concern for State Prerogatives in a Cooperative Federalism Framework

Despite this federally heavy-handed approach, the Act still adheres even within its direct regulatory provisions to a policy of allowing the states to take an important role in water quality control.\(^5\) That

\(^4\) The Act “impose[s] criminal liability, as well as steep civil fines, on a broad range of ordinary industrial and commercial activities.” \textit{Rapanos}, 547 U.S. at 721 (plurality op.) (quoting \textit{Hanousek v. United States}, 529 U.S. 1102, 1109 (2000) (Thomas, J., dissenting from denial of certiorari)).

\(^5\) See 40 C.F.R. § 19.4, Table 1 (2011).

\(^4\) NRDC v. EPA, 822 F.2d 104, 123 (D.C. Cir. 1987) (“The Clean Water Act does not permit pollution whenever that activity might be deemed reasonable or necessary; rather, the statute provides that pollution is permitted only when discharged under the conditions or limitations of a permit.”).


\(^5\) See 33 U.S.C. § 1319(a)(1)–(3) (compliance orders); \textit{id.} § 1319(d) (civil actions); \textit{id.} § 1319(g) (administrative penalties).

\(^5\) See \textit{id.} § 1344(a)(1)–(4) (compliance orders, civil actions, and administrative penalties).

\(^5\) See S. REP. NO. 92-414, at 71 (“The Federal Government as the custodian of the navigable waters has the responsibility to control affirmatively any discharges of pollutants into the navigable waters and, under the Committee bill, seek to achieve elimination of the discharge of pollutants. [I] It is expected that the States will play a major role in the administration of this program.”); H.R. REP. NO. 92-911, at 125 (1971) (“Another problem raised by the [current] permit program is the total usurpation of enforcement of water quality control by the Federal Government. This is inconsistent with the Federal-State partnership that is necessary if we are ever to have clean and safe waters. The role of the States must be clearly recognized. It is impossible for the Federal Government to succeed in this program without the close and active cooperation of the States. A system of
policy is furthered most clearly through the Act’s permitting transfer provisions.\textsuperscript{54} Although Congress has followed that approach in other statutes,\textsuperscript{55} the practice is by no means universal or a default.\textsuperscript{56} Thus, Congress’ decision to give the power to wield significant federal permitting authority with respect to controlling water pollution reflects its particular concern “to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution,” as well as “to plan the development and use . . . of land and water resources.”\textsuperscript{57}

Such solicitude for the states’ prerogatives is not, however, limited to the Act’s direct regulatory provisions. As noted above, the Clean Water Act’s central prohibition makes unlawful “the discharge of any pollutant by any person.”\textsuperscript{58} Because “discharge of a pollutant” is in turn expressly defined as “any addition of any pollutant to navigable waters from any point source,”\textsuperscript{59} the Act by necessary implication leaves to the states to regulate (or not to regulate) the addition of any pollutant to things other than “navigable waters,” or the addition of any pollutant from a “nonpoint source.”\textsuperscript{60} These inferred limitations on federal power—especially that pertaining to nonpoint source pollution—also bear witness to the cooperative federalism framework embodied in the Act.\textsuperscript{61}

\begin{footnotesize}
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\item \textsuperscript{54} But it also can be seen in Section 401, 33 U.S.C. § 1341, which effectively gives the states a veto power over projects requiring a Clean Water Act permit. See S. REP. No. 92-414, at 69 (“The purpose of the certification mechanism provided in this law is to assure that Federal licensing or permitting agencies cannot override State water quality requirements.”).
\item \textsuperscript{55} See New York v. United States, 505 U.S. at 167–68 (discussing other examples).
\item \textsuperscript{56} For example, the Endangered Species Act reserves to the federal government the authority to issue permits for the incidental take of listed species. See 16 U.S.C. § 1540(a).
\item \textsuperscript{57} 33 U.S.C. § 1251(b).
\item \textsuperscript{58} Id. § 1311(a). See Allison LaPlante & Lin Comerford, On Judicial Review Under the Clean Water Act in the Wake of Decker v. Northwest Environmental Defense Center: What We Now Know and What We Have Yet to Find Out, 43 ENVTL. L. 767, 773 (2013) (“The CWA’s central prohibition lies in section 301 of the statute.”).
\item \textsuperscript{59} 33 U.S.C. § 1362(12)(A) (emphases added).
\item \textsuperscript{60} See United States v. Wilson, 133 F.3d 251, 260–61 (4th Cir. 1997).
\item \textsuperscript{61} See Am. Farm Bureau Fed’n v. EPA, 792 F.3d 281, 288 (3d Cir. 2015) (“Under the Clean Water Act, the EPA and the states participate in a ‘cooperative federalism’ framework working together to clean the Nation’s waters.”). See also 33 U.S.C. § 1251(b) (establishing a national policy “to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution,” while also allowing the states “to
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What is cooperative federalism? Federalism itself is a basic principle of our constitutional structure.63 According to that principle, the federal government is a government of enumerated powers64; all authority not expressly granted to it is reserved to the states or to the people.64 In a sense, all federalism is cooperative: the federal government and the state governments, acting according to their unique prerogatives and competencies, achieve a better regulatory result than would be the case if all power were assigned to one level.64 The modifier “cooperative” thus must denote something more: it refers to the value obtained when one level of government does have the constitutional authority to act, but nevertheless recognizes that its policies would be better served by inviting other levels of government to participate in regulation.66

Although cooperative federalism “retains some currency outside of environmental law, it does not play as central a role in any other field.”67 And in the field of environmental law,68 one of the clearest examples of cooperative federalism is the Clean Water Act.69 As one commentator noted

plan the development and use (including restoration, preservation and enhancement) of land and water resources”).

65 U.S. CONST. amend. X. See Alden v. Maine, 527 U.S. 706, 713 (1999) (“The limited and enumerated powers granted to the Legislative, Executive, and Judicial Branches of the National Government . . . underscore the vital role reserved to the States by the constitutional design . . .”).
66 As, if not more, important than the governmental efficiencies that federalism encourages is the protection and increase of liberty that it fosters. See New York v. United States, 505 U.S. at 181 (“[F]ederalism secures to citizens the liberties that derive from the diffusion of sovereign power.”) (quoting Coleman v. Thompson, 501 U.S. 722, 759 (1991) (Blackmun, J., dissenting)). Professor Corwin memorably described federalism’s double nature as the interplay between “more or less jealous rivals for power,” and “mutually supplementing agencies of government.” Edward S. Corwin, National-State Cooperation—Its Present Possibilities, 46 YALE L.J. 599, 601 (1937).
67 Robert L. Fischman, Cooperative Federalism and Natural Resources Law, 14 N.Y.U. ENVTL. L.J. 179, 184 (2005) (“Since the New Deal, cooperative federalism typically appears as congressional or administrative efforts to induce . . . states to participate in coordinated federal programs.”).
68 Id. at 187.
69 “Environmental law is an unplanned by-product of the unique politics of environmentalism in the late 1960s and early 1970s” with “two distinct but overlapping branches, public health protection and biodiversity conservation.” A. Dan Turlock, The Future of Environmental “Rule of Law” Litigation, 19 PACE ENVTL. L. REV. 575, 581–82 (2002). In my view, the Clean Water Act principally falls under Professor Turlock’s former branch, whereas, for example, the Endangered Species Act falls under his latter branch.
70 See Jim Rossi & Thomas Hutton, Federal Preemption and Clean Energy Floors, 91 N.C.
shortly after the law’s passage, “[t]he Act provides for an intricate system of federal-state interaction in the administration and enforcement of the Act, with emphasis on state responsibility.” Indeed, throughout the Act one can find instances, in addition to the permitting-transfer authorities discussed above, of congressional reliance on nonfederal methods to control water pollution.71

For example, Section 208 expressly relies upon appropriate local or regional governments to take charge of cleaning up areas with greater-than-usual water quality control problems.72 Section 303(a) provides for the states, not the federal government, to establish water quality standards for a state’s waters.73 Similarly, Section 303(d) places principal responsibility on the states again for identifying those waters within their jurisdictions that do not meet water quality standards, and which should therefore be deemed “impaired.”74 And Section 303(e) directs states to create and maintain continuing planning processes for addressing water pollution.75

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71 See Fischman, supra note 66, at 190–91 (explaining how the Act uses federal funding to support state-based programs, and allows states to develop water quality standards that are stricter and more locally tailored than federal standards).
72 See 33 U.S.C. § 1286. One early commentator reckoned Section 208 to be a key component to the Act’s ability to control nonpoint source pollution, provided continued Congressional interest in local land-use decision-making. See Michael Jungman, Comment, Areawide Planning under the Federal Water Pollution Control Act Amendments of 1972: Intergovernmental and Land Use Implications, 54 Tex. L. Rev. 1047, 1080 (1976) (“Section 208 will foster effective programs to improve water quality through land use management, but Congress must pass additional legislation to ensure adequate progress in achieving other equally important objectives that require land use planning.”).
74 Id. § 1313(e). One might also cite Section 401, which gives states a near veto-power over projects involving pollution discharge that require a federal permit. See id. § 1341. I do not cite the section in the text because its importance today is a direct result of the wondrously expansive reading that EPA and the Corps have, to some extent, successfully
These are activities that conceivably could be done in the first instance at the federal level, but Congress elected otherwise.

Notably, these state-based authorities and responsibilities figure prominently in the states' administration of the Clean Water Act's permitting programs.76 If, then, Congress was willing to allow states to retain such a significant regulatory role in areas—such as point source pollution—where a distinctive federal overhaul was expressly effected,77 it should not be surprising that, as we shall see, Congress chose to defer even more broadly to the states in regulating nonpoint source pollution,78 for which Congressional concern was not at that time paramount.79

C. Cooperative Federalism and Nonpoint Source Pollution

The Act does not define "nonpoint source pollution,"80 but by logical implication it is "pollution that does not result from the 'discharge' or 'ad- dition' of pollutants from a point source."81 Such pollution typically is caused by "rainfall around activities that employ or cause pollutants,"82 and which thereupon enters regulated waters "primarily through indiscriminate

attributed to "navigable waters." Cf. Rapanos, 547 U.S. at 722 (plurality op.) ("[A]n immense expansion of federal regulation of land use that has occurred under the Clean Water Act—without any change in the governing statute—during the past five Presidential administrations [that has resulted in] any plot of land containing such a channel [of ephemeral water] may potentially be regulated as a 'water of the United States.'"). Congress, in my view, did not intend the Act to operate like a land use regulation. Gary E. Parish & J. Michael Morgan, History, Practice and Emerging Problems of Wetlands Regulation: Reconsidering Section 404 of the Clean Water Act, 17 LAND & WATER L. REV. 43, 84 (1982) ("There should be little doubt that Congress did not intend such a result."), and so I do not believe that Congress intended Section 401 to play the outsized role in water-pollution regulation that it does today.

76 For example, permits must be consistent with the water quality standards and related limitations that states adopt pursuant to Section 303 of the Act. See 33 U.S.C. § 1311(b); 40 C.F.R. § 122.44(d)(1).

77 See Or. Nat. Desert Ass’n, 172 F.3d at 1096 (observing that the Act "overhauled the regulation of water quality" through "direct federal regulation of the level of effluent that flows from point sources" by means of "the issuance of permits").

78 See Appalachian Power Co., 545 F.2d at 1373 ("Congress consciously distinguished between point source and nonpoint source discharges, giving EPA authority under the Act to regulate only the former.").

79 Even Professor Houck, who believes that the importance of the states to the Act's structure is overplayed, nevertheless acknowledges that the Act only "relegates the states to a highly circumscribed role for those dischargers most on the national mind in 1972"—namely, "point sources." Houck, Cooperative Federalism, supra note 9, at 10428.

80 The Act does, however, use the term. See 33 U.S.C. §§ 1288(b)(2)(F)(i), (j)(1); id. § 1329(k).

81 Swanson v. U.S. Forest Serv., 87 F.3d 339, 342 n.2 (9th Cir. 1996).

82 United States v. Earth Sci., Inc., 599 F.2d 368, 373 (10th Cir. 1979).
and less identifiable natural processes such as runoffs, precipitation and percolation." In part because "the control of nonpoint source pollution is so dependent on such site-specific factors as topography, soil structure, rainfall, vegetation, and land use," Congress "shift[ed] primary control for the control of nonpoint source pollution to the states." The relevant legislative history, although by no means decisive, nevertheless supports the conclusion that Congress recognized the practical, and federalism-based, reasons for allowing nonfederal actors to take the lead in addressing nonpoint source pollution. From the Senate floor, Senator Edwin Muskie—the Act’s chief sponsor in the upper House emphasized that, although "a great quantity of pollutants is discharged by nonpoint source runoff," the Act’s discharge standards pertain only to point source pollution. The reason, he explained, was that "there is no effective way, as yet other than land use control, by which you can intercept that nonpoint source runoff and control it in the way that you do a point source. In other words, because nonpoint source pollution is principally a problem of land-use, its resolution falls principally within the states’ regulatory domain.

* * *

The preceding discussion establishes that an interpretation of the Act that would result in a substantial amount of such nonpoint source pollution falling outside the Act’s regulatory reach would be inconsistent with the Act’s history of nonpoint discharge and with Congress’ understanding and intent.

83 Cordiano v. Metacomet Gun Club, Inc., 575 F.3d 199, 220 (2d Cir. 2009) (quoting Frank P. Girard, Treatise on Env't. Law § 3.03 (updated 2009)).
84 Shanty Town Assoc. Ltd. v. EPA, 843 F.2d 782, 791 (4th Cir. 1988).
85 See Jeffrey G. Miller, Plain Meaning, Precedent, and Metaphysics: Interpreting the "Point Source" Element of the Clean Water Act Offense, 45 Envtl. L. Rep. News & Analysis 11129, 11131 (2015) (besides discussion over the regulation of thermal discharges, “[n]othing in the House, Senate, or Conference Reports further explains the meanings of point source, nonpoint source, the differences between the two terms, or why the permit programs are limited to point sources”).
86 Shanty Towns Assoc. Ltd. v. Piship, 843 F.2d at 791.
87 Although the "remarks of a single legislator, even the sponsor, are not controlling in analyzing legislative history," Chrysler Corp. v. Brown, 441 U.S. 281, 311 (1979) (emphasis added), the floor statement of a sponsor is among "the most authoritative and reliable materials of legislative history," Disabled in Action of Met. N.Y. v. Hammons, 202 F.3d 110, 124 (2d Cir. 2000).
89 Legis. History of Waters Pollution Control Act, supra note 88, at 1314.
90 Id. at 1315.
pollution being shifted to direct federal control—as opposed to leaving it subject to the indirect methods that the Act currently espouses—would conflict with the cooperative framework that Congress has chosen to address pollution from nonpoint sources. As I explain below, regulation of pollution discharges to groundwater would upset this federal-state balance. Because Congress has not expressly authorized that rebalancing, the Act therefore should not be interpreted to encompass direct federal control of such pollution.  

II. DISCHARGES TO GROUNDWATER ARE NOT SUBJECT TO DIRECT FEDERAL CONTROL UNDER THE CLEAN WATER ACT

Three theories have been developed to justify direct federal regulation of groundwater pollution under the Clean Water Act: (i) groundwater is among the “navigable waters”; (ii) groundwater is a “point source” for pollution that reaches regulated surface waters; and (iii) groundwater, although not a “point source,” nevertheless operates as a liability-sustaining “conduit” for point source pollution that reaches regulated surface waters. As set forth below, none of these theories of liability withstands scrutiny. They all suffer from the same defect: attempting to undo the statute’s cooperative federalism framework, either by increasing the number of waters subject to direct federal regulation, or by improperly converting nonpoint source pollution into directly regulated point source pollution.

A. Groundwater Is Not Among the “Navigable Waters”

As previously noted, the Act does not directly regulate all waters within the United States, but rather only “navigable waters.” The statute

91 Pronsalino, 291 F.3d at 1126–27.
92 See Bond v. United States, 134 S. Ct. 2077, 2089 (2014) (“[i]f the Federal Government would ‘radically readjust[] the balance of state and national authority, those charged with the duty of legislating [must be] reasonably explicit’ about it.”) (quoting BFP v. Resolution Trust Corp., 511 U.S. 531, 544 (1994)).
94 For a compendium of cases addressing the extent to which the Act reaches groundwater pollution, see id. at 1001–10. Rather than discuss particular cases, I principally address in this part the main arguments that have been developed by certain courts and commentators to justify direct federal regulation of groundwater pollution under the Act.
95 Id. at 979, 981.
96 See 33 U.S.C. § 1311(a) (prohibiting “the discharge of any pollutant”); id. § 1362(12)(A)
also repeatedly distinguishes between “navigable waters” and “ground waters.”97 For example, Section 102 of the Act requires the preparation of comprehensive programs for water pollution control for “the navigable waters and ground waters.”98 Section 104 mandates the establishment of a water surveillance system for monitoring the quality of, among other things, “the navigable waters and ground waters.”99 Section 106 conditions federal funding of state pollution control programs on, among other things, the establishment of monitoring and data collection for “the quality of navigable waters and to the extent practicable, ground waters.”100 And Section 304 requires both the production of federal guidelines for maintaining water quality for, among other things, “all navigable waters [and] ground waters,”101 as well as federal pollution control guidelines that take account of “changes in the movement, flow, or circulation of any navigable waters or ground waters.”102

If Congress had intended groundwater to be considered part of “navigable waters,” it would have had no reason to list it separately in the foregoing sections.103 Indeed, although the Act mentions “ground waters” repeatedly, the term is absent from that Title of the Act governing water quality standards and permitting.104 Thus, reading “ground waters” to be included in “navigable waters” would violate two well-established canons of statutory interpretation: the inclusion of text in one portion of a statute and its exclusion elsewhere means that the text should

(definition of “discharge of a pollutant” to include “any addition of any pollutant to navigable waters”). See also id. § 1362(12)(B) (regulating discharges from point sources other than vessels on the waters of the contiguous zone and the high seas).

97 The distinction was one that the EPA Administrator himself made during the hearings leading to the Act’s adoption. See Hearings before the Subcomm. on Air and Water Pollution of the Comm. on Public Works, on Bills Amending the Federal Water Pollution Control Act and Other Pending Legislation Relating to Water Pollution Control, 92d Cong. S (1971) (statement of William Ruckelshaus, EPA Administrator) (“We would extend water quality standards to all navigable waters and their tributaries, whether interstate or intrastate, as well as to ground waters . . . .”).


99 Id. § 1254(a)(5).

100 Id. § 1256(e)(1).

101 Id. § 1314(a)(2).

102 Id. § 1314(f)(2)(F).

103 See Tr. Realty Co. v. Ursinus College, No. 11-5885, 2013 WL 6164092, at *9 n.7 (E.D. Pa. Nov. 21, 2013) (noting that, in the part of the Act dealing “with program development and the study of water pollution, Congress consistently refers to ‘navigable waters and ground waters,’” but in the part of the Act concerning “water quality and discharge permit[] Congress uses only the phrase ‘navigable waters’”).

104 Id.
not be implied where it is not expressly found\textsuperscript{105}; and text should not be interpreted to be superfluous.\textsuperscript{106} The textual argument against reading “navigable waters” to include “ground waters” is rather robust.\textsuperscript{107}

The argument is strengthened by the Clean Water Act’s legislative history. The report of the Senate Committee on Public Works, while noting the harms posed by groundwater pollution,\textsuperscript{108} nevertheless “evidences a clear intent to leave the establishment of standards and controls for groundwater pollution to the states.”\textsuperscript{109} For example, the report explains that, “[b]ecause the jurisdiction regarding groundwater is so complex and varied from State to State, the Committee did not adopt the recommendation to establish federal pollution standards for groundwater.”\textsuperscript{110} A similar effort was rejected in the House of Representatives.\textsuperscript{111}

In that body, Representative Aspin of Wisconsin had proposed an amendment on the floor that would have prohibited the unpermitted “addition of any pollutant to any ground waters from any point source.”\textsuperscript{112} Rising against the amendment, Representative Clausen—a House bill sponsor\textsuperscript{113}—explained that “there was not sufficient information on ground waters to justify the types of controls that are required for navigable waters.”\textsuperscript{114} He noted that a provision of the existing bill—ultimately carried forward into the enacted law\textsuperscript{115}—specifically addressed groundwater pollution by denying the transfer of permitting authority if a state could not demonstrate that it had the power to control the disposal of pollutants into wells.\textsuperscript{116} The Aspin amendment was resoundingly voted down.\textsuperscript{117} Advocates of


\textsuperscript{107} See Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 810 (E.D. N.C. 2014) (“Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that groundwater is eventually or somehow ‘hydrologically connected’ to navigable surface waters.”).

\textsuperscript{108} S. Rep. No. 92-414, at 3739 (“The importance of groundwater in the hydrological cycle cannot be underestimated . . . . Groundwater pollution is not as serious a national problem at present as is surface water pollution, but groundwater availability and quality is deteriorating.”).

\textsuperscript{109} Exxon Corp. v. Train, 554 F.2d 1310, 1325 (6th Cir. 1977).

\textsuperscript{110} S. Rep. No. 92-414, at 3739.

\textsuperscript{111} LEGIS. HISTORY OF WATERS POLLUTION CONTROL ACT, supra note 88, at 597.

\textsuperscript{112} See id. at 589.

\textsuperscript{113} Umatilla Waterquality Protective Ass’n, Inc. v. Smith Frozen Foods, Inc., 962 F. Supp. 1312, 1319 (D. Or. 1997). See supra note 87 (on the weight to be given to a sponsor’s views).

\textsuperscript{114} LEGIS. HISTORY OF WATERS POLLUTION CONTROL ACT, supra note 88, at 591.

\textsuperscript{115} See 33 U.S.C. § 1342(b)(1)(D).

\textsuperscript{116} LEGIS. HISTORY OF WATERS POLLUTION CONTROL ACT, supra note 88, at 591.

\textsuperscript{117} See id. at 597.
groundwater regulation have tried to minimize the significance of the Aspin amendment’s rejection, arguing that it means only that Congress did not believe that all groundwater—isolated as well as connected—should be regulated. But this explanation fails to recognize that none of those who spoke against the amendment did so because the amendment was overbroad. Moreover, there is no indication that Mr. Aspin himself thought that the amendment would extend to isolated groundwater.

No doubt taking their cue in part from the statute’s text and legislative history, the EPA and the Corps also have concluded that groundwater is not itself “navigable waters.” In their 2015 rule-making to define “waters of the United States,” EPA and the Corps expressly excluded “groundwater.” The agencies did so despite their Science Advisory Board’s admonition that the “exclusion[] of groundwater . . . do[es] not have scientific justification.” As EPA and the Corps explained, the rule excluded groundwater because “the agencies have never interpreted [it to be a ‘water of the United States.’]” Indeed, even courts that have approved direct federal regulation of groundwater-derived pollution have recognized that groundwater itself is not a regulated water.

111 See Krien, supra note 93, at 965. Another commentator has contended that the Aspin amendment may have been rejected simply because it would have eliminated the definitional exclusion for “pollutant” applicable to oil and gas wells. See Mary Christina Wood, Regulating Discharges Into Groundwater: The Crucial Link in Pollution Control Under the Clean Water Act, 12 Harv. Envtl. L. Rev. 569, 613–14 (1988). But as many who spoke against the amendment did so because of its groundwater effects as those who did so because of its elimination of the definitional exclusion. See LEGIS. HISTORY OF WATERS POLLUTION CONTROL ACT, supra note 88, at 590–97.

112 See id. at 589 (“If we do not stop pollution of ground waters through seepage and other means, ground water gets into navigable waters, and to control only the navigable water and not the ground water makes no sense at all.”).

113 See Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,073 (June 29, 2015) (EPA and Army Corps rule-making noting that “groundwater . . . has never been interpreted to be a ‘water of the United States.’”), see also Vill. of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994) (“Neither the Clean Water Act nor the EPA’s definition asserts authority over ground waters, just because these may be hydrologically connected with surface waters.”).

114 See id. at 37,105 (to be codified at 33 C.F.R. § 328.3(b)(5)); id. at 37,114 (to be codified at 33 C.F.R. § 122.2(2)(v)).

115 Id. at 37,064–65.

116 Id. at 37,073.

117 See, e.g., Tenn. Clean Water Network, 2017 WL 3476069, at *43 (“The Court agrees with those courts that ‘view[] the issue not as whether the CWA regulates the discharge of
Against this significant collection of evidence, advocates for direct federal regulation point to the Act’s definition of “pollutant.” That definition specifically excludes material injected into a well in connection with oil or gas production, so long as the well has been state-approved and the injection will not degrade “ground or surface water resources.” The argument goes that Congress would have had no reason to exclude such underground pollution from the Act’s definition of “pollutant” unless it had believed that such pollution otherwise would be subject to the Act. Of course, the natural rejoinder is that the Act’s definition section applies throughout the statute—to its regulatory as well as to its research and funding sections. Hence, Congress could quite reasonably have decided that the definitional exclusion was necessary to avoid triggering the nonregulatory provisions of the Act, even while maintaining that the exclusion was unnecessary to avoid triggering the Act’s direct regulatory exclusions. And it is no answer to the foregoing that Congress could simply have specified that the exclusion only apply to the Act’s nonregulatory provisions. Such a selected exclusion might well have given rise to the unjustified implied conclusion that such pollutant injections would otherwise be regulated under the Act.

In short, the omission of groundwater from direct federal regulatory control under the Clean Water Act “is not an oversight,” but rather reflects “Congress[’] elect[ion] to leave the subject to state law.” Recognizing that groundwater is not among the statute’s “navigable waters” thus directly vindicates the Act’s cooperative federalism framework.

pollutants into groundwater itself but rather whether the CWA regulates the discharge of pollutants to navigable waters via groundwater.” (quoting Yaddin Riverkeeper, Inc., 141 F. Supp. 3d at 445); Hawaii Wildlife Fund, 24 F. Supp. 3d at 996 (upholding liability on a “conduit theory,” but still recognizing that an “unpermitted discharge into the groundwater, without more, does not constitute a violation of the Clean Water Act”).

124 See Wood, supra note 118, at 697–99.
126 Wood, supra note 118, at 609.
127 See 33 U.S.C. § 1362 (directing that the section’s definitions apply “when used in this chapter” unless “otherwise specifically provided”).
128 See Exxon Corp., 554 F.2d at 1321 n.19. See also United States v. GAF Corp., 389 F. Supp. 1379, 1384 (S.D. Tex. 1975) (“It is at least plausible that Congress intended to include within the scope of research under Subchapter I of the Act and of the permit programs, especially those of the States, under Subchapter IV that which was excluded from the enforcement provisions of Subchapter III.”) (footnote and citations omitted).
129 Wood, supra note 118, at 609.
130 Vill. of Oconomowoc Lake, 24 F.3d at 965.
131 See Jason H. Jones, Comment, The Clean Water Act: Groundwater Regulation and the
B. Groundwater Is Not a “Point Source”

The Clean Water Act defines “point source” as “any discernible, confined and discrete conveyance,” and then lists a number of illustrative items, including pipes, ditches, channels, and conduits.\textsuperscript{334} Several decisions have recognized that groundwater does not fit within this statutory definition.\textsuperscript{335} In fact, as one commentator otherwise friendly to groundwater regulation has conceded, “[c]ontrasting even the most ‘confined and discrete’ groundwater with traditional point sources such as pipes makes the contention that groundwater can be a point source look like a rather weak one.”\textsuperscript{336}

The fit between groundwater and the statutory definition of “point source” is poor because, unlike pollutants contained in a point source, polluted groundwater typically does not flow in discrete channels but instead oozes through the hollow spaces of subterranean material.\textsuperscript{337} As Representative Roncolio observed in speaking against the failed Aspin

\textit{National Pollutant Discharge Elimination System, 8 Dick. J. Envtl. L. & Pol'y 93, 111 (1999) (“[A]lthough Congress found the quality of the nation's groundwater important, Congress . . . intended to distinguish between groundwater and surface water [so as] to encourage the states to develop and to implement groundwater pollution control programs, but to preclude federal enforcement.”).}

\textsuperscript{334} 33 U.S.C. § 1362(14).


\textsuperscript{336} Kven, supra note 93, at 986.

\textsuperscript{337} See James W. Hayman, Regulating Point-Source Discharges to Groundwater Hydrologically Connected to Navigable Waters: An Unresolved Question of Environmental Protection Agency Authority Under the Clean Water Act, 5 Barry L. Rev. 95, 121 (2005) (“Groundwater is that water which exists in the pore spaces among the soil or rock material below the water table . . . . In order for groundwater to move through soil or rock material, the pore spaces (i.e., porosity) must be interconnected to create flow paths (i.e., permeability).”) (footnote omitted); 26 Crown Assocs., 2017 WL 2960506, at *8 (“It is basic science that ground water is widely diffused by saturation within the crevices of underground rocks and soil.”).
amendment, “water that is seeped into the ground and returns to the aquifer or streamflow is not a point of discharge.”138 In other words, the mere fact that pollutants can flow through X does not make X a point source conveyance.139

At least one district court has thought otherwise. In Hawaii Wildlife Fund, the court ruled that groundwater can qualify as a “discrete and confined” conveyance if it can transport “a high proportion of a pollutant from one place to another . . . irrespective of its other geologic properties.”140 Rejecting the argument that pollution could become so diffuse in groundwater that it would not trigger liability, the court explained that “a diffused conduit is no less covered under the Act if it actually conveys pollutants to navigable-in-fact water.”141 The court’s argument is not convincing. First, given that Clean Water Act liability generally does not depend on the amount of pollutant discharged,142 it would be odd to make the pollutant-conveyance potential of X determine whether X is a liability-creating point source. Second, one can certainly conceive of “a high proportion of a pollutant” being conveyed to regulated waters by virtue of unconfined, rainfall-induced, sheet flow—the classic example of nonpoint source pollution143—which all would acknowledge the Act does not regulate. Third, as noted in the preceding paragraph, that X can convey pollutants to regulated waters does not mean that X is a point source.144 Were that not so, then the concept of nonpoint source pollution would be meaningless: for by the very fact of having reached regulated waters by some outside agency—i.e., having been conveyed to those waters—the discharge would necessarily consist only of point source pollution.145 In a word, Hawaii Wildlife Fund renders nonpoint source pollution a contradiction in terms.

138 LEGIS. HISTORY OF WATERS POLLUTION CONTROL ACT, supra note 88, at 590.
139 See Miller, supra note 85, at 11132.
140 Hawaii Wildlife Fund, 24 F. Supp. 3d at 999.
141 Id. at 1000.
142 See Minnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617, 626–27 (8th Cir. 1979) (“We find no justification in the Act for the District Court’s conclusion that a significant alteration in water quality must be demonstrated before the addition of a particular substance to navigable waters can be classified as the discharge of a pollutant.”).
144 Miller, supra note 85, at 11132.
145 The argument assumes, not unreasonably in my view, that a pollutant cannot travel from point A to point B unless it is in some sense conveyed (even if only by “nature”) from point A to point B.
Besides illogicality, defining groundwater as a point source would introduce a significant and unprecedented layer of federal regulation, even for those landowners who do not discharge pollutants but who happen to own land over a polluted aquifer. The “owner” of groundwater in most states is anyone who owns a portion of the land above the aquifer. Such a landowner could easily be considered an “owner” of the groundwater “point source” beneath his or her property, and thus be liable for the polluted groundwater that is conveyed to regulated surface waters. For that reason, the landowner would become subject as well to the Act’s burdensome monitoring and record-keeping requirements for point source owners. These serious consequences for the nation’s owners of groundwater rights marks another reason why an implied direct regulatory control over groundwater pollution makes for bad statutory interpretation.

C. The “Conduit” Theory Improperly Expands the Act’s Coverage

Recently, several district courts have adopted the theory that, even if groundwater itself is neither a regulated water nor a point source, liability may attach to a point source discharge of pollutants to groundwater, if those pollutants reach a regulated surface water. As a leading decision explains the theory, a “discharge into groundwater...is functionally equivalent to a discharge into the [regulated surface water] itself...as long as the groundwater is a conduit through which pollutants are reaching [regulated surface] water.” Typically, this theory of liability


146 See United States v. Huseby, 862 F. Supp. 2d 951, 965 (D. Minn. 2012) (liability extends to those with responsibility for or control over the pollution discharge).

147 See 33 U.S.C. §§ 1318(a)(4)(A), 1318(a)(4)(B), 1318(b). The burden of such obligations for groundwater owners would be especially severe. See Tripp & Jaffe, supra note 146, at 4 (“[M]onitoring groundwater quality is fundamentally more difficult than monitoring surface water quality...”).


150 Hawaii Wildlife Fund, 24 F. Supp. 3d at 994.
is limited by the requirements that (i) the connection through groundwater between surface point source and regulated surface water be "direct" or "immediate," and (ii) the surface-water pollution be traceable through the groundwater connection back to the original point source. Even with these limitations, the "conduit" theory is an impermissible extension of federal regulation.

To begin with, the conduit theory cannot be reconciled with the Act’s text. The statute prohibits the unpermitted discharge of any pollutant, which activity in turn is defined as "any addition of any pollutant to navigable waters from any point source." Liability therefore requires that the addition of a pollutant to regulated waters occur by virtue of a point source conveyance. Groundwater, however, is not a point source. Thus, groundwater’s conveyance of pollutants to regulated waters cannot trigger liability because it consists solely of the delivery of nonpoint source pollution.

Nothing in the Supreme Court’s Clean Water Act case law is to the contrary. It is true that, in Rapanos v. United States, a plurality of the High Court suggested that liability may attach to discharges that "naturally" but not "directly" reach regulated waters. This observation was part of the plurality opinion’s attempt to show that its narrow interpretation of "navigable waters" would not necessarily lead to a significant reduction in the Act’s scope. As the plurality explained, prior lower court decisions had affirmed liability for pollutant discharges "even

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154 E.g., Hawaii Wildlife Fund, 24 F. Supp. 3d at 1000.
157 § 1362(2)(A).
158 See S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians, 541 U.S. 95, 105 (2004) ("[A] point source need not be the original source of the pollutant; it need only convey the pollutant to 'navigable waters' . . . .").
159 Id.
160 See Tripp & Jaffe, supra note 146, at 13 ("A possible explanation for the exclusion of groundwater from the major regulatory provisions of the Act might be that Congress considered groundwater pollution to be, in effect, nonpoint source pollution . . . .").
161 See Hawaii Wildlife Fund, supra note 145, at 996 ("While it makes sense to regulate groundwater under the conduit theory, this court acknowledges that it cannot point to controlling appellate law or statutory text expressly allowing this theory in the present context.").
162 Rapanos, 57 U.S. at 743.
163 See id. at 742–43.
if the pollutants discharged from a point source do not emit ‘directly into’ covered waters, but pass ‘through conveyances’ in between.”

In other words, the plurality was entertaining a point-source-to-point-source-to-regulated-water theory of liability. That is why the plurality thought it relevant that those features that might no longer qualify as “waters of the United States” under its test could still be deemed to be point sources.

This reading of Rapanos is not hair-splitting. There is, after all, a significant difference between a theory of liability based on (i) point-source-to-point-source-to-regulated-water, and (ii) point source pollution traveling through a nonpoint source like groundwater—potentially for many miles—before reaching regulated surface waters. Seeking approval from the Rapanos plurality for the liability-expanding conduit theory is particularly inapt, given that the plurality’s clear intent was to narrow, not expand, the Act’s scope.

Defenders of the conduit theory also assert that the theory comports with the Clean Water Act’s purposes, in light of the interrelation between groundwater pollution and surface water pollution. As one early district court decision puts the point, “since the goal of the [Act] is to protect the quality of surface waters, any pollutant which enters such waters, whether directly or through groundwater, is subject to regulation.”

The argument fails, however, in two important ways. First, it ignores that, as a general matter of statutory interpretation, “it is one thing for Congress

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161 Id.

162 See id. at 743. The opinion’s recitation of the lower court case law supporting that possibility reveals that in nearly all of the cited cases, the “indirect” discharge was simply the result of a series of point-source-to-point-source conveyances.

163 See, e.g., id. at 768 (Kennedy, J., concurring) (“The plurality proceeds to impose two limitations on the Act; but these limitations, it is here submitted, are without support . . . .”); id. at 800 (Stevens, J., dissenting) (“The plurality imposes two novel conditions on the exercise of the Corps’ jurisdiction that can only muddy the jurisdictional waters.”).

164 See Kvien, supra note 93, at 980–81; Brett Smith, Note, Pollution Problems in Paradise: Does the Clean Water Act Apply to Groundwater Pollution in Maui?, 22 J. ENVTL. & SUSTAINABILITY 292, 309 (2016). But at least one strong defender of the regulation of groundwater pollution through the Clean Water Act acknowledges that “incorporating groundwater into [the Act’s framework] can only be achieved by construing either ‘point source’ or ‘navigable waters’ to include groundwater.” Wood, supra note 118, at 574.

to announce a grand goal, and quite another for it to mandate full implementation of that goal.” 169 In other words, a statute does not always pursue its stated objectives “at all costs.” 170 Second, the argument does not recognize that “clean water is not [the Clean Water Act’s] only purpose”—also relevant “is the preservation of primary state responsibility for ordinary land-use decisions.” 171 Indeed, one critical reason why Congress chose not to regulate all waters in the country, or all sources of pollution, was precisely because it would require an unprecedented and unwanted federal intrusion into land-use regulation, 172 a traditional area of state regulatory pre-eminence. 173 By privileging one statutory purpose over another, the conduit theory impossibly overrides the delicate legislative balance between federal and state control that the Clean Water Act codifies. 174

Because the purpose-based argument is perhaps what the defenders of the conduit theory consider to be its strongest point, and because such an approach to statutory interpretation I believe to be especially pernicious, allow me to dwell a bit on the issue. In doing so, I hope that the defects in such a purpose-based approach will be seen more readily. To that end, I set forth below the conduit theory’s purpose-based defense in two steps, drawing from an oft-cited 2005 district court decision that presaged the more recent conduit-favorable case law. 175

**Question:** Does the Clean Water Act directly regulate groundwater pollution?

**Step 1:** Acknowledge the Clean Water Act’s remedial purpose: “Congress has explicitly stated that the objective of the [Act] is to restore

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170 Kappanos, 547 U.S. at 752.
172 See Or. Nat. Res. Ass’n, 550 F.3d at 784. As Professor Andreen memorably put the point, “What was the EPA supposed to do, tell farmers how to farm?” William A. Andreen, Water Quality Today—Has the Clean Water Act Been a Success?, 55 Ala. L. Rev. 537, 562 (2004).
173 Solid Waste Ag. of N. Cook Cnty., 531 U.S. at 174.
and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

**Step 2:** Note that the aforementioned purpose would not be served by regulating “a polluter who discharges pollutants via a pipe running from the factory directly to the riverbank, but not a polluter who dumps the same pollutants into a man-made settling basin some distance short of the river and then allows the pollutants to seep into the river via the groundwater.”

**Answer:** Yes, the Clean Water Act directly regulates groundwater pollution, because such direct regulation would serve the Act’s purpose of cleaning up the Nation’s waters.

This is an excellent purposivist analysis, so it should come as no surprise that its errors are precisely a function of its adherence to “that last resort of extravagant interpretation.” A purpose-based analysis interprets statutory text in light of, and to effect, the statute’s purpose. That is where the error begins. As we have already seen, the Clean Water Act does not embody a single “let’s clean up our water” purpose. Moreover, it is simply “a misunderstanding of the nature of lawmaking in a democratic system to assume that each statute will, like a good work of art, show forth consistent and well-developed themes.” Rather, laws often are the product of “a delicate compromise among competing interests and concerns.” Putting it more bluntly, “reasonable people in the legislature do not always produce reasonable results”; sometimes they produce little more than “backroom deals.” Hence, trying to “interpret” a statute exclusively according to “public-regarding rhetoric” often just results in the “substitut[ion of] the judge’s conception of public policy for that of the legislature.”

Beyond these generally applicable concerns, a myopic purpose-based theory of interpretation bodes particularly ill for the continuing vitality of the Act’s federalism-infused distinction between point source and non-point source pollution. Again, one important way that the Clean Water Act serves the purpose of maintaining state land-use authority as against

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176 *Id.* at *2 (quoting 33 U.S.C. § 1251(a)).
177 *Id.* at *2.
178 *Rapanos*, 547 U.S. at 759.
180 See *Rapanos*, 547 U.S. at 755–56 (plurality op.).
182 *Weyer v. Twentieth Century Fox Film Corp.*, 198 F.3d 1104, 1113 (9th Cir. 2000).
183 Eskridge & Frickey, *supra* note 179, at 335.
184 *Id.*
federal intrusion is through its regulatory limitation to point source pollution.\textsuperscript{186} This kind of built-in statutory backstop is as much the source of a law’s “purposes” as its express grants of authority.\textsuperscript{187} Yet the same myopic purpose-based approach of, “if regulating it would help the environment, then regulate it,” which ostensibly supports the conduit theory, would impermissibly support regulation of pollution traditionally thought of as nonpoint source.\textsuperscript{188} Put another way, construing the Clean Water Act solely through the lens of environmental protection is bad statutory interpretation, because that unqualified criterion did not motivate Congress. “Nonpoint sources discharge more pollutants than point sources,”\textsuperscript{189}—they in fact “constitute[] a substantial portion of all water pollution and significantly affect[] the quality of both surface water and groundwater”\textsuperscript{190}—but Congress chose to leave this problem to the states to address.\textsuperscript{191}

Perhaps recognizing the overreaching effects of wholesale acceptance of the conduit theory, EPA has attempted to limit the theory through a directness requirement—only pollutant discharges that reach regulated surface waters through a “direct” groundwater connection trigger liability.\textsuperscript{192} But there is no logically compelled way to distinguish between

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\item[187] Director, Office of Workers’ Comp. Programs, Dept of Labor v. Newport News Shipbuilding & Dry Dock Co., 514 U.S. 122, 136 (1995) (“Every statute proposes, not only to achieve certain ends, but also to achieve them by particular means . . . . The withholding of agency authority is as significant as the granting of it, and we have no right to play favorites between the two.”).
\item[188] See Miller, supra note 85, at 11147–48 (observing that much nonpoint source pollution originates from vehicles, which comfortably fit within the definition of point source).
\item[189] Id. at 11135.
\item[190] See Miss. Comm’n on Nat. Res., 625 F.2d at 1275 (“[T]he legislative history reflects congressional concern that the Act not place in the hands of a federal administrator absolute power over zoning watershed areas. The varied topographies and climates in the country call for varied water quality solutions.”). See also Ky. Waterways Alliance, 2017 WL 6628917, at *10.
\item[191] See EPA Amicus Br., supra note 153, at 12 (“It has been EPA’s longstanding position that discharges moving through groundwater to a jurisdictional surface water are subject to CWA permitting requirements if there is a ‘direct hydrological connection’ between the groundwater and the surface water.”). See also 66 Fed. Reg. at 3016 (“The Agency has determined that discharges via hydrologically connected ground water impact surface waters and, therefore, should be controlled at the source.”). EPA contends that the Second Circuit upheld its “direct hydrological connection” theory in partially affirming the agency’s effluent limitation guidelines for discharge permits issued to concentrated animal feeding operations. See 73 Fed. Reg. at 70,420 (citing Waterkeeper Alliance, Inc. v. EPA, 399 F.3d
a direct and an indirect discharge if both discharges are to the same groundwater aquifer and that aquifer discharges to a regulated surface water, especially given that "ground and surface waters are connected" and that "polluted groundwater will in most cases eventually discharge to the surface."192 Without such a method for determining liability, the decision whether to regulate becomes an arbitrary line-drawing exercise,193 which typically is the province of the legislature not the judiciary or the executive.194 Even if such a distinction could be formulated, its implementation would be impracticable.180 And predicating liability based on foreseeability—which seems to be the consideration underlying EPA’s direct/indirect distinction—is a poor fit with the Clean Water Act’s strict liability regime.196

486, 514–15 (2d Cir. 2005)). EPA’s reliance is misplaced. No one disputes that EPA may take groundwater into account when superintending the NPDES permitting program; after all, transfer of that power to the states is based on, among other things, a state’s having an adequate program in place to deal with well (read: groundwater) pollution. See 33 U.S.C. § 1342(b)(1)(D). Moreover, no one disputes that the Act takes account of groundwater pollution—the question is how the Act does so. The indirect methods of funding and permitting guidelines are consonant with a congressional desire to avoid direct federal regulation of groundwater pollution.

193 Tripp & Jaffe, supra note 146, at 4.

194 The Clean Water Act’s legislative history reveals Congress’ awareness of the arbitrary nature of the division in pollution regulation that it was enacting. See S. Rep. No. 92-414, at 73 (“The Committee recognizes the essential link between ground and surface waters and the artificial nature of any distinction.”).


196 Hayman, supra note 137, at 122 (“[I]n general, the directness of hydrologic connection is far more obtuse and difficult either to demonstrate or to disprove.”).

197 Stoddard v. W. Carolina Regional Sewer Auth., 784 F.2d 1200, 1208 (4th Cir. 1986) ("Liability under the Clean Water Act is a form of strict liability."). Cf. David P. Griffith, Note, Products Liability—Negligence Presumed: An Evolution, 67 Tex. L. Rev. 851, 854 (1989) (“Strict liability . . . dispos[es] of foreseeability . . . .”). It is plausible that injunctive relief may be available to restrain the foreseeable and imminent addition of pollutants to regulated surface waters. See Drellich, supra note 36, at 287–88 (citing, inter alia, Milwaukee v. Ill., 451 U.S. 304 (1981)). But that possibility does not support the regulation of groundwater pollution, if 1 am correct that should be considered nonpoint source pollution. For even advocates of expansive direct Clean Water Act liability—such as Mr. Drellich—presumably would agree that the Act provides no authority to restrain a foreseeable addition of nonpoint source pollution.
Adding a traceability requirement to conduit-theory liability for "direct" groundwater-carried discharges, as some courts have done, actually worsens rather than moderates the interpretive error. Whether a pollutant that has reached regulated waters is traceable to a given point source is a question of trying to pin an already existing liability on the right actor, as opposed to determining whether liability exists in the first place. In other words, the inability to trace the pollutant back to a particular point source does not mean that no liability has been incurred, but rather that such liability likely cannot be proved. But weighing the difficulty in establishing liability is a quintessentially prosecutorial not judicial function. Thus, the conduit theory improperly collapses two conceptually distinct issues: the standard of liability, and likelihood of establishing that standard in any given case.

CONCLUSION

In the spirit of cooperative federalism, Congress left the problem of nonpoint source pollution to the states. In the preceding pages, I have endeavored to show that direct federal regulation of discharges to groundwater—the consequence of judicial adoption of the "conduit" or related theories—would upset this careful legislative compromise.

The courts that have concluded otherwise all appear to adhere—whether explicitly or not—to a purpose-based interpretive approach to support direct federal regulation, one which I sketched out in the preceding section. Such an interpretation produces what I have elsewhere called "interpretive creep," i.e., the process of construing particular provisions of a statute in light of its supposed purpose such that, after a series of interpretations, the statute begins to take more and more the view of only one faction of the legislature that helped to enact it. Such a

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198 Cf. Miller, supra note 85, at 11132 ("[T]he definition of point source does not mention or suggest traceability.").
199 Cf. Wayte v. United States, 470 U.S. 598, 607 (1985) (noting that prosecutorial discretion is a function of, among other factors, "the strength of the case.").
200 By asking the courts to assume that task, the traceability limitation invites the judiciary to exceed its proper role. Cf. Morrison v. Olson, 487 U.S. 654, 680–81 (1988) (observing that "one purpose of the broad prohibition upon the courts' exercise of executive or administrative duties of a nonjudicial nature," is to ensure that "judges do not encroach upon executive or legislative authority or undertake tasks that are more properly accomplished by those branches") (quoting Buckley v. Valeo, 424 U.S. 1, 123 (1976)).
201 Schiff, supra note 181, at 1091–92.
phenomenon is frequently seen in environmental law, perhaps because people—judges, politicians, and even businessmen included—generally harbor favorable views of environmental protection.204

Given these unspoken prejudices, coupled with the force of interpretive creep, a query would naturally arise in the courts that have followed the above-described purposivist interpretive theory: Why, after all, wouldn’t Congress want groundwater pollution to be cleaned up?205 Unavoidably, this line of inquiry leads to the wrong result because it asks the wrong question. It impliedly denies the existence of other or competing purposes—if there are no other purposes than environmental protection, then it may well follow that Congress would have had no good reason to decline to directly regulate groundwater pollution. The analysis depends on the counterfactual that the Act has no other purpose than environmental protection à l’orraine.

More importantly, the purposivist analysis is misguided because it is exclusively concerned with ends (getting rid of water pollution). That is problematic because a statute is not just about ends—it is also about the means chosen to achieve those ends.206 Congress quite reasonably can choose not to select certain means for a variety of reasons, e.g., economic costs, tradition, or political controversy. To find such choosiness over means in the Clean Water Act should not be surprising at all, given the statute’s express policy to protect the states’ land-use authority.207 Thus, a question

204 Environmental law “came from a public awareness so spontaneous and deep that within a few short years, it had produced over a dozen major public welfare laws and more than twenty new federal programs.” Houck, Standing on the Wrong Foot, supra note 50, at 15. Importantly, these new laws—including the Clean Water Act—“were largely bi-partisan, and . . . received overwhelming votes in [their] favor.” Id. It should not come as a surprise, then, that “it is now bad politics to be considered anti-environment, [as well as] bad business for a company to conduct its operations without considering environmental impacts.” Mark A. Stach, The Gradual Reform of Environmental Law in the Twenty-First Century: Opportunities Within a Familiar Framework, 22 J. CORP. L. 621, 623 (1997). Environmental law also quickly became exceedingly popular in law school, shaping the views of decades-worth of judges. See David Sive, Some Thoughts of an Environmental Lawyer in the Wilderness of Administrative Law, 70 COLUM. L. REV. 612, 613 (1970) (“The popularity of environmental law seminars overwhelms their instructors.”).

205 As my exemplar district court observed, “it would hardly make sense” to regulate the direct discharger but not the groundwater-to-surface-water discharger. N. CAL. RIVER WATCH, 2005 WL 2122052, at *2. Of course, it’s not quite fair to fault a certain legislative distinction for bearing no rational connection to one purpose, where, as with the Clean Water Act, a statute serves more than one purpose.

206 See Director, Office of Workers’ Compensation Programs, Dep’t of Labor, 514 U.S. at 136.

207 See 33 U.S.C. § 1251(b).
better tailored to good statutory interpretation would be, why would Congress choose not to regulate groundwater pollution? The answer lies in the cooperative framework that animates the Clean Water Act, one according to which primary responsibility for remedying groundwater pollution is assigned to the states. Perhaps that framework was then or is now ill-judged. If so, then it falls to Congress—not private litigants or the courts—to recalibrate the Act’s federal-state balance.

**EPILOGUE**

Shortly before this Article went to press, the United States Court of Appeals for the Ninth Circuit ruled in *Hawai`i Wildlife Fund v. County of Maui* that Clean Water Act liability attaches to point-source discharges of pollutants that reach jurisdictional waters through groundwater, if the pollution is more than *de minimis* and is “fairly traceable” to the point source. The court’s very liability-friendly standard shares many of the shortcomings associated with the conduit theory, discussed supra Section II.C, perhaps most notably the failure to preserve any meaningful distinction between point-source and nonpoint-source pollution.

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209 *See* *Ark. v. Okla.*, 503 U.S. at 101.
210 *See*, e.g., Terence J. Centner, *Nutrient Pollution from Land Applications of Manure: Discerning a Remedy for Pollution*, 21 *Stan. L. & Pol’y Rev.* 213, 225 (2010) (“States have provisions concerning nonpoint source pollution, but state efforts have not been very successful in precluding nonpoint source pollution.”); *Ky. Waterways Alliance*, 2017 WL 6626917, at *12 (“Indeed, the distinction between point- and non-point sources would appear untenable in light of this purpose [of protecting surface water quality], given that ‘non]-point sources of pollution constitute a major source of pollution in the nation’s waters.’”) (quoting *Or. Nat’l Res. Council*, 834 F.2d at 849).
211 No. 15-17447, 2018 WL 650973 (9th Cir. Feb. 1, 2018).
212 *Id.* at *7.
April 17, 2018

Honorable John Barrasso
Chairman
Committee on Environment and Public Works
U.S. Senate
410 Dirksen Senate Office Building
Washington, D.C. 20510

Honorable Thomas Carper
Ranking Member
Committee on Environment and Public Works
U.S. Senate
456 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Barrasso and Ranking Member Carper:

In advance of the Committee’s April 18, 2018 oversight hearing, “The Appropriate Role of States and the Federal Government in Protecting Groundwater,” attached please find the following items expressing states’ legal authority over groundwater resources:

- Western Governors’ Association (WGA) Policy Resolution 2013-08, Water Resource Management in the West;
- WGA Policy Resolution 2017-04, Water Quality in the West;
- WGA’s October 2, 2014 letter to the U.S. Forest Service re. FS-2014-0001- Proposed Directive on Groundwater Resource Management, Forest Service Manual 2560; and
- WGA’s May 19, 2017 testimony before the U.S. House of Representatives Committee on Natural Resources, Subcommittee on Water, Power, and Oceans: Legislative Hearing on H.R. 2371 and Water Rights Protection Act Discussion Draft.

On behalf of the Western Governors, I respectfully request that these materials be included in the permanent record of the hearing, as they articulate the Governors’ policy positions on this important issue. Additionally, WGA is preparing written comments to submit to the Environmental Protection Agency (EPA) in response to its February 20, 2019 Request for Comment regarding the Clean Water Act’s application to pollutant discharges into groundwater. These comments will be shared with the Committee as soon as they have been submitted.

Please contact me if you have any questions or require further information. In the meantime, with warm regards and best wishes, I am

Sincerely,

James D. Ogilvie
Executive Director

Attachments

[Signature]
Western Governors’ Association
Policy Resolution 2015 - 08

Water Resource Management in the West

A. BACKGROUND

1. Water is a crucial resource for communities, industries, habitats, farms, and Western states. Clean, reliable water supplies are essential to maintain and improve quality of life. The scarce nature of water in much of the West makes it particularly important to our states.

2. States are the primary authority for allocating, administering, protecting, and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of Western water law and hydrology.

3. Many communities in the West anticipate challenges in meeting future water demands. Supplies are nearly fully allocated in many basins across the West, and increased demand from population growth, economic development, and extreme weather and fire events places added stress on those limited water resources. Sustainability of our natural resources, specifically water, is imperative to the foundations upon which the West was developed. Growth and development can only continue upon our recognition of continued state stewardship of our unique resources and corresponding responsibilities.

4. Strong state, regional and national economies require reliable deliveries of good-quality water, which in turn depend on adequate infrastructure for water and wastewater. Investments in water infrastructure also provide jobs and a foundation for long-term economic growth in communities throughout the West. Repairs to aging infrastructure are costly and often subject to postponement.

5. Western Governors recognize the essential role of partnership with federal agencies in Western water management and hope to continue the tradition of collaboration between the states and federal agencies.

6. Tribal governments and Western states also share common water resource management challenges. The Western Governors Association and Western States Water Council have had a long and productive partnership with tribes, working to resolve water rights claims.
B. **GOVERNORS’ POLICY STATEMENT**

1. **State Primacy in Water Management**: As the preeminent authority on water management within their boundaries, states have the right to develop, use, control and distribute the surface water and groundwater located within their boundaries, subject to international treaties and interstate agreements and judicial decrees.

   a. **Federal Recognition of State Authority**: The federal government has long recognized the right to use water as determined under the laws of the various states; Western Governors value their partnerships with federal agencies as they operate under this established legal framework.

   While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states’ primacy over the allocation and administration of their water resources.

   Reauthorization of the Water Resources Reform & Development Act, proposed federal surplus water rulemakings, and/or storage reallocation studies should recognize and defer to the states’ legal right to allocate, develop, use, control, and distribute their waters, including but not limited to state storage and use requirements.

   b. **Managing State Waters for Environmental Purposes**: States and federal agencies should coordinate efforts to avoid, to the extent possible, the listing of water-dependent species under the Endangered Species Act (ESA). When ESA listings cannot be avoided, parties should promote the use of existing state tools, such as state conservation plans and in-stream flow protections, to conserve and recover species.

2. **Infrastructure Needs**: Aging infrastructure for existing water and wastewater facilities and the need for additional water projects cannot be ignored. Infrastructure investments are essential to our nation’s continued economic prosperity and environmental protection, and they assist states in meeting federally-mandated standards.

   a. **Federal Support for Infrastructure Investment**: Congress should provide adequate support for the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) State Revolving Funds. Further, Congress should fully utilize the receipts accruing to the Reclamation Fund for their intended purpose in the continuing conservation, development and wise use of western resources to meet Western water-related
needs, including the construction of Congressionally-authorized Bureau of Reclamation rural water projects and facilities that are part of a Congressionally-authorized Indian water rights settlement.

Congress should reauthorize Water Resources Reform & Development Act (WRRDA) legislation on a regular schedule and appropriate funding so all projects and studies authorized in WRRDA can be completed in a timely manner.

Congress also should consider facilitating greater investment in water infrastructure, utilizing such tools as loan guarantees, revolving funds, infrastructure banks and water trust funds.

Capital budgeting and asset management principles should be used to determine funding priorities based on long-term sustainability and not annual incremental spending choices. It should be accompanied by dedicated sources of funding with appropriate financing, cost-sharing, pricing and cost recovery policies.

b. **Alternatives to Direct Federal Investment:** Federal and state policymakers should also consider other tools to promote investment in water infrastructure and reduce financing costs, including: public-private partnerships; bond insurance; risk pooling; and credit enhancements.

Congress should remove the state volume caps for private activity bonds used for water and wastewater projects, provide guaranteed tax-exempt status for bonds issued by state or local agencies to finance water infrastructure, provide loan guarantees, and otherwise support and encourage alternatives to direct federal investment of limited general funds.

c. **Hydropower:** Congress and the Administration should authorize and implement appropriate hydropower projects and programs through efficient permitting processes that enhance renewable electric generation capacity and promote economic development, while ensuring protection of important environmental resources and indigenous people’s rights.

d. **Infrastructure Planning and Permitting:** Infrastructure planning and permitting guidelines, rules and regulations should be coordinated, streamlined and sufficiently flexible to: 1) allow for timely decision-making in the design, financing and construction of needed infrastructure; 2) account for regional differences; 3) balance economic and environmental considerations; and 4) minimize the cost of compliance.

3. **Western States Require Innovative and Integrated Water Management.** Western Governors believe effective solutions to water resource challenges require an integrated
approach among states and with federal, tribal and local partners. Federal investments should assist states in implementing state water plans designed to provide water for municipal, rural, agricultural, industrial and habitat needs, and should provide financial and technical support for development of watershed and river basin water management plans when requested by states.

Integrated water management planning should also account for flood control, water quality protection, and regional water supply systems. Water resource planning must occur within a framework that preserves states' authority to manage water through policies which recognize state law and the financial, environmental and social values of the water resource to citizens of the western states today and in the future.

a. **Water Transfers:** Western Governors recognize the potential benefits of market-based water transfers, meaning voluntary sales or leases of water rights. The Governors support water transfers that avoid or mitigate damages to agricultural economies and communities while preventing injury to other water rights, water quality and the environment.

b. **Energy Development:** Western Governors recognize that energy development and electricity generation may create new water demands. Western Governors recommend increased coordination across the energy and water management communities, and support ongoing work to assess the interconnection of energy and water through the Regional Transmission Expansion Planning Project for the Western interconnection and similar efforts.

c. **Conservation and Efficiency:** Because of diminished water resources and declining and inconsistent snowpack, Western Governors encourage adoption of strategies to sustain water resources and extend existing water supplies further through water conservation, water reuse and recycling, desalination and reclamation of brackish waters, and reductions in \textit{per capita} water use. The Governors encourage the use of and research into promising water-saving strategies.

d. **Local Watershed Planning:** Western Governors encourage federal agencies and Congress to provide resources such as technical support to states and local watershed groups. States may empower these watershed groups to address local water issues associated with water quality, growth and land management to complement state water needs.

e. **Intergovernmental Collaboration and Conflict Resolution:** Western Governors support the negotiated settlement of interstate water disputes, Indian and Hawaiian water rights claims, and other federal water needs and claims, the settlement of which are in the best interest of Western states.
f. **State-Federal Coordination:** Western Governors recognize the important role of federal agencies in advancing sound water resource management in the Western states. Governors appreciate the efforts of federal agencies to coordinate water-related activities, particularly through the Western States Water Council, and support the continuation of these key state-federal partnerships.

4. **Western States Need Reliable Water Resource Information:** Basic information on the status, trends and projections of water resource availability is essential to sound water management.

   a. **Basic Water Data:** Western Governors support the U.S. Geological Survey’s Cooperative Water Program and National Streamflow Information Program (NSIP), the Natural Resources Conservation Service’s Snow Survey and Water Supply Forecasting Program, the National Oceanic and Atmospheric Administration’s (NOAA) weather and hydrology-related data collection, monitoring, and drought information programs, and the National Aeronautics and Space Administration’s National Land Imaging (Landsat) Program with its thermal infrared sensor. Western Governors support federal efforts to coordinate water data gathering and information programs across multiple agencies.

   b. **Extreme Weather Events Planning:** Western Governors recognize the significant potential impacts of extreme weather events and variability in water supplies. Western Governors urge Congress and the Administration to work closely with states and other resource managers to improve predictive and adaptive capabilities for extreme weather variability and related impacts. We specifically urge the federal government to place a priority on improving the sub-seasonal and seasonal precipitation forecasting capabilities that could support water management decision-making.

   c. **Water Data Exchange:** The Western Governors’ Association and the Western States Water Council have worked together to create the Water Data Exchange, an online portal that will enable states to share their water data with each other, federal agencies, and the public via a common platform. The Governors encourage the use of state water data in planning for both the public and private sectors.

5. **Drought Preparedness and Response:** As exceptional levels of drought persist across the West, Governors are leading on drought preparedness and response through the Western Governors’ Drought Forum. The Drought Forum provides a framework for leaders from states, businesses, non-profits, communities, research organizations and federal agencies to share best practices and identify policy options for drought management. The Governors have identified several areas in need of additional attention from Drought Forum partners, including:
a. **Data and Analysis:** Basic data on snowpack, streamflow and soil moisture is essential to understanding drought. Though a great deal of information already exists, enhanced drought data collection and real-time analysis at a higher resolution is essential. Governors support state and federal efforts to maintain adequate collection of drought and water data, enhance data networks where appropriate, and facilitate better use of existing information.

The Governors appreciate the collaborative efforts on drought provided through NOAA’s National Weather Service River Forecast Centers and Weather Forecast Offices, and the Office of Atmospheric Research’s labs and programs, such as the National Integrated Drought Information System (NIDIS).

b. **Produced, Reused and Brackish Water:** Technology exists to use produced, reused, recycled and brackish water—sources traditionally considered to be marginal or wastewater. Adoption of this technology has been limited by inadequate data, regulatory obstacles, financial barriers, public attitudes and logistical uncertainties. Governors support regulatory streamlining and policy options to encourage use of produced, brackish, and re-used water where appropriate.

c. **Forest Health and Soil Stewardship:** Better land management practices for forests and farmland may help improve availability and soil moisture retention. Wildfires can cause sediment runoff in water systems, leading to problems for reservoir management and water quality. Governors support policies and practices that encourage healthy and resilient forests and soils in order to make the most of existing water supplies.

d. **Water Use Efficiency and Conservation:** Public awareness of drought has directed increasing attention to water conservation strategies, both in-home and on-farm. Governors encourage municipal, industrial and agricultural water conservation strategies as drought management strategy.

e. **Infrastructure and Investment:** Water infrastructure to store and convey water is crucial to drought management, but maintenance and expansion of that infrastructure is often difficult to fund. Governors support efforts to make the most of existing infrastructure, while seeking creative solutions to add more infrastructure with limited resources.

f. **Working within Institutional Frameworks to Manage Drought:** Legal frameworks and regulatory regimes can sometimes limit the ability of state, local and federal agencies to respond quickly to drought conditions. Governors believe that
innovative, flexible policy solutions, such as streamlined processing of temporary water transfers, should be considered when managing drought.

g. Communication and Collaboration: Communication among state officials, federal agency representatives, water providers, agricultural users and citizens is a crucial component of effective drought response. The Western Governors’ Drought Forum will continue to provide a framework for sharing best practices through its online resource library, informational webinars, and strategy-sharing meetings for the duration of this resolution.

C. GOVERNORS’ MANAGEMENT DIRECTIVE

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution including funding, subject to the appropriation process, based on a prioritization of needs.

2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.
Western Governors’ Association
Policy Resolution 2017-04

Water Quality in the West

A. BACKGROUND

1. Clean water is essential to strong economies and quality of life. In most of the West, water is a scarce resource that must be managed with sensitivity to social, environmental, and economic values and needs. Because of their unique understanding of these needs, states are in the best position to manage the water within their borders.

2. States have federally-recognized authority to manage and allocate water within their boundaries. The Clean Water Act (CWA) Section 101(g) expressly says that “the authority of each state to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this Act.”

3. States and the Environmental Protection Agency (EPA) work together as co-regulators under the CWA and the Safe Drinking Water Act (SDWA). The U.S. Congress has provided for, by statute, the authority for states to obtain approval to implement certain federal program responsibilities. When a state has been approved to implement a program and the state is meeting minimum program requirements, the role of federal agencies like EPA should be funding, technical assistance and research support. States should be free to develop, implement and enforce those requirements using an approach that makes sense in their specific jurisdiction, subject to the minimum requirements of the federal acts.

4. The CWA was last reauthorized in 1987; attempts to reauthorize the Act since then have failed. Current federal regulations, guidance and programs pertaining to the CWA do not always recognize the specific conditions and needs of most of the West, where water is scarce and even wastewater becomes a valuable resource to both humans and the environment. The West includes a variety of waters; small ephemeral washes, large perennial rivers, effluent-dependent streams, and wild, scenic rivers. In addition to natural rivers, streams and lakes, there are numerous man-made reservoirs, waterways and water conveyance structures. States need more flexibility to determine how to best manage these varying resources.
B. GOVERNORS’ POLICY STATEMENT

Clean Water Act (CWA)

1. State Authority and Implementation of CWA: States have jurisdiction over water resource allocation decisions and are responsible for how to balance state water resource needs within CWA objectives. New regulations, rulemaking, and guidance should recognize this state authority.

a) CWA Jurisdiction: Western Governors urge EPA and the Corps to engage the states as co-regulators and ensure that state water managers have a robust and meaningful voice in the development of any rule regarding CWA jurisdiction, particularly in the early stages of development before irreversible momentum precludes effective state participation.

b) Total Maximum Daily Loads (TMDLs)/Adaptive Management: States should have the flexibility to adopt water quality standards and set total maximum daily loads (TMDLs) that are tailored to the specific characteristics of Western water bodies, including variances for unique state and local conditions.

c) Anti-degradation: CWA Section 303 gives states the primary responsibility to establish water quality standards (WQS) subject to EPA oversight. Given the states’ primary role in establishing WQS, EPA should directly involve the states in the rulemaking process for any proposed changes to its existing regulations. Before imposing new anti-degradation policies or implementation requirements, EPA should document the need for new requirements and strive to ensure that new requirements do not interfere with sound existing practices.

d) Groundwater: States have exclusive authority over the allocation and administration of rights to use groundwater located within their borders and are primarily responsible for allocating, protecting, managing, and otherwise controlling the resource. The regulatory reach of the CWA was not intended to, and should not, be applied to the management and protection of groundwater resources. The federal government should not develop a groundwater quality strategy; instead, it must recognize and respect state primacy, reflect a true state-federal partnership, and comply with current federal statutory authorities.

2. Permitting: Actions taken by EPA in its CWA permitting processes should not impinge upon state authority over water management or the states’ responsibility to implement CWA provisions.

a) State Water Quality Certification: Section 401 of the CWA requires applicants for a federal license to secure state certification that potential discharges from their activities will not violate state water quality standards. Section 401 of the CWA is
operating as it should and states’ mandatory conditioning authority should be retained without amendment.

b) **General Permits**: Reauthorization of the CWA must reconcile the continuing administrative need for general permits with their site-specific permitting requirements under the CWA. EPA should promulgate rules and guidance that better support the use of general permits where it is more effective to permit groups of dischargers rather than individual dischargers.

c) **Water Transfers**: Water transfers that do not involve the addition of a pollutant have not been subject to the permitting requirements of the CWA’s National Pollutant Discharge Elimination System (NPDES). States already have authority to address the water quality issues associated with transfers. Western Governors believe that transporting water through constructed conveyances to supply beneficial uses should not trigger NPDES permit requirements simply because the source and receiving water contain different chemical concentrations and physical constituents. Western Governors generally support EPA’s current water transfers rule, which exempts water transfers between waters of the United States from NPDES permitting requirements.

d) **Pesticides**: Western Governors generally support the primary role of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in regulating agriculture and public health related pesticide applications to waters of the U.S. and will seek state-based solutions that complement rather than duplicate FIFRA in protecting water supplies.

3. **Nonpoint Source Pollution**: Nonpoint source pollution requires state watershed-oriented water quality management plans, and federal agencies should collaborate with states to carry out the objectives of these plans. The CWA should not supersede other ongoing federal, state and local nonpoint source programs. Federal water policies must recognize that state programs enhanced by federal efforts could provide a firm foundation for a national nonpoint source policy that maintains the non-regulatory and voluntary nature of the program. In general, the use of point source solutions to control nonpoint source pollution is also ill-advised.

a) **Forest Roads**: Stormwater runoff from forest roads has been managed as a nonpoint source of pollution under EPA regulation and state law since enactment of the CWA. Western Governors support solutions that are consistent with the long-established treatment of forest roads as nonpoint sources, provided that forest roads are treated equally across ownership within each state.

b) **Nutrient Pollution**: Nitrogen and phosphorus (nutrient) pollution is a significant cause of water quality impairment across the nation, and continued cooperation between states and EPA is needed. However, nutrients produced by non-point
sources fall outside of NPDES jurisdiction and should not be treated like other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions.

States should be allowed sufficient flexibility to utilize their own incentives and authorities to establish standards and control strategies to address nutrient pollution, rather than being forced to abide by one-size-fits-all federal numeric criteria. Successful tools currently in use by states include best management practices, nutrient trading, controlling other water quality parameters, and other innovative approaches.

4. **CWA Reauthorization:** The Western Governors support reauthorization of the CWA, provided that it recognizes the unique hydrology and legal framework in Western states. Further, any CWA reauthorization should include a new statement of purpose to encourage the reuse of treated wastewater to reduce water pollution and efficiently manage water resources.

5. **Good Samaritan Legislation:** Congress should enact a program to protect volunteering remediating parties who conduct authorized remediation of abandoned hardrock mines from becoming legally responsible under the CWA and/or the Comprehensive Environmental Response, Compensation, and Liability Act for any continuing discharges after completion of a remediation project, provided that the remediating party – or “Good Samaritan” – does not otherwise have liability for that abandoned mine or inactive mine site.

6. **Stormwater (Wet Weather) Pollution:** In the West, stormwater discharges to ephemeral streams in arid regions pose substantially different environmental risks than do the same discharges to perennial surface waters. The Western Governors emphasize the importance of state primacy in water management, including management of ephemeral streams. State water agencies are well-equipped to provide tailored approaches that reflect the unique management needs of ephemeral streams.

7. **State-Tribal Coordination:** Western Governors endorse government-to-government cooperation among the states, tribes and EPA in support of effective and consistent CWA implementation. While retaining the ability of the Governors to take a leadership role in coordination with the tribes, EPA should promote effective consultation, coordination, and dispute resolution among the governments, with emphasis on lands where tribes have treatment-as-state status under Section 518 of the CWA.
8. **Federal Assistance in Meeting SDWA Standards**: Western Governors believe that the SDWA and its standards for drinking water contaminants have been instrumental in ensuring safe drinking water supplies for the nation. It is essential that the federal government, through EPA, provide adequate support to the states and water systems to meet federal requirements. Assistance is particularly needed for small and rural systems, which often lack the resources needed to comply with federal treatment standards.

9. **Drinking Water Standards**: Contaminants such as arsenic, chromium, perchlorate and fluoride often occur naturally in the West. Western Governors support EPA technical assistance and research to improve both the efficiency and affordability of treatment technologies for these contaminants. In any drinking water standards that the EPA may revise or propose for these and other contaminants, including disinfection byproducts, EPA should consider the disproportionate impact that such standards may have on Western states and give special consideration to feasible technology based on the resources and needs of smaller water systems.

10. **Risk Assessments**: Analysis of the costs of treatment for drinking water contaminants should carefully determine the total costs of capital improvements, operation and maintenance when determining feasible technology that can be applied by small systems. These costs should be balanced against the anticipated human health benefits before implementing or revising drinking water standards.

11. **Emerging Contaminants/Pharmaceuticals**: The possible health and environmental impacts of emerging contaminants and pharmaceuticals are of concern to Western Governors. Although states have existing authorities to address possible risks associated with emerging contaminants and pharmaceuticals, there is a need for more reliable science showing impacts on human health as more information regarding these contaminants becomes available.

12. **Hydraulic Fracturing**: States currently employ a range of effective programmatic elements and regulations to ensure that hydraulic fracturing does not impair water quality, including but not limited to requirements pertaining to well permitting, well construction, the handling of exploration and production waste fluids, the closure of wells, and the abandonment of well sites.

   Federal efforts to study the potential impacts of hydraulic fracturing on water quality should leverage state knowledge, expertise, policies, and regulations. Such efforts should also be limited in scope, based upon sound science, and driven by the states. Western Governors oppose efforts that would diminish the primary and exclusive authority of states over the allocation of water resources necessary for hydraulic fracturing.
Compliance with Federal Water Quality and Drinking Water Requirements

13. **State Revolving Funds:** Western Governors support EPA’s Clean Water State Revolving Fund (SRF) and Drinking Water SRF as important tools that help states and local communities address related water infrastructure needs and comply with federal water quality and drinking water requirements. Western Governors also urge Congress and the Administration to ensure that the SRF Programs provide greater flexibility and fewer restrictions on state SRF management.

14. **Restoring and Maintaining Lakes and Healthy Watersheds:** Historically, the Section 314 Clean Lakes Program and the Section 319 Nonpoint Source Management Program provided states with critical tools to restore and maintain water quality in lakes and watersheds. Western Governors urge the Administration and Congress to support these programs. Such support should not come at the expense of other federal watershed protection programs.

15. **EPA Support and Technical Assistance:** The federal government through EPA should provide states and local entities with adequate support and technical assistance to help them comply with federal water quality and drinking water requirements. EPA should also collaborate with and allow states to identify and establish priority areas, timelines, and focus on programs that provide the largest public health and environmental benefits.

16. **EPA Grant Funding for Primary Service: Rural Water Programs:** Some rural communities still lack basic water and sanitary services needed to assure safe, secure sources of water for drinking and other domestic needs. Adequate federal support, including but not limited to the Rural Utilities Service programs of the Department of Agriculture and State Revolving Funds through EPA, are necessary to augment state resources.

Water Quality Monitoring and Data Collection

17. **Water Data Needs:** Western water management is highly dependent upon the availability of data regarding both the quality and quantity of surface and ground waters. EPA should provide support to the states in developing innovative monitoring and assessment methods, including making use of biological assessments, sensors and remote sensing, as well as demonstrating the value to the states of the national probabilistic aquatic resource surveys.
C. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct WGA staff to work with Congressional committees of jurisdiction, the Executive Branch, and other entities, where appropriate, to achieve the objectives of this resolution.

2. Furthermore, the Governors direct WGA staff to consult with the Staff Advisory Council regarding its efforts to realize the objectives of this resolution and to keep the Governors apprised of its progress in this regard.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult www.westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.
July 2, 2014

Honorable Tom Vilsack
Secretary of Agriculture
U.S. Department of Agriculture
1400 Independence Ave., S.W.
Washington, D.C. 20250

Dear Secretary Vilsack:

Western Governors are concerned by the United States Forest Service’s (USFS) recently released Proposed Directive on Groundwater Resource Management (hereafter “Proposed Directive”). As you know, states are the exclusive authority for allocating, administering, protecting and developing groundwater resources, and they are primarily responsible for water supply planning within their boundaries.

Congress recognized states as the sole authority over groundwater in the Desert Land Act of 1877. The United States Supreme Court reiterated the exclusive nature of state authority in California Oregon Power Co. v. Roter Portland Cement Co., 295 U.S. 142 (1935).

Despite that legal and historical underpinning, the Proposed Directive only identifies states as “potentially affected parties,” and asserts that the USFS’s proposed actions would “not have substantial direct effects on the states.” Our initial review of the Proposed Directive leads us to believe that this measure could have significant implications for our states and our groundwater resources.

For this Proposed Directive – as well as the Proposed Directives for National Best Management Practices for Water Quality Protection on National Forest System Lands – USFS should seek authentic partnership with the states to achieve appropriate policies that reflect both the legal division of power and the on-the-ground realities of the region.

We respectfully request your responses to the attached questions to help us better understand the rationale behind this new proposal.

Sincerely,

Josh Hickenlooper
Governor, State of Colorado
Chairman, WGA

Brian Sandoval
Governor, State of Nevada
Vice Chairman, WGA
Western Governors' Association
Questions Regarding Proposed United States Forest Service (USFS)
Water Quality-Related Directives

Proposed Directive on Groundwater Resource Management

Legal Basis for USFS Action:

Well over a century ago, Congress recognized states as the sole authority over groundwater in the Desert Land Act of 1877. The United States Supreme Court reiterated the exclusive nature of state authority in California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935), recognizing that states have exclusive say over the allocation, administration, protection and control of groundwater within their borders.

- What is the legal basis for U.S. Department of Agriculture (USDA) / USFS assertion of federal authority in the context of the Proposed Directive? What does the USDA / USFS recognize as the limits of federal authority?

- The Proposed Directive states that, when filing groundwater use claims during state water rights adjudications and administrative proceedings, Forest Service employees should “[a]pply Federal reserved water rights (the Reservation or Winters doctrine) to groundwater as well as surface water to meet Federal purposes under the Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act” (emphasis added).
  - What is the legal basis for these claims?
  - When and how will USFS assert reserved water rights claims to groundwater?

- The Proposed Directive states that the assertion of reserved rights to surface water and groundwater should be consistent with the purposes of the Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act. In the 1978 case United States v. New Mexico, 438 U.S. 696 (1978), the U.S. Supreme Court denied USFS claims to reserved rights for fish, wildlife and recreation uses. Rather, the Court found that the Organic Act limits reserved rights to those necessary to meet the primary purposes of the Act – the conservation of favorable water flows and the production of timber – and that other secondary needs must be met by obtaining appropriation rights from the state.
  - How does the Proposed Directive work within the legal framework required by the Court?
  - Given the Supreme Court’s finding, how does the Organic Act authorize USFS reserved rights to groundwater here?
State Authority:

- Given the federal statutory grant of state authority over ground water and U.S. Supreme Court case law discussed above:
  
  o What will “cooperatively managing groundwater with states” mean in practice?
  
  o How will the Department ensure that the Proposed Directive will not infringe upon, abrogate, or in any way interfere with states’ exclusive authority to allocate and administer rights to the use of groundwater as well as the states’ primary responsibility to protect, manage, and otherwise control water resources within their borders?
  
  o Do the new considerations for groundwater under USFS’ existing special use authorizations amount to a permit for groundwater use? If (as stated) groundwater and surface water are assumed to be hydraulically connected, could this special use authorization for groundwater amount to water rights permitting of both groundwater and surface water? Will there be an increase in regulatory responsibilities for states and water users? What will the new requirements for monitoring and mitigation entail?
  
- The Proposed Directive asserts that it does not trigger the requirements of E.O. 13132 on federalism— that it would not impose compliance costs on states or have substantial direct effects on states or the distribution of power.
  
  o Given the changes this directive would make in the ways state-managed waters are permitted, why do USDA and USFS believe this action would not trigger E.O. 13132?

Scientific Assumptions and Definitions:

- How will definitions be established for the Proposed Directive? Particularly regarding the definition of “groundwater-dependent ecosystems,” states should be able to weigh in with information regarding the unique hydrology within certain areas.

- The Proposed Directive would require the Forest Service to, “[a]ssume that there is a hydrological connection between groundwater and surface water, regardless of whether State law addresses these water resources separately, unless a hydrogeological evaluation using site-specific data indicates otherwise.” The Federal Register notice for the Directive further states that, “this assumption is consistent with scientific understanding of the role and importance of groundwater in the planet’s hydrological cycle.” Yet without citing specific scientific evidence for specific areas, the assumption of connectivity opens new waters to permitting without sound evidence that takes site-
specific considerations into account.

- What quantifiable science does USFS depend upon to justify this broad assertion of federal authority?

**Application to Existing Permitted Uses:**

- How will the Proposed Directive apply to existing, permitted activities on USFS lands? How will it affect existing uses that rely on state-based water rights?

**Nexus to Forest Planning Rule:**

- How is this Proposed Directive related to the Forest Planning Rule?

**Process Concerns**

- Given the Proposed Directive's potential impacts on states and stakeholders, why was this new policy released as a Proposed Directive rather than a rule?

- Why were states – the exclusive authorities over groundwater management – not consulted during USDA / USFS' development of this Proposed Directive?


- How do the proposed BMP Directives relate to *NEDC v. Brown*, litigation overturned by the U.S. Supreme Court which would have identified forest roads as subject to permitting under the Clean Water Act (CWA)?

- How will the Proposed Best Management Practices (BMP) Directives relate back to the recent proposed rule regarding the scope of waters protected under the CWA and the related study on *Connectivity of Streams and Wetlands to Downstream Waters* from the Environmental Protection Agency’s Scientific Advisory Board?

- What are the implications of using these BMP Directives as USFS' primary requirements to meet water quality standards?

- Will these become the basis for future regulatory action impacting specific activities on USFS lands (for example, energy production, mining, or grazing)?

- What is the legal basis of asserting that USFS needs to institute BMP Directives to "[maintain] water resource integrity?"
October 2, 2014
Groundwater Directive Comments
USDA Forest Service
Attn: Elizabeth Berger – WFWARP
201 14th St. SW
Washington, D.C. 20250


Dear Ms. Berger:

The U.S. Forest Service (hereafter USFS or Service) has issued a proposed directive on groundwater resource management (79 FR 25815, May 6, 2014). This draft directive, published for public comment, is proposed for addition to the USFS Manual 2560. Because this directive impacts state authority to manage water, the Western Governors’ Association (WGA) submits the following comments.

The USFS states that the directive is needed in order to "establish a consistent approach for addressing both surface and groundwater issues that appropriately protects water resources, recognizes existing water uses, and responds to the growing societal need for high-quality water supplies" (79 FR 25815).

STATEMENT OF INTEREST:

The WGA represents the Governors of 19 Western states and 3 U.S.-flag islands. The association is an instrument of the Governors for bipartisan policy development, information exchange and collective action on issues of critical importance to the Western United States.

Clean water is essential to strong economies and quality of life, as the Western Governors recognize in their Policy Resolution 2014-04, Water Quality in the West. Because of their unique understanding of these needs, states are in the best position to manage the water within their borders.

States are the primary authority for allocating, administering, protecting, and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the
management of their water resources and are best suited to speak to the unique nature of Western water law and hydrology.

WESTERN GOVERNORS' ANALYSIS AND RECOMMENDATIONS:

The Western Governors sent a letter to US Secretary of Agriculture Tom Vilsack on July 2 with several questions regarding the proposed directive.\(^1\) As stated in that letter, our initial review of the proposed directive leads us to believe that this measure could have significant implications for our states and our groundwater resources.

WGA thanks Secretary Vilsack for his response to this letter, dated August 29. We are also sincerely grateful for the additional extension of the comment period so that the Western Governors are able to provide these detailed comments on the proposed directive. We understand that the Forest Service manages a significant portion of land in western states, on behalf of the United States, and that what occurs on this land can, in some instances, have a significant impact on water resources.

Recognition of the States' Exclusive Authority over Groundwater Management

Well over a century ago, Congress recognized states as the sole authority over groundwater in the Desert Land Act of 1877. Moreover, the U.S. Supreme Court held in *California Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935), that states have exclusive authority over groundwater, finding that following the Desert Land Act of 1877 "... all non-navigable waters then a part of the public domain became publici juris, subject to the plenary control of the designated states."

Congress' clear intent that the states should have authority over groundwater, as affirmed by the U.S. Supreme Court, is distorted by the proposed directive in multiple ways. The proposed directive could be construed to assert USFS ownership of state groundwater through use of the phrase "NFS groundwater resources" throughout the document. It goes on to identify states merely as "potentially affected parties" and only recognizes states as "having responsibilities" for water resources within their boundaries. This vague and insufficient acknowledgement of the states' authority over groundwater is also evident in Section 2560.02-1, which states that an objective of the proposed directive is to "manage groundwater underlying NFS lands cooperatively with states." This language misleadingly suggests that the USFS has equal authority with the states over groundwater management, which it does not.

Potential for Special Use Authorizations to Supersede State Authority

States hold the authority to issue water rights, a fact recognized by the USFS in the proposed directive. However, the Western Governors are concerned that the proposed directive will lead the USFS to make decisions and place stipulations on proposed actions on NFS lands based on the quantity of water withdrawn with a state-issued water right; that is, a quantity that the state has authorized for diversion and depletion. Specific provisions include (emphasis added in all instances):

- Section 2560.03-4-a: Consider the effects of proposed actions on groundwater quantity, quality, and timing prior to approving a proposed use or implementing a Forest Service activity;

- Section 2561-2: Prior to implementation or approval, assess the potential for proposed Forest Service projects, approvals, and authorizations to affect the groundwater resources of NFS lands. If there is a high probability for substantial impact to NFS groundwater resources, including its quality, quantity, and timing, evaluate those potential impacts in a manner appropriate to the scope and scale of the proposal and consistent with this chapter; and

- Section 2562.1-3: When issuing or reissuing an authorization or approving modification of an authorized use, require implementation of water conservation strategies to limit total water withdrawals from NFS lands (FSM 2541.21h) deemed appropriate by the authorized officer, depending on the type of authorized use; existing administrative and other authorized uses in the area; the physical characteristics of the setting; and other relevant factors. If the holder of the authorization consents, amend the authorization to include this requirement.

These portions of the proposed directive assume that the Service has some type of authority over the management of groundwater, which it does not. The proposed directive should clearly state that state-issued water rights for allocations of water must be recognized. The USFS does not have the authority to limit the amount of withdrawals authorized by a state. Limiting the quantity of groundwater withdrawals through special use authorizations would, in effect, amount to superseding states' authority to issue water rights.

Connectivity of Surface Water and Groundwater

Another troubling concern in the proposed directive is the Service's rebuttable presumption that surface water and groundwater are hydraulically connected, regardless of whether state law treats these resources separately (Sections 2560.03-2 and 2561-1). The directive should defer to the laws of individual states in recognition of their authority over water management. Moreover, if groundwater and surface water are
assumed to be hydraulically connected, there is the potential for misinterpretation of the
directive to mean the Service’s newly asserted management of groundwater resources
should extend to surface water. To be clear, the states have the authority to manage
both groundwater and surface water, and the USFS should fully recognize this in its
proposed directive.

Legal Basis for the Proposed Directive

Aside from the question of state authority, the proposed directive raises other legal questions.
The proposed directive states that the assertion of reserved rights to surface water and
groundwater should be consistent with the purposes of the Organic Administration Act, the
(1978), the U.S. Supreme Court denied USFS claims to reserved rights for fish, wildlife and
recreation uses. Rather, the Court found that the Organic Act limits reserved rights to those
necessary to meet the primary purposes of the Act—the conservation of favorable water flows
and the production of timber—and that other secondary needs must be met by obtaining
appropriation rights from the state.

Given the Supreme Court’s ruling, specific language in Section 2567 (Item 3) of the proposed
directive is troubling and confusing. This section states that, when filing groundwater use
claims during state water rights adjudications and administrative proceedings, Forest Service
employees should “[a]pply Federal reserved water rights (the Reservation or Winters doctrine)
to groundwater (emphasis added) as well as surface water to meet Federal purposes under the
Organic Administration Act, the Wild and Scenic Rivers Act, and the Wilderness Act.”

The prospect of federal agencies claiming reserved rights to surface water is already a
contentious affair, but suggesting the agency can assert such claims to groundwater is even
more so. Reserved water rights have always been limited to surface water, and while there has
been a long-standing debate as to whether they apply to groundwater, no federal court has
extended the doctrine to groundwater.

Nevertheless, states and federal agencies have worked together to craft mutually acceptable and
innovative solutions to address federal water needs, including federal needs for groundwater.
These types of negotiated outcomes accommodate federal interests and needs and should be
considered, recognizing the absence of any USFS reserved water rights authority for secondary
purposes. The directive should require the USFS to work with state water right administrative
agencies to address federal interests and needs without asserting any reserved right claims to
groundwater.

Questionable Need for Proposed Directive

In the Federal Register notice for the proposed directive, the Service argues that there is “a need
to establish a consistent approach for addressing both surface and groundwater issues” (79 FR
25815). In separate communications, Service officials have declared a need to bring all of the USFS regions in line with varying groundwater directives into a single consistent framework. However, just one region – Region 3 (encompassing Arizona and New Mexico) – addresses groundwater in its existing directives.

**Questionable Ability and Need to Implement Proposed Directive**

The proposed directive requires USFS employees to consider groundwater in a variety of new situations. Yet, as acknowledged in a “Frequently Asked Questions” document provided by the Service on the proposed directive, USFS has just four dedicated groundwater specialists within its current staff to implement the proposed directive (*Key and Common Questions and Answers: Proposed Groundwater Directive FSM 2560, Question 41*). This document also contemplates hiring a contractor with groundwater expertise, “if circumstances require it.” Given the pressing needs of (and limited budget for) the Service’s existing responsibilities, the Western Governors encourage the agency to direct its resources to existing programs.

Additionally, the proposed directive creates regulatory duplication and overlap. As the South Dakota Department of Environment and Natural Resources stated in its July 31 submission on the proposed directive:

> The Forest Service is now directed to do research and groundwater evaluations and assessments through this proposal. This is commonly what the US Geological Survey and Environmental Protection Agency do. It is not only a redundancy of responsibilities, it is doubling expenditures of these activities in an already overextended and unbalanced federal budget.

**Adjacent Lands**

The proposed directive also requires USFS officials to evaluate water right applications “on adjacent lands that could adversely affect NFS groundwater resources” (Sections 2560.03-6(f) and 2560.08h-5). Such actions outside the boundaries of NFS lands exceed the limits of the agency’s authority. It is inappropriate for the USFS to extend its administrative reach to lands it does not manage.

**Land Exchanges**

The USFS creates a new requirement in the proposed directive for “an appropriate assessment of potential groundwater availability . . . as part of the appraisal process when water availability may be of significance on NFS lands proposed for a land exchange” (Section 2560.03-11). As the Western Governors have stated in a letter supporting legislation to facilitate state-federal land exchanges,

> The burdensomeness and complexity of federal land exchange processes often prevent the completion of sensible and mutually beneficial
Exchanges, even on a government-to-government basis. Consequently, state lands remain locked in federal conservation areas, and states are deprived the economic benefit of land grants that were made to fund education and other purposes.\(^2\)

Adding a new requirement to an already arduous process will create further challenges for the process of approving economically beneficial land exchanges. Furthermore, the proposed directive does not specify what the threshold of “significance” is that would warrant a groundwater availability assessment, nor does it speak to which specific factors will be evaluated or how they may be weighted in the consideration of a transaction. The Service should clarify these points before adding a new barrier to the land exchange process.

**Lack of State Consultation**

The USFS did not reach out to WGA or any state agencies of which WGA staff is aware in advance of developing and publishing the proposed directive. When asked about state consultation on a stakeholder conference call on May 20, 2014, the USFS indicated that they had consulted with states when the Proposed Directive was first considered several years ago, a time when many of the current Western Governors had not yet been elected and many different employees were working within the Service and the state agencies.

The USFS asserts that the proposed directive does not trigger the state consultation requirements under E.O. 13132 on federalism. However, the USFS has initiated tribal consultation pursuant to E.O. 13175, *Consultation and Coordination with Indian Tribal Governments*. States, as the exclusive authority for groundwater management, deserve at least the same level of consultation as tribes.

Waiting until the public comment period to solicit state input, as the USFS has done in this instance and others, does not allow for meaningful consideration of the states’ perspectives. States should have been consulted much earlier in the development of this directive, especially given the number of years the agency has spent preparing this proposal.

**Context: Other Water-Related Proposed Directives from USFS**

The USFS has published two other proposed directives for public comment: one regarding best management practices for water quality and one on ski area water rights. An assumption underlying all three proposed directives is that the Service has an obligation to extend regulation of water resources beyond current state and federal efforts. As the Service has

Elizabeth Berger  
October 2, 2014  
Page 7

written in a “Frequently Asked Questions” document for the proposed directive on groundwater.  

There is a clear need for the Forest Service, in continued cooperation with the states and tribes, to take an active role in comprehensively managing the human activities that potentially affect water resources on National Forest System lands.

WGA is sensitive to the potential for this “comprehensive management” to venture into the realm of new regulatory authority for the Forest Service.

WGA urges the Forest Service to consult with states in a meaningful way prior to proposing future directives or rules.  This proposed directive, like many other proposals from the USFS and other federal agencies, was developed without any state consultation of which WGA is aware.  True consultation with the states will help the Service identify and avoid conflicts regarding proposed directives and rules.  We invite the USFS to work through WGA, the Western States Water Council, and individual states to facilitate dialogue on ways to improve this (and any future) proposed directive.

WGA appreciates the opportunity to submit comments on this proposed directive.

Respectfully submitted,

Brian Sandoval  
Governor, State of Nevada  
WGA Chairman

John Kitzhaber, M.D.  
Governor, State of Oregon  
WGA Vice Chairman

Testimony of James D. Ogsbury, Executive Director
Western Governors’ Association

Before the U.S. House of Representatives
Committee on Natural Resources
Subcommittee on Water, Power, and Oceans

Legislative Hearing on H.R. 2371 and Water Rights Protection Act Discussion Draft
May 18, 2017

Chairman Lamborn, Ranking Member Huffman, and Members of the Subcommittee, the Western Governors’ Association (WGA) appreciates the opportunity to provide written testimony addressing states’ rights to manage and allocate their water resources. WGA is an independent organization representing the Governors of 19 western states and 3 U.S.-flag islands. The Association is an instrument of the Governors for bipartisan policy development, information-sharing, and collective action on issues of critical importance to the western United States. The Governors appreciate the opportunity to provide background testimony relevant to the Subcommittee’s work on water resources policy.

Water is a precious resource everywhere but especially in the arid West. Water regimes are different in the West — our hydrology and the legal structures governing water rights and usage are distinct from the rest of the nation. The Western Governors have adopted a policy resolution (WGA Policy Resolution 2015-08, Water Resource Management in the West) that articulates a fundamental fact and principle recognized by both Congress and the United States Supreme Court:

States are the primary authority for allocating, administering, protecting and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of western water law and hydrology.

The Governors’ statement is the starting point of WGA’s work on water policy and should be the starting point of any federal action on water as well. In recent years, however, several federal regulatory proposals have inadequately recognized state authority over water. In WGA Policy Resolution 2015-08, Water Resource Management in the West, Western Governors assert:

The federal government has long recognized the right to use water as determined under the laws of the various states; Western Governors value their partnerships with federal agencies as they operate under this established legal framework. While the Western Governors acknowledge the important role of
federal laws such as the Clean Water Act, the Endangered Species Act and the Safe Drinking Water Act, nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states’ primacy over the allocation and administration of their water resources.

Nowhere is the need for substantive consultation between states and the federal government more critical than in the water arena. WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship, states that:

Each Executive department and agency should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with early, meaningful and substantive input in the development of regulatory policies that have federalism implications. This includes the development, prioritization and implementation of federal environmental statutes, policies, rules, programs, reviews, budgets and strategic planning.

Certain previously proposed rules, regulations, and directives have threatened to disrupt the traditional balance of state and federal power over water management and protection, and preempt state water resource authority. Western Governors have consistently communicated concerns regarding the preemption of, and interference with, state water authority to federal agencies through public comments. WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship, states that:

In the absence of Constitutional delegation of authority to the federal government, state authority should be presumed sovereign. Accordingly, federal departments and agencies should, to the extent permitted by law, construe, in regulations and otherwise, a federal statute to preempt state law only when the statute contains an express preemption provision or there is some other firm evidence compelling the conclusion that Congress intended preemption of state law, consistent with established judicial precedent.

While states have primary authority over their water resources generally, their authority over groundwater management and allocation is even more extensive and has not been expressly preempted by federal legislation. WGA Policy Resolution 2015-08, Water Resource Management in the West, affirms that:

States have exclusive authority over the allocation and administration of rights to use groundwater located within their borders...The federal government should not develop a groundwater quality strategy; instead, it must recognize and
respect state primacy, reflect a true state-federal partnership, and comply with current federal statutory authorities.

Western Governors communicated their concerns regarding a previously proposed Directive on Groundwater Resource Management, issued by the U.S. Forest Service (USFS), which included language that could have been construed to assert USFS ownership of state groundwater and lead USFS employees to make decisions regarding special use permits based on the amount of water withdrawn under a state-issued water right (79 FR 25815, May 6, 2014). Additionally, the proposed Directive instructed USFS employees to assume that surface water and groundwater are hydraulically connected, regardless of whether state laws treats these resources as separate. This assumption disregarded long-standing state laws and conflated separate authorities over groundwater and surface water.

Another previous proposal of USFS threatening states' primary authority over water resources involved an addition to the agency’s handbook regarding ski area water rights (79 FR 35513, June 23, 2014). As the Western Governors stated in their formal comments on the proposal, some of the proposed language appeared to be an agency effort to utilize special use authorization as a means by which to manage water use and water rights on National Forest System lands and to add a layer of federal regulatory oversight to state-managed water rights systems. On December 30, 2015, USFS issued a modified directive that does not provide for ski area water rights to be acquired in the name of the United States; instead, the final directive focuses on sufficiency of water to operate ski areas on NFS lands.

The 2015 Clean Water Rule, promulgated by the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE), prompted Western Governors to submit comments expressing various process-related, as well as substantive, concerns. The Rule, which is the subject of agency review under an Executive Order dated February 28, 2017 (and currently stayed by the U.S. Court of Appeals for the Sixth Circuit), would create ambiguity in defining the jurisdictional bounds of the Clean Water Act (CWA). While the Rule exempts groundwater from its scope, a “shallow subsurface flow connection” – a term the Rule fails to define – could establish jurisdiction over isolated surface waters. Additionally, EPA’s Scientific Advisory Board (SAB) report on the connectivity of waters indicated support for using connectivity as a scientific basis for even broader CWA jurisdiction than was asserted under the Rule. Furthermore, no state representatives participated in the SAB review of EPA’s connectivity report. Accordingly, the review was deprived of the regulatory expertise, scientific resources, and on-the-ground knowledge possessed by state professionals. The EPA and USACE have recently begun renewed efforts to enact a rule that clarifies which water bodies fall under CWA jurisdiction. WGA, as well as individual states, have been approached by the agencies in order to seek their concerns and viewpoints. Western Governors applaud this outreach and look forward to a robust and ongoing dialogue between the states and federal agencies in the development of a new rule.
In December 2016, USACE proposed a Rule seeking to preempt states’ primary authority over waters impounded in USACE reservoirs. Western Governors submitted comments in response to the proposed Rule expressing concerns that: (i) federalism implications were not properly evaluated and discussed by the agency with the states; (ii) states were required to relinquish their primary authority over historic natural flows in the rivers, which was never contemplated by the applicable federal statutes under which USACE was developing the Rule; and (iii) the proposed Rule improperly denied access to divert and appropriate natural flows under state water law.

In conclusion, state authority is the cornerstone of effective water management in the West. This is not simply a matter of precedent; states are best situated to understand their own unique legal frameworks, local hydrology and citizen needs. Federal efforts to assume greater authority over water jeopardize the distinct advantages of on-the-ground resource management. Congress and the Supreme Court have squarely and repeatedly affirmed state authority over water through a litany of court opinions and statutes commanding federal deference to the states with respect to water management and allocation. Western Governors are committed to the preservation and responsible exercise of that authority. We welcome the opportunity to partner with the Subcommittee and federal agencies to maintain states’ authority over their water resources.
Senator CARPER. Mr. Chairman, I am going to apologize. One of my other committees is meeting right now. We don’t have any Governors on the Postal Board of Governors, not one, and we haven’t had any. It is like the second largest company in the world not having a board of directors. We are having a hearing on three nominees. I need to run over to that, but I will be back, so don’t go anywhere.

I leave you in good hands.

Senator BARRASSO. Senator Inhofe.

Senator INHOFE. Well, thank you, Mr. Chairman.

Before you leave, let me thank you for taking 7 minutes, because I may need 7 minutes to get through the three questions.

Senator CARPER. I will not object.

Senator INHOFE. I do have three questions I want to make sure we get on the record, so I am going to talk fast, all right? The first one, I chaired this Committee, I spent a lot of time about the over-regulation. Right now we are in much better shape in this country with the regulations that we are dropping down that have caused us to really be suffering here.

Our economic activity is increasing now, and things are good. But of all the regulations, when I talk to my farmers in Oklahoma, the WOTUS one was the big one, and I think the American Farm Bureau officially listed that as their most concerning one.

Out in the western part of my State, it is pretty arid out there in the panhandle. They used to call it no man’s land out there, and there is a reason for that. But anyway, when you get out there, it is very arid, but I think the farmers out there tell me that if we change this, before the WOTUS rule went through, so that the Federal Government has the jurisdiction instead of the State government, that would probably be considered a wetland.

So, we have been talking about the WOTUS rule, and that is how significant it is. But then when I look at what is happening now, I would have to say how would this Federal groundwater expansion impact the progress being made to repeal and replace the 2015 WOTUS rule?

Mr. Guild, would you answer that, please, briefly?

Mr. GUILD. Thank you, Senator Inhofe. It would change it dramatically because currently a point source is defined in the law as any discernible, confined, and discrete conveyance. The groundwater is not discernible, not confined, and not discrete.

I mentioned percolation earlier in an answer to Senator Barrasso’s question. This percolation of water, irrigation water, if you will, into the groundwater, and subsequently potentially getting into surface water, is defined in cases as a non-point source. In fact, the EPA Office of Water Guidance Number 3–1987 said that percolation is a non-point source. So, once we change that, Senator Inhofe, I think it is a dramatic difference in our agricultural world.

Senator INHOFE. OK, that is very good.

Ms. Mettler, in your written statement—actually, your opening statement—you singled out Oklahoma with some other States that includes groundwater in its definition of water of the State. Because of this, we regulate direct releases of pollutants to ground-
water. It is also my understanding that all 50 States have laws of 
regulation regarding the release of pollutants into groundwater.

I want to make sure I get your answer on the record. Wouldn't 
the Federal regulation be duplicative? And it seems the costs would 
be higher while there would be little environmental benefit. Do you 
agree with that?

Ms. METTLER. Yes.

Senator INHOFE. Do you agree with that, Ms. Waters?

Ms. WATERS. Yes.

Senator INHOFE. All right.

The last question, then, I want to get to is we just had a sub-
committee hearing in this Committee on cooperative federalism 
under the Clean Water Act and how it is the basis of our envi-
ronmental laws. This includes the Clean Water Act. Congress defined 
the waters that fall under the Federal jurisdiction and left the rest 
to the States. OK?

In reaching out to our Oklahoma stakeholders, we heard that if 
these cases are to stand, it would eliminate any concept of coopera-
tive federalism. So, I would say to Ms. Mettler, can you explain 
why it is best that States are in the best position to manage 
groundwater than the Federal Government?

Ms. METTLER. Well, the Clean Water Act was set up so that we 
can evaluate our own particular State hydrology and certain ele-
ments of how the water flows so that we can set our own standards 
and do our own regulations, as appropriate for the State. So, taking 
that away from us will just be a burden to evaluate and possibly 
detract from the actual implementation of protections that we want 
to focus on.

Senator INHOFE. Do you have anything to add to that, Ms. 
Waters?

Ms. WATERS. Well, I would. We have talked a lot about States 
that aren't enforcing their regulations for a variety of reasons, and 
I think what is important is the cooperative federalism framework 
of the Clean Water Act, that it was set up so that States would 
have control over this because of the site specific and varied condi-
tions at the State level.

So, I think if there are problems with the enforcement of existing 
regs, then you have to look at those regs; you don't go back and 
change the Clean Water Act. And if you do, there is an entire pro-
cess that goes along with that.

Senator INHOFE. It is very consistent, and I don't say this in any 
detrimental sense about anyone, but there are different philoso-
phies that you see in Government here, Democrats and Repub-
licans.

As a general rule, Democrats think things are done better when 
they are regulated from the Federal Government, and we live with 
this every day. I am of the opposite view. I always feel the closer 
we are to the people, the better job we can do of regulating. I think 
that applies here, too.

Thank you, Mr. Chairman.

Senator BARRASSO. Thank you, Senator Inhofe.

Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Mr. Chairman.

Thank all of you for your testimony.
Mr. Holleman, I was reading your testimony. On page 5 you mention the case in Virginia regarding Dominion Energy’s Chesapeake Energy Center polluting the groundwater which flows into the Elizabeth River, which is on the southern end of the Chesapeake Bay. My State of Maryland is one of the Bay States, so we take a keen interest in this.

As you state, the U.S. District Court found that, indeed, they were violating the Clean Water Act, Dominion Energy, right?

Mr. Holleman. Yes, Senator, that is correct. I would just like to underscore what we are emphasizing is not the rights of government, State or Federal, but the rights of citizens. And it was the citizens of that area, the Chesapeake area, who brought that case, enforced the law when the State was not, and made that happen. So, the important thing here is let’s not take rights away from the citizens and lock them up in the government; let’s protect the citizens’ rights that the Clean Water Act is truly based on.

Senator Van Hollen. And you have listed a whole line of legal cases that indicate that this is not some new interpretation; this has been going on for a long time, right?

Mr. Holleman. Yes. It is entirely wrong to call this an expansion of the Clean Water Act or a new regulation. That certainly is not correct. EPA has been issuing permits for years in this arena. EPA has confirmed the meaning of the law since its enactment, and since 1977 courts across the country, from Alabama to Puerto Rico, have been applying the Clean Water Act in this way, according to its plain language.

Senator Van Hollen. So, Mr. Guild, you bring up a very sort of sympathetic example. You are talking about a large ranch with cattle on it. I want to ask you and maybe some of the others, with respect to a clear case, where you have a company, whether it is Dominion Energy or a coal plant, that has a pipe that is discharging directly into the groundwater, and that groundwater is flowing right into a navigable water, is it your position that that situation is not covered by the current Clean Water Act?

Mr. Guild. If I understand the question correctly, we don’t do that.

Senator Van Hollen. No, I know you don’t. I know you don’t, but the position that is being taken by people here is to say that that particular example, where you have what is unambiguously a point source injecting pollution into groundwater that then just flows into the Chesapeake Bay, or whatever else it may be, that that is not covered by the Clean Water Act. So I am asking you if you are subscribing to that position or if your concern is much more with respect to what is sometimes called non-point source pollution on a large area, you are a cattle rancher, and that somehow becoming a point source for the purpose of the interpretation here.

Mr. Guild. Well, just to be clear, Senator, what you just described is not the position I am taking. But in a larger sense, if you take a western river valley, the Arkansas River, the Upper Missouri Platte River, and you take pivot irrigation water, and somehow that percolates back into the soil, under the current interpretations in the circuit courts, that is somehow a point source pollution; and that is what I completely disagree with. That is what I
think will upset agriculture all across the country, including maybe even in places like Maryland, with all due respect.

Senator Van Hollen. I understand where you are going, but as I understand your testimony, you do not dispute the fact that if you have what is unambiguously a point source, like a pipe coming out of petroleum, Duke Energy Company, or a coal ash pit, you are not arguing here today that the Clean Water Act does not apply to that, even if its conduit is through the groundwater. That is not your argument today?

Mr. Guild. That is correct. As I said in answer to Senator Inhofe’s question, the law defines what a point source is, discernible, confined, and discrete, so your description fits the description of what the law calls a point source.

Senator Van Hollen. So, Ms. Water, would you take the same position, that the current interpretation of the Clean Water Act does not find that to be a violation?

Ms. Waters. As I described in my testimony, that situation, first of all, it is always the extreme bad actor case, and under the situations I am describing they are permitted. It is not like we would have any operations that would inject into groundwater without a permit that is protective.

So that is what I am saying, that absolutely we are concerned about pollution of groundwater. We are the ones who are largely responsible for water quality in this country. Those need to be permitted. But we cannot torture the Clean Water Act to extend it in a way that is not stated or in addition to congressional intent. It was not planned to be extended in that manner.

Senator Van Hollen. Well, I am just reading these court opinions. But you are agreeing that at least in the cases that Mr. Holleman has raised, where you are talking about coal ash pits and other clear point sources being injected into the groundwater and then finding their way to navigable waters, that the Clean Water Act does apply. So, if everybody is in agreement that it applies in those circumstances—you are not in agreement?

Ms. Waters. No.

Senator Van Hollen. It is interesting you raise that.

Ms. Waters. We have cases right now. We have one in the Second Circuit that there is a hearing today, so that is a situation. It is not a pipe, but it is a basement backup, where they are alleging that sewage seeped through the basement, got into groundwater, and eventually got into Long Island Sound. So, there is an example where we are saying that is not the intent of the point source provision in the Clean Water Act; it is not to be regulated that way.

Senator Van Hollen. So, Mr. Chairman, you mentioned some Maryland municipalities. I just want to be on the record. The Maryland Attorney General, Brian Frosh, filed an amicus brief in this case that is before the Fourth Circuit to prevent these kinds of discharges into the Chesapeake Bay and other waters.

Senator Barrasso. Thank you, Senator.

Mr. Holleman. And Senator, the town of Chesapeake also—local government in Chesapeake also supported that position.

Senator Van Hollen. Thank you.

Senator Barrasso. The Senator’s time has expired.
I would ask unanimous consent to submit for the record a brief filed by 18 States, including my home State of Wyoming, a State that increased Federal control would “increase administrative and legal costs to the States and their environmental protection agencies without materially improving environmental quality.”

Without objection.

[The referenced information follows:]
UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

TENNESSEE CLEAN WATER NETWORK;
TENNESSEE SCENIC RIVERS ASSOCIATION,
Plaintiffs-Appellees,

v.

TENNESSEE VALLEY AUTHORITY,
Defendant-Appellant.

On Appeal from the United States District Court
for the Middle District of Tennessee, Nashville Division
Case No. 3:15-cv-00424

BRIEF OF THE STATE OF ALABAMA, THE STATE OF KENTUCKY, FIFTEEN OTHER
STATES, AND THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY AS AMICI
CURIAE IN SUPPORT OF APPELLANT TENNESSEE VALLEY AUTHORITY

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INTEREST OF AMICUS CURIAE

The States of Alabama, Kentucky, Arkansas, Georgia, Indiana, Kansas, Louisiana, Missouri, Montana, Nebraska, Oklahoma, South Carolina, Texas, Utah, West Virginia, Wisconsin, Wyoming, and the Mississippi Department of Environmental Quality file this brief under Rule 29(a) of the Federal Rules of Appellate Procedure.¹

The amici States have a substantial interest in this case because the lower court’s decision creates an unprecedented extension of federal jurisdiction under the Clean Water Act ("CWA") and the National Pollutant Discharge Elimination System ("NPDES"), expanding federal regulation to those waters historically regulated by the States. That result is contrary to both the text and the cooperative federalism scheme expressed in the CWA, and erodes the States’ role as principal regulators and protectors of groundwater and land resources. Moreover, the lower court’s expansion of federal jurisdiction to “hydrologically-connected” groundwater will increase administrative and legal costs to the States and their environmental protection agencies without materially improving environmental quality.

In addition, certain amici States’ interest extends beyond legal and jurisdictional disputes. The lower court’s remedy, ordering closure of the Gallatin

¹ A State “may file an amicus-curiae brief without consent of the parties or leave of court.” Fed. R. App. P. 29(a).
ash ponds by excavation and removal, would cost approximately $1.8 billion to 4.0 billion. As TVA will pass this cost on to its captive utility customers, such a costly remedy will have an unanticipated, immediate, and profound impact on utility ratepayers. If this Court upholds the lower court’s remedy, and closure-by-removal is subsequently applied throughout the Sixth Circuit, the resulting costs to utility customers would be astronomical, costing in the tens-of-billions of dollars. Ratepayers in states outside of the Sixth Circuit who receive wholesale utility service from TVA, like Mississippi, Georgia, and Alabama, would suffer the same negative consequences if the legal arguments and remedies the lower court adopted are accepted by this Court.

**SUMMARY OF ARGUMENT**

The CWA strikes a balance between state and federal environmental enforcement in a cooperative scheme designed to protect the nation’s waters. The CWA prohibits discharges of pollutants from “point sources,” like pipelines, into waters of the United States. Congress expressly left regulation of groundwater pollution to the States. The pollution at issue here occurred on intrastate land, with some pollutants—eventually and indirectly—making their way to waters of the United States by seeping into the ground from coal ash ponds and migrating through the groundwater. The CWA does not apply to this form of groundwater pollution.
Nevertheless, the district court adopted a “hydrological connection” theory, which has the effect of end-running the jurisdictional limitations embodied in the CWA. The lower court’s adoption of this theory effectively erases the distinction between state and federal authority, which is incorporated into the CWA’s very structure. Moreover, the lower court’s decision creates unnecessary complexities and administrative costs to States attempting to navigate new and unanticipated regulatory duties imposed upon them under an atextual theory, rather than clear text approved by representatives of the States in Congress.

Indeed, the lower court’s decision creates additional, unanticipated costs for TVA’s utility customers both in and out of the Sixth Circuit. Notably, while monopoly-status utilities pass on environmental compliance costs to captive customers, those costs are typically associated with legal and regulatory policy initiatives enacted by elected officials or their delegates. Despite this fact, the lower court mandated – in a proceeding with limited evidence and stakeholder participation – a remedy of “closure by excavation and removal,” which will cost billions that will ultimately be passed on to captive customers in states both within the Sixth Circuit and elsewhere. Application of such a remedy to the dozens of coal ash ponds in the Sixth Circuit in subsequent litigation would add to already mounting costs and could effectively mean hundreds-of-thousands of customers being unable
to afford electricity. This Court should avoid such unintended, costly results and reverse the lower court’s flawed decision.

ARGUMENT

I. The Hydrological Connection Theory of CWA Jurisdiction Is Inconsistent with the Text of The CWA and Cooperative Federalism Principles.

This Court should reject a flawed hydrological connection theory of CWA jurisdiction that is contradictory to the text of the statute and the cooperative federalism principles embodied in its structure. The CWA generally prohibits “the discharge of any pollutant” from a “point source” to “navigable waters,” without an NPDES permit. See 33 U.S.C. §§ 1311(a); 1342; 1362(12). However, the Act’s express language does not include groundwater within federal jurisdiction – a limitation confirmed by the Act’s legislative history, wherein Congress explicitly determined that regulation of ground water be left to the States. Indeed, numerous courts have confirmed that the theory adopted by the lower court is unworkable, finding that hydrologically connected groundwater is neither a “point source” nor a “navigable water” under the text of the Act. See e.g., Kentucky Waterways Alliance, et al. v. Kentucky Utilities, Civ. Action No. 5: 17-292-DCR, 2017 WL 6628917, (E.D. Ky. Dec. 28, 2017).
Management of local lands and waters “is perhaps the quintessential state activity.” *FERC v. Mississippi*, 456 U.S. 742, 767, n. 20 (1982). To secure the reserved power of the States over local land and water resources, the Supreme Court has required a clear statement of congressional intent to interfere with the States’ “traditional and primary power of land and water use” when assessing the validity of expansive interpretations of the CWA. *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng’rs*, 531 U.S. 159, 174 (2001) (hereinafter “SWANCC”). But there is no clear statement of Congressional intent to subject regulated parties for groundwater discharges present in the text of the CWA. Instead, Congress chose to leave regulation of groundwater, including groundwater that is “hydrologically connected” to “navigable waters” within the purview and jurisdiction of the States. As a result, the lower court erred when it adopted the hydrological connection theory of CWA jurisdiction.

It is beyond dispute that groundwater does not in itself constitute “navigable waters” and the District Court’s opinion below does not purport to hold otherwise. The CWA’s definition of navigable waters—“waters of the United States, including the territorial seas”—excludes groundwater. 33 U.S.C. § 1362(7). Federal regulations likewise exclude groundwater from navigable waters. 40 C.F.R. §§ 122.2, 230.3(o); 33 C.F.R. § 328.3(a). *See also* 79 FR 22188, 22218 (Apr. 21, 2014).
("The agencies have never interpreted ‘waters of the United States’ to include groundwater").

And the CWA defines the term “discharge of any pollutant” as “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12) (emphasis added). The addition of a pollutant to groundwater from a point source is not enough; Congress repeatedly rejected proposed bills adding that language. See infra pp. 8-9.

A discharge that migrates through groundwater from a point source to navigable water is not an addition of a pollutant to navigable waters from a point source. It is an addition of a pollutant to groundwater from a point source. Thus, the addition of pollutants to groundwater does not constitute an “addition of any pollutant to navigable waters from any point source,” as the District Court’s hydrological connection theory requires. 33 U.S.C. § 1362(12). The possibility of a “hydrological connection” between groundwater and navigable waters is not “a sufficient ground of regulation.” Village of Oconomowoc Lake v. Dayton Hudson Corp., 24 F.3d 962, 965 (7th Cir. 1994) (“the statute Congress enacted excludes some waters, and ground waters are a logical candidate.”) (emphasis in original).

Nor does groundwater itself constitute a “point source.” Under the CWA, a “point source” is “any discernible, confined and discrete conveyance,” which includes (but is not limited to) “any pipe, ditch, channel, tunnel, conduit, well,
discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). But groundwater is neither discernable, confined, nor discrete. “It is basic science that ground water is widely diffused by saturation within the crevices of underground rocks and soil,” and “[a]bsent exceptional proof of something akin to a mythical Styx-like subterranean river,” “passive migration of pollutants” through groundwater is not a discharge from a point source. 26 Crown Assocs., LLC v. Greater New Haven Reg’l Water Pollution Control Auth., 2017 WL 2960506, at *8 (D. Conn. July 11, 2017).

Moreover, while the CWA does prohibit indirect discharges into navigable waters, those discharges must proceed from one distinct point source (e.g. a pipe) into another (e.g. a drainage ditch), which is designed or intended to channel water into navigable waters. See, e.g., Rapanos v. United States, 547 U.S. 715, 743 (2006) (plurality opinion). Given the ubiquitous presence of groundwater in State lands, the lower court’s expansive reading of the CWA would authorize the federal government “to function as a de facto regulator of immense stretches of intrastate land.” Id. at 738 (plurality opinion) (citation omitted). Such “an unprecedented intrusion into traditional state authority” requires a “clear and manifest statement from Congress.” Id. “The phrase ‘waters of the United States’ hardly qualifies.” Id. As a result, migration of pollutants through groundwater is not covered by the
CWA’s prohibition on indirect discharges because groundwater does not constitute a “point source” within the meaning of the statute.

Extending the reach of the CWA to encompass hydrologically connected groundwater would be facially inconsistent with the cooperative federalism structure embodied in the CWA. The EPA has emphasized that the CWA “commands the [EPA] to pursue two policy goals simultaneously: (a) To restore and maintain the nation’s waters; and (b) to preserve the States’ primary responsibility and right to prevent, reduce, and eliminate pollution,” 82 Fed. Reg. at 34900 (emphasis added). As one court stated: “Congress did not intend for the CWA to extend federal regulatory authority over groundwater, regardless of whether that ground water is eventually or somehow ‘hydrologically connected’ to navigable surface waters.” Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc., 25 F. Supp. 3d 798, 810 (E.D.N.C. 2014). Instead, Congress determined that regulation of groundwater pollution be left to the states. See Exxon Corp. v. Train, 554 F.2d 1310, 1325-29 (5th Cir. 1977).

The CWA’s legislative history further confirms that Congress extensively considered whether to extend CWA jurisdiction to groundwater and chose not to. Id. Although the Senate Committee on Public Works expressly recognized “the essential link between ground and surface waters and the artificial nature of any distinction,” it expressly rejected, after “heated debate,” an amendment that would
have extended the CWA to groundwater. *Id.* at 1325, 27-29 (*quoting* S. Rep. No. 414, 92d Cong., 1st Sess. 73 (1971)). Instead, Congress determined that regulation of groundwater be left to the States. *Id.* at 1325-29; *see also* *Kelley ex rel. Mich. v. United States*, 618 F. Supp. 1103, 1107 (W.D. Mich. 1985)). Respecting the balance of roles and policy goals that Congress adopted in the CWA is the best way to ensure the existence of strong environmental protection programs at both the State and federal levels. For these reasons, this Court should reverse the lower court’s decision.

II. **The Hydrological Connection Theory Dramatically Increases State Regulatory and Compliance Costs and Creates New, Unanticipated Costs for Regulated Parties.**

This Court should not adopt an atextual theory of federal CWA jurisdiction that is certain to drastically increase the cost of States’ administration, regulation, enforcement of the NPDES program as well as the costs of citizen and business compliance with the CWA and NPDES program. Initially, expanding CWA liability to groundwater would immediately force States to undergo massive expansion of NPDES programs beyond discharges from “discrete conveyances” to the entire network of underground capillaries that ultimately lead to “navigable waters,” or else risk losing their authority to issue NPDES permits altogether. *See 33 U.S.C. § 1342(c)(3).* Next, expanding the NPDES permitting regime would strap the States’ environmental protection resource. Finally, the hydrological connection theory
would dramatically increase the number of regulated individuals and business and their CWA and NPDES compliance costs.

Simply put, the adoption of the hydrological connection theory would cause a radical and impracticable expansion of States’ NPDES permitting programs. NPDES permits issued by authorized state agencies contain precise discharge limits from specific point sources into covered water. Compliance with the terms of a permit is the prerequisite for avoiding liability. *See, e.g.*, 33 U.S.C. §§ 1311(a), 1342. But the degree of precision necessary to draft permits with clear compliance requirements would be nearly impossible to replicate with respect to groundwater discharges. States would be forced to issue permits for any flows, seeps, or fissures, including those that are hidden and malleable. The trajectory and speed of groundwater flow depends on geography and gravity, not design. These factors would make it extremely difficult to draft a permit with precise discharge parameters or monitor compliance or seepage.

The struggle to regulate this radically expanded realm of CWA permitting would place an untenable strain on the environmental protection resources of the States. At present, the time and costs for States to administer NPDES permitting programs and otherwise satisfy the requirements of the CWA already require an estimated $83 million in annual labor costs and 1.8 million hours per year. *See* EPA ICR Supporting Statement, Information Collection Request for National Pollutant
Discharge Elimination System (NPDES) Program (Renewal), OMB Control No. 2040-0004, EPA ICR No. 0229.22 at 23 tbl. 12.1 (Sept. 2017).

In addition to the hundreds or thousands of new permitting applications, States would, at a minimum, be forced to undertake significant environmental impact studies of the many newly covered sources of pollution in order to develop data sufficient to regulate with any degree of precision, coherence, and conformity with established scientific principles. States would also necessarily be required to expand the extent and applicability of their respective water quality standards ("WQS") to cover groundwater. See 33 U.S.C. §§ 1311(b)(1)(C), 1313(c)(3)(A); 40 C.F.R. §§ 130.3, 131.3(i), and 131.4(a). Such a result would expand States’ duties to revise WQS or require them to issue altogether new WQS. See 33 U.S.C. §§ 1313(c)(3); 1315(b)(1)(A)-(B). Moreover, States could not simply decline to undertake these burdensome costs. Instead, if a State chose not to extend its permitting programs to include the addition of pollutants to “groundwater,” it would immediately risk EPA revocation of its authority to issue NPDES permits altogether. See 33 U.S.C. § 1342(c)(3). Ultimately, this theory of CWA jurisdiction would require States to devote astronomical resources from already strained budgets.

Finally, the hydrological connection theory would dramatically increase the number of regulated parties and their compliance costs. The “systemic consequences” of the CWA can be “crushing” “to landowners for even inadvertent
violations.” *Hawkes*, 136 S.Ct. at 1816 (Kennedy, J., concurring). For example, owners of large parking lots could find themselves subject to CWA citizen suits as storm water runoff mixes with petroleum products discharged by cars parked on pavement, and may make its way into groundwater and eventually “navigable water.” The same logic extends to runoff from state, county, and municipal roads and highways. As all groundwater may eventually migrate to navigable waters, individuals and companies will likely find it prudent to seek NPDES permits for essentially every discharge that might find its way to groundwater, resulting in the imposition of immense compliance costs on regulated parties. As the Supreme Court has recently emphasized, the NPDES permitting process is “arduous, expensive, and long.” *U.S. Army Corps of Engineers v. Hawkes Co.*, 136 S.Ct. 1807, 1815 (2016). In sum, the lower court’s adoption of the hydrological connection theory would cause CWA and NPDES compliance costs to skyrocket for both individuals and businesses. As a result, this Court should reverse the lower court’s decision.

### III. Extending the CWA’s Scope Is Unnecessary.

This Court should not adopt an unnecessary, atextual theory of federal CWA jurisdiction in light of other state and federal laws that provide adequate, alternative methods for addressing groundwater pollution. The NPDES structure is ill-suited to regulate discharges into groundwater, as explained above, but there are numerous federal and state programs that are better tailored to address groundwater pollution.
These existing laws and programs render the extension of CWA jurisdiction to hydrologically connected groundwater unnecessary. See Catskill Mountains v. Ch. of Trout Unlimited, Inc. v. EPA, 846 F.3d 492, 529 (2d Cir. 2017) (finding narrower interpretation of CWA reasonable in part because “several alternatives could regulate pollution . . . even in the absence of an NPDES permitting scheme”).

Several other federal statutes provide the federal government authority to regulate the migration of pollutants through groundwater. For example, the Resource Conservation and Recovery Act (“RCRA”) provides the government the power to bring suits and criminal actions against persons who dispose of solid or hazardous waste, past or present, which “may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6973(2). Indeed, the EPA has exercised its authority under RCRA to regulate the disposal of solid waste by promulgating a rule establishing minimum national standards for the disposal of coal combustion residuals (“CCR”) generated by electric utilities and independent power producers, like the pollutants at issue in this case. See Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302 (Apr. 17, 2015), 2010 WL 2470432 (“CCR Rule”); 40 C.F.R. 257.50-257.107. Under the Rule, any existing unlined CCR surface impoundment that is contaminating groundwater above a groundwater protection
standard established by the EPA must stop receiving CCR and either retrofit or close, except in limited circumstances. 40 C.F.R. § 257.71; id. § 257.101.

In addition, The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") grants federal authority to order removal of pollutants or other remedial action whenever any "hazardous substance is released or there is a substantial threat of such a release into the environment." 42 U.S.C. § 9604(a)(1). Unlike the CWA, CERCLA provides authority to remediate "release of pollution" into "environment," expressly including the "navigable waters" and "any other surface water, ground water, drinking water supply, land surface, or subsurface strata, or ambient air within the United States." 42 U.S.C. § 9601(8) (emphasis added). Had Congress intended the CWA to include ground water it would have explicitly said so, as it did under CERCLA.

Moreover, States have long exercised their power to protect intrastate waters and groundwater independent of the CWA NPDES permitting program. Tennessee law, for example, directly addresses the discharge of pollutants into groundwater by rendering it "unlawful for any person to discharge any substance into the waters of the state" where such substances qualify as statutorily defined pollutants and the discharge was not "properly authorized" by state authorities. T.C. § 69-3-114(a); T.C. § 69-3-103 (defining "pollutant"). This prohibition clearly encompasses the discharge of pollutants into groundwater, because the applicable statutory definition
of “waters” includes “any and all water, public or private, on or beneath the surface of the ground, that are contained within, flow through, or border upon Tennessee.” T.C. § 69-3-103 (emphasis added). Other States in this Circuit enforce similar laws, including—but not limited to—the following:

- Kentucky law provides that “no person shall, directly or indirectly . . . discharge into any of the waters of the Commonwealth . . . any pollutant, or any substance that shall cause or contribute to the pollution of the waters of the Commonwealth” except as authorized by state regulatory authorities.” KRS § 224.70-110; KRS § 224.1-010 (defining “waters” and “waters of the Commonwealth” to include “underground water”).

- Michigan law provides that a “person shall not directly or indirectly discharge into the waters of the state a substance that is or may become injurious” to a broad array of interests, including public health, commercial, industrial and agricultural land uses, and the protection of wild flora and fauna. M.C.L. 324.3109(1). The term “waters of the state” is explicitly defined to include “groundwaters . . . within the jurisdiction of this state.” M.C.L. 324.3101(aa).

- Ohio law makes it unlawful for any person to “cause pollution or place or cause to be placed any sewage, sludge, sludge materials, industrial waste, or other wastes in a location where they cause pollution of any waters of the state.” R.C. § 6111.04(A)(1); R.C. § 6111.01 (defining “waters of the state” to include all “bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located . . . except those private waters that do not combine or effect a junction with natural surface or underground waters”).

In sum, state and federal laws already provide important regulatory checks on groundwater pollution. At best, the hydrologically connected groundwater theory is an expensive, atextual, redundancy. As a result, this Court should respect the
jurisdictional limitations embodied in the text of the CWA and reverse the lower court’s decision.

IV. The Lower Court’s Order Would Impose Substantial Costs on Utility Customers

A. The Impact to Customers Is Immediate and Profound.

Just like any other utility with regulated rates, the TVA generally passes its costs on to consumers. While the specific type of costs that utilities experience may vary, the broad categories of costs the TVA incurs are typical of the industry, and include “[o]peration, maintenance and administration of the utilities’ power system; taxes or in lieu of tax payments; and, capital costs such as debt service payments.”

Over the past few decades, utilities have spent an increasing amount of capital on environmental compliance. For instance, “[f]rom the 1970s to 2017, TVA spent approximately $6.7 billion on controls to reduce emissions from its coal-fired power plants.” The bulk of environmental compliance costs are attributable to government mandates and sweeping regulatory changes, such as the implementation of the Clean

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2 The TVA board has some discretion in determining when costs are recovered through rates, but generally, the TVA sets its rates at levels that will recover its costs. TVA 10-K For the fiscal year ended Sep. 30, 2017 (“TVA 2017 10-K”), at 11-12, here <https://www.sec.gov/Archives/edgar/data/1376986/000137698617000031/tve-09302017x10k.htm>

3 Id.

4 Id. at 32-33.
Water Act and Clean Air Act, or standards for Sulfur Dioxide or Nitrogen Oxides. For example, in 2011 the TVA initiated a project at the Gallatin Plant to install a dry flue gas desulfurization control ("dry FGD") to the tune of $730M, wherein, "[t]he Project allowed TVA to reduce the plant's sulfur dioxide and nitrous oxide emissions into the air." When a utility spends significant sums for the purpose of regulatory compliance, the expenses are typically passed on to consumers. When provided with two reasonable options like in this matter — deciding between whether to close-by-removal or close-in-place a coal ash pond — a utility’s decision will generally be reflected on customers’ bills for decades to come.

The remedy provided by the lower court much more expensive than the alternative remedy. The TVA’s preferred option of addressing the future of the Gallatin ash ponds—and an option specifically authorized by the EPA’s CCR rule—is a process referred to as closure-in-place. The estimated cost of closure-in-place, as provided to TDEC, is $230 million. This is in stark contrast to the remedy ordered by the lower court (and advanced by the Appellees) of the “excavation and offsite relocation of CCR Material,” costing approximately $2 billion. Should this remedy

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5 Trial Tr. (Vol. 4), RE 237, PageID#9513.
6 Trial Tr. (Vol. 4), RE 237, PageID#9520.
7 Id.
be upheld, the cost to TVA’s customers for this project alone will likely be nearer to $4 billion when considering the cost of debt.\(^8\)

B. If this Remedy in this Case Is Upheld and Applied to Additional TVA Sites, the Cost will be Unduly Burdensome to Customers.

If the hydrological connection theory becomes binding in this Circuit, these costs will dramatically increase. Additional citizen suits will almost certainly follow, likely resulting in closure-by-removal of most, if not all, of the coal ash ponds operated by the TVA. The ratepayer impact of this broad reading and implementation of the CWA, together with the burdensome remedy and subsequent application to other impoundments, would lead to unaffordable bills for many TVA customers. For instance, the cost estimation information provided by the Part II EIS programmatic review, an environmental impact and cost study conducted for the TVA, of ten (10) other wet ash-handling facilities at six (6) additional TVA fossil fuel sites, suggests that if those facilities were closed-by-removal, rather than closed-in-place, the net difference in cost would be roughly $2.7 billion, before considering financing costs.\(^9\)

\(^8\) Calculated assuming a 30-year amortization period and a debt rate of 4.75%, which is conservative compared to the TVA’s 2017 blended interest rate of 5.11%. TVA 2017 10-K, at 61. 30 years was used as the amortization period as it is generally the ordinary length of time in which large, long-term debts are borrowed and to reflect the anticipated length of ash pond closure-by-removal for Gallatin (24 years), See Proposed Compliance Timetable, RE268, PageID#10883.

\(^9\) To simplify, the amounts used were those provided for the closure-by-removal (truck) option in the Part II-Programmatic Reviews.
Coupled with the net difference between the costs of the two options at the Gallatin facility, and including financing costs, the estimated cost to TVA customers if the utility is forced to close-by-removal fourteen (14) of its twenty-two (22) total coal ash facilities is more than $8,500,000,000. This estimate does not include the eight (8) ash impoundments that do not have Part II EIS reviews or are part of this litigation.\footnote{Page 6 of Part I-Programmatic NEPA Review, available at <https://www.tva.com/file_source/TVA/Site%20Content/Environment/Environmental%20Reviews/Closure%20of%20Coal%20Combustion%20Residual%20Impoundments/Final%20EIS%20Part%201.pdf>}

If the other eight (8) ash impoundments are considered, the net cost to TVA customer for the closure-by-removal remedy vs. closure-in-place is likely in excess of $10,000,000,000. Importantly, the TVA currently has outstanding debt in excess of $20 billion, while the TVA Act only authorizes the TVA to issue bonds in an amount not to exceed $30 billion at any time.\footnote{See TVA 2017 10-K, at 112-113; See also TVA Act, at 20, available at <https://www.tva.com/file_source/TVA/Site%20Content/About%20TVA/TVA_Act.pdf>} Similar citizen suits and the imposition of same remedy as the underlying matter could ultimately devastate TVA’s financial position, putting the future of millions of American’s energy supply at risk.
In 2016, Kentucky customers represented approximately 6.5% of the total kWh’s sold by TVA.\textsuperscript{12} Thus, it is reasonable to assume that Kentucky customers would be liable for approximately 6.5% of the $8,500,000,000 net cost associated with the closure-by-removal remedy (rather than closure-in-place) for fourteen (14) of TVA’s ash impoundments – or $550,000,000. Assuming those costs are recovered on a levelized basis over 30 years\textsuperscript{13}, the cost of this single issue will lead to residential customers in Kentucky paying $5,000,000 more a year.\textsuperscript{14} This increase to Kentucky customers provides them no corresponding benefit. These customers do not live in a State where any of the fourteen (14) referenced impoundments are located, while those in Kentucky who live near the Cumberland River are hundreds-of-miles upstream from the Gallatin plant. Any perceived safety or environmental benefits that may be claimed by the Appellees as a result of the ordered remedy will be of little assistance to those 200,000 Kentucky households that will see their bills rise more than necessary than if the TVA closes-in-place its ash ponds. When considering the effect on customers of closing-by-removal all TVA ash

\begin{footnotesize}
\begin{itemize}
\item 13 See footnote 9 stating that the assumed amortization period is 30 years.
\item 14 $ 8.5 \text{ billion} \times 6.5\% = $552,500,000
\item 552,500,000/30 \text{ years} \approx $18,416,667
\item 18,416,667 \times 0.2745 \text{ (% of total 2016 Ky. kilowatt-hours represented by residential customers)} = 55,055,375
\end{itemize}
\end{footnotesize}
impoundments, as opposed to closure-in-place, the remedy ordered by the lower court appears to be even more unreasonable.

If similar citizen suits, demanding the same draconian remedy for every impoundment, are applied across the Sixth Circuit additional consumers will suffer. Kentucky, like the others states in the Sixth Circuit, has dozens of ash impoundments. If the lower court’s interpretation of law and the applied remedy are upheld in this matter, similar citizen suits will undoubtedly follow. Due to the rate-regulated nature of most States’ utilities, the consequence of these suits and subsequent mandated remedy of closure-by-removal, will without question lead to increased rates for consumer. For legal precedent based on limited evidence to mandate that utilities close-by-removal all ash impoundments, regardless of whether that method is the most reasonable, will ultimately lead to unaffordable and burdensome utility rates. Using the estimated size of the ash impoundments in Kentucky, and extrapolating the cost estimated in TVA’s programmatic reviews, the costs that will be passed onto customers within the Sixth Circuit alone will be tens-of-billions of dollars. Along with the inappropriate interpretation of the CWA, the remedy the lower court ordered is an unreasonable application of the CWA to these facts, and the precedent it sets for the rest of the States within the Circuit is untenable for customers. Reasonable minds can differ among stakeholders as to the most prudent long-term plans for these impoundments, and under cooperative federalism
every stakeholder has an opportunity in the process to voice those concerns. If upheld, customers across the Circuit will be paying for the preference of those citizens who have strong opinions regarding environmental issues – not what the most reasonable outcome should be.

Consumers in Mississippi, Georgia and Alabama all receive service from, and pay rates to TVA, although they are located outside of the Sixth Circuit. As a consequence of this matter, and any others where TVA may be forced to close its ash impoundments by removal under an unreasonable application of the CWA, customers in those States will pay their portion of the costs, just like residents of the Sixth Circuit States. These States are not within the footprint of the Sixth Circuit, but those consumers will nevertheless be burdened with any negative consequences of the district court’s decision. In fact, the Fifth Circuit, in which Mississippi is located, has already rejected similar arguments under the CWA as those before us.15 Thus, although the federal courts in their State and Circuit have rejected the legal arguments made by Appellees here, consumers may nevertheless pay for a contradictory decision from a different Circuit.

15 See Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001).
CONCLUSION

For the foregoing reasons, the Court should reverse the judgment of the District Court.

Respectfully submitted,

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2. This document complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using Microsoft Word 2016 in 14-point Times New Roman.

Dated: February 6, 2018

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Ala. Assistant Solicitor General
CERTIFICATE OF SERVICE

I certify that on February 6, 2018, I electronically filed this document using the Court’s CM/ECF system, which will serve an electronic copy on all registered counsel of record.

/s/ Eric M. Palmer

Eric M. Palmer

Ala. Assistant Solicitor General
Senator BARRASSO. Senator Gillibrand.

Senator GILLIBRAND. Thank you, Mr. Chairman.

Mr. Brown, perfluorinated compounds, or PFCs, which include PFOA and PFOS, are serious public health and environmental concern in New York State and around the country. PFOA is present in the groundwater near Hoosick Falls and Petersburg, New York, as a result of a plastic manufacturing plant nearby. PFOS is present near two of our Air National Guard bases in Newburgh and West Hampton due to the use of firefighting foam containing the chemical. The presence of these chemicals has contaminated drinking water sources and resulted in a listing of Hoosick Falls as a Federal Superfund Site by the EPA.

Have there been any instances of PFCs migrating from groundwater to surface waters that are jurisdictional under the Clean Water Act?

Mr. Brown. The one example where I believe that has occurred is in Cape Fear, where a facility that I believe was operated by Nemours, formerly part of Dow Chemical, I believe, they had releases of PFOA and PFOS into groundwater, and those chemicals also were released into surface water. But also the groundwater migrated and discharged into the surface water.

There is also now a new chemical that has also followed that exact same pathway called GenX, which, unfortunately, was designed to replace the PFCs, and unfortunately, that is now also discharging to groundwater and surface water.

Senator GILLIBRAND. What is the impact of PFC contamination to those jurisdictional waters?

Mr. Brown. Obviously, in that particular example, the concern is that the intake for the city of Wilmington is directly downgradient to those discharges; the city of Wilmington has had to face challenges in meeting its water demands for its customers because of the impact of its water supply from those chemicals.

Senator GILLIBRAND. How difficult is it to clean up PFC contamination once it reaches a river or lake, and what can be done to prevent further contamination?

Mr. Brown. Obviously, the cleanup, once it is in the surface water, can be very expensive; you are now dealing with very large volumes of water that have to be treated down to very, very low levels. We are talking about levels in the very low parts per trillion, so minute levels have to be removed from the water.

Clearly, the most effective way to achieve long term treatment is to actually remove the source, to physically clean up the source and clean up the plume, in addition to treating the surface water. Otherwise, you would be treating the surface water essentially in perpetuity.

Senator GILLIBRAND. Mr. Holleman, as you noted in your testimony, the Clean Water Act provides an important tool for citizens to compel polluters to clean up environmental degradation when environmental authorities fail to take action. If pollution that migrates from a point source to rivers and lakes through groundwater is not covered under the Clean Water Act, what impact would that have on communities that are living with this toxic contamination?

Mr. Holleman. Well, it will be devastating to them because they won’t have an effective way to stop it. There has been talk here
about local governments. I can tell you, in the cases we have worked on, the local governments supported us.

In the Fourth Circuit case, an amicus brief was filed by the County of Anderson, South Carolina, and I can tell you that is about as conservative a Republican county council you could ever find. There is no question that they thought their community needed to be protected.

And in our Tennessee case the State agency in Tennessee even is supporting our position in an amicus brief as well, as is the County of Clermont, Ohio, because local communities that are close to their citizens know that if the citizens don't have the power to enforce the law, you can't always count on Washington or the State capital to protect you.

Senator GILLIBRAND. Right. Also, the issue of resources, because how aggressive have States historically been in addressing this type of contamination absent intervention by the EPA or citizen action under the Clean Water Act?

Mr. HOLLEMAN. Well, here is the problem. Some of these polluters—for example, I am working on Duke Energy, is one of the richest institutions on planet Earth. Our State agency in North Carolina simply does not have the legal horsepower to fight them, and we are handling one case. And not only does Duke Energy have the largest law firm in North Carolina working on it, they just added 8 to 10 new lawyers from L.A. and DC to come down to Roxboro, North Carolina, to fight us over pollution from a coal ash lagoon.

The State agencies, amongst other things, know they just don't have the resources to fight these big entities, and all their lawyers and consultants, if they get into a real fight, so oftentimes they pick their fights, and the big pollution is allowed to continue, but my cousin, who owns a lot with an old gas tank on it, has to pull it out of the ground.

Senator GILLIBRAND. Right. And what is the prevalence of communities with polluted groundwater and surface water that are predominantly communities of color and low income communities?

Mr. HOLLEMAN. That is a big problem because a lot of these sites are located in rural areas where there are poor communities, often, as you say, people of color, but this pollution falls on everybody of every ethnic background. But what happens is when it impacts their drinking water supplies, when it impacts their wells, but also it is important when it impacts their home values, because they are living in an area that has polluted water, and some of these families worked all their lives in the mill or even for Duke, they can't sell their homes.

Senator GILLIBRAND. Same thing is happening in my neighborhood.

Mr. HOLLEMAN. Right. And they believe fervently that their health has suffered and that members of their communities have suffered illnesses as well.

Senator GILLIBRAND. Thank you, Mr. Chairman.

Senator BARRASSO. Thank you very much.

Senator Markey.

Senator MARKEY. Thank you, Mr. Chairman.
Court decision after court decision has supported the EPA’s long-standing plain and obvious reading of the Clean Water Act. For decades, the Agency has had the authority to regulate point source pollution that travels through groundwater to navigable waters. Now this record includes a ruling from the Fourth Circuit just last week.

Along with his litany of sins against the environment, Scott Pruitt has decided to reopen and may possibly upend these decades of decisions. By calling into question whether or not the EPA can regulate, for example, a pipe that drops pollution, water, sludge, 10 feet from a river, Scott Pruitt is leading yet another attack on the Clean Water Act. To redefine and undermine the EPA’s authority here would be a blatant assault on public health and the health of our environment. Yet again, Scott Pruitt is turning the EPA into every polluter’s ally.

In Southbridge, Massachusetts, there is a landfill that has reportedly leaked dangerous and toxic chemicals through the groundwater and into nearby wetlands. Concerned citizens have brought suit against the town, the owner, and the operator of the landfill.

Mr. Holleman, would a reversal by Scott Pruitt on whether a pipe spewing pollution can be regulated under the Clean Water Act make it harder for Americans, like these citizens in Southbridge, to fight back against pollution in their communities and waterways?

Mr. Holleman. Well, it certainly would because the cadre, this huge flock of lawyers that follow these cases for industry from court to court, will trump that up. But of course, as you know, Senator, Scott Pruitt and no other person other than this Congress can change the language of the Clean Water Act, and what the EPA has been doing through every administration—from Jimmy Carter to the present day—has been to follow the plain language of the Act. But if Mr. Pruitt follows the path he is on now, he will give a tool to the lawyers who go from case to case around the country to frustrate the efforts of the community in your State and in North Carolina to protect themselves from this kind of pollution.

Senator Markey. So, if the EPA went back on its interpretation of the Clean Water Act that it supported for decades, would that make it easier for landfills like the one in Southbridge, Massachusetts, and similar landfills in States like North Carolina to have polluters be able to avoid enforcement?

Mr. Holleman. Yes, it would give their lawyers a leg up in court. Now they have to face the uniform, consistent interpretation of the EPA for over 40 years. I would emphasize, though, he can’t change the law, and we say the law is clear; the EPA has simply been following it. He would be acting lawlessly to do otherwise.

Senator Markey. So this would be par for the course for Scott Pruitt, another dirty attack on clean water, on clean air. It is all part of his profile at the Agency for the year and 3 months that he has been in office.

The final question I have is has the Southern Environmental Law Center witnessed a chill in enforcement activity at Pruitt’s EPA?

Mr. Holleman. Oh, yes. Now, unfortunately, we have been spending our time and effort to help communities protect them-
selves. Now we have to spend time, money, and effort to fight with an environmental protection group. Now we have to fight what is supposed to be our country's Environmental Protection Agency. It is like you are in a never-never land, where what is supposed to be right is stood on its head.

Senator Markey. So the Clean Water Act is very clear, to protect families against polluted water. And Scott Pruitt's record is very clear; it is to remove protections to ensure that families are not exposed to pollutants that could be harmful to their children, to the health of their families.

That is what this debate is all about. It is settled law, but not in the mind of Scott Pruitt. It is almost as though they have put the fox in the chicken coop. They brought in someone who represents polluters in order to finally reclaim the EPA for its own, and that is something that is going to be fought every single day in this country.

Thank you, Mr. Chairman.

Senator Barrasso. Thank you very much, Senator.

Well, the hearing record will be remaining open for 2 weeks. I want to thank all of our witnesses for their testimony today on the important hearing and matter.

The hearing is adjourned.

[Whereupon, at 11:25 a.m. the Committee was adjourned.]

[Additional material submitted for the record follows:]
ENVIRONMENTAL PROTECTION AGENCY
40 CFR Part 122

EPA-HQ-CW-2018-0063; FRL-99373-41-
OW

Clean Water Act Coverage of 'Discharges of Pollutants' via a Direct Hydrologic Connection to Surface Water

AGENCY: Environmental Protection Agency (EPA).

ACTION: Request for comment.

SUMMARY: The Environmental Protection Agency (EPA) is requesting comment on the Agency's previous statements regarding theClean Water Act (CWA) and whether pollutant discharges from point sources that are necessary to discharge or reach surface water as part of their normal operation that have no direct discharge to surface water may be subject to CWA regulation. EPA is requesting comment on whether the Agency should consider clarification or revision of those statements and if so, comment on how clarification or revision should be provided.

DATES: Comments must be received on or before May 31, 2018.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-CW-"2018-0063", at http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, et cetera) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments not written in English.

FOR FURTHER INFORMATION CONTACT: Scott Wilson, Office of Wastewater Management, Water Quality Division (MC229M), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 504-6087; email address: scott.wilson@epa.gov.

SUPPLEMENTARY INFORMATION:

1. General Information

A. Does this action apply to you?

B. What should I consider as I prepare my comments for EPA?

2. How do I prepare my comments for EPA?

a. Submitting CDR: Do not submit this information to EPA through www.regulations.gov. Clearly mark the part of the information that you claim to be CDR. For CDR information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CDR and then identify electronically within the disk or CD-ROM the specific information that is claimed as CDR. In addition to one complete version of the comment that includes information claimed as CDR, a copy of the comment that does not contain the information claimed as CDR must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

b. Follow directions—The agency may ask you to respond to specific questions or organize comments by referencing a code of Federal Regulations (CFR) part or section number.

3. How can I ensure my privacy?

4. What does this action mean for me?

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II. Background
A. The Clean Water Act's National Pollutant Discharge Elimination System Program

The CWA—initially enacted as the Federal Water Pollution Control Act Amendments of 1972 (Pub. L. 92-500) and subsequently amended—establishes the basic structure in place today for regulating discharges source pollutants to the waters of the United States. In the CWA, Congress established the national objective to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” CWA Section 1251(a). Congress also expressly intended that states retain their traditional role in preventing, reducing and eliminating pollution. It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and, enhancement) of land and water resources. ... CWA Section 1251(b).

The CWA National Pollutant Discharge Elimination System (NPDES) permitting authority, whether implemented by EPA or an authorized State, is limited to regulating the discharge of pollutants from point sources to navigable waters. Congress prohibited any “discharge of any pollutant” to “navigable waters” unless it is authorized by statute, generally by a permit. CWA Sections 1311, 1344, 1342, 306. The term “discharge” of a pollutant as “any addition of any pollutant to navigable waters from any point source.” CWA Section 1342(2)(A). Pollutant means “dredged spoil, solid waste, incinerator, sewage, garbage, sewage sludge, municiplal, or agricultural waste discharged into water.” CWA Section 1342(2)(B). The CWA defines “navigable waters” as “the waters of the United States, including the territorial seas.” CWA Section 1344(1). “Point source” means any discernable, confined and discrete discharge of pollutants, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete firearm, sewer, storm drain, cable, or ditch or trench. CWA Section 1344(2). The CWA authorizes EPA to issue NPDES permits under Section 402(d), but EPA may authorize a state to administer its own NPDES program if it appears that the program meets the statutory criteria. CWA Sections 1342(a), (b). When a state receives such authorization, EPA retains oversight and enforcement authorities. CWA Sections 1317, 1344(d).

B. EPA’s Previous Statements Regarding the Clean Water Act’s “Discharge of a Pollutant” Provision Where There Is a Direct Hydraulic Connection

EPA has previously stated that pollutants discharged from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a direct hydraulic connection to the jurisdictional water may be subject to CWA permitting requirements. EPA has not stated that CWA permits are required for pollutants discharged from point sources to jurisdictional surface waters that occur via groundwater or other subsurface flow that has a direct hydraulic connection to the surface water. It has long acknowledged that permitting is required in particular circumstances, such as where a direct hydraulic connection exists between a point source and a jurisdictional water. See also Proposed NPDES Permit Regulation and Efficient Limitations Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 66 FR 2306, 2307 (Jan. 12, 2001). As a legal and factual matter, EPA has made a determination that, in general, collected or channeled pollutants conveyed to surface water via groundwater can constitute a discharge subject to the Clean Water Act. The determination of whether a particular discharge to surface water via groundwater which has a direct hydraulic connection is a discharge which is prohibited without an NPDES permit is a factual inquiry.

When taking final action on the proposed regulation of discharges from CAFOs, EPA rejected establishing nationally applicable effluent limitation requirements related to releases to groundwater with a direct hydraulic connection to jurisdictional water and recognized that “there are scientific uncertainties and site-specific considerations with respect to regulating discharges to surface water via groundwater with a direct hydraulic connection to surface water [and] conflicting legal precedents on this issue.” Final General NPDES Permit for Concentrated Animal Feeding Operations (CAFO) in Idaho (50-04-0000, 62 FR 15,78 (1997)) (“the Clean Water Act does not give EPA the authority to regulate groundwater quality through NPDES permits. The only situation in which groundwater may be affected by the NPDES program is when a discharge of pollutants to surface waters can be proven to be via groundwater. ... [T]he permit requirements ... are intended to protect surface waters which are contaminated via a groundwater (subsurface connection).”). See also Proposed NPDES Permit Regulation and Efficient Limitations Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 66 FR 2306, 2307 (Jan. 12, 2001). As a legal and factual matter, EPA has made a determination that, in general, collected or channeled pollutants conveyed to surface water via groundwater can constitute a discharge subject to the Clean Water Act. The determination of whether a particular discharge to surface water via groundwater which has a direct hydraulic connection is a discharge which is prohibited without an NPDES permit is a factual inquiry.

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water. Some courts have determined that the states' efforts to explicitly answer this question, while others have held that the statute does not extend to releases to groundwater. Other courts have interpreted the CWA as covering not only discharges of pollutants to navigable waters, but also releases of pollutants to groundwater. The question is whether the release of pollutants to groundwater has been a jurisdictional issue in the context of the CWA.

III. Request for Comment

EPA is requesting comments and information on the applicability of the CWA to groundwater discharges from point sources that reach jurisdictional surface waters. The Agency is seeking comments on whether the releases of pollutants to groundwater would be regulated under the CWA as part of a direct hydrologic connection to a jurisdictional surface water. Specifically, EPA seeks comment on whether the releases of pollutants to groundwater would be regulated under the CWA as part of a direct hydrologic connection to a jurisdictional surface water. EPA also seeks comment on whether the releases of pollutants to groundwater would be regulated under the CWA as part of a direct hydrologic connection to a jurisdictional surface water. EPA also seeks comment on whether the releases of pollutants to groundwater would be regulated under the CWA as part of a direct hydrologic connection to a jurisdictional surface water.

IV. Federal Register

The Federal Register is published by the U.S. Government and contains information on federal regulations, proposed rules, and other official notices. The information in the Federal Register is available for public comment and review.

V. Conclusion

In conclusion, the CWA is a complex and multifaceted law that requires careful consideration and interpretation. The EPA is seeking comments on the applicability of the CWA to groundwater discharges from point sources that reach jurisdictional surface waters to ensure that such discharges are properly regulated under the CWA.


David P. Ross,
Assistant Administrator, Office of Water.
EPA Doc. 2018-0067, Filed 2-12-18; 8:45 am
DELIB CODE 660-66-0
DIVISION G – DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2018

The following statement is an explanation of the effects of Division G, which makes appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), the Forest Service, the Indian Health Service, and related agencies for fiscal year 2018.

The joint explanatory statement accompanying this division is approved and indicates congressional intent. Unless otherwise noted, the language set forth in House Report 115-238 carries the same weight as language included in this joint explanatory statement and should be complied with unless specifically addressed to the contrary in this joint explanatory statement. While some language is repeated for emphasis, it is not intended to negate the language referred to above unless expressly provided herein.

In instances where the House report speaks more broadly to policy issues or offers views that are subject to interpretation, such views remain those of the House and are not affirmed by this explanatory statement unless repeated herein. In cases where the House report or this explanatory statement directs the submission of a report, such report is to be submitted to both the House and Senate Committees on Appropriations. Where this explanatory statement refers to the Committees or the Committees on Appropriations, unless otherwise noted, this reference is to the House Subcommittee on Interior, Environment, and Related Agencies and the Senate Subcommittee on Interior, Environment, and Related Agencies.

The Committees direct each department and agency funded in this Act to follow the directions set forth in this Act and the accompanying statement, and not reallocate resources or reorganize activities except as provided herein or otherwise approved by the Committees through the reprogramming process as referenced in this explanatory statement. This explanatory statement addresses only those agencies and accounts for which there is a need for greater explanation than provided in the Act itself. Funding levels for appropriations by account, program, and activity, with comparisons to the fiscal year 2017 enacted level and the fiscal year 2018 budget request, can be found in the table at the end of this division.

Unless expressly stated otherwise, any reference to “this Act” or “at the end of this statement” shall be treated as referring only to the provisions of this division.

Committee Directives.—The Department of the Interior and Forest Service are directed to continue the directions included in the Explanatory Statement accompanying the Consolidated Appropriations Act, 2017 (P.L. 115-31) relating to Vacant Grazing Allotments; State Wildlife Data; Bighorn Sheep; Land Grants, Acequias, and Community Ditches; and Public Access.
Duty Engines. Upon completion of the review, the Agency is directed to update the Committees on the matter.

Integrated Planning.—The Agency is encouraged to continue using an integrated planning approach to enhance flexibility for communities struggling to meet compliance costs mandated under the Clean Water Act (CWA) as well as the Agency’s efforts to consider a community’s ability to pay for compliance costs when determining permitting actions under the CWA. The Agency is directed to maintain technical assistance and outreach to communities seeking to develop and implement an integrated planning approach to meeting Clean Water Act requirements. Further, the Committees urge the Agency to implement integrated planning measures through a flexible permit process rather than enforcement actions and consent decrees.

Interagency Consultations.—The Agency is directed to continue following the requirements in Senate Report 114-281 regarding consultation with the Secretary of Agriculture related to the Federal Insecticide, Fungicide, and Rodenticide Act.

Pesticides Registration Improvement Act.—The agreement provides additional funding for compliance with the Pesticides Registration Improvement Act. The Committees direct the Agency to comply with the fiscal year 2017 quarterly reporting requirement related to previously collected maintenance fees that are currently unavailable for obligation. To ensure the Committees have the most accurate information regarding this issue, the Agency is directed to provide a briefing within 30 days of enactment of this Act.

Public Access to Research.—The Agency released its Plan to Increase Access to Results of EPA-Funded Scientific Research on November 29, 2016. The Committees urge the Agency to continue its efforts towards full implementation of the plan, and directs the Agency to provide an update on its efforts within 60 days of enactment of this Act.

Regulation of Groundwater.—Since enactment in 1972, the Clean Water Act (CWA) has regulated impacts to navigable waters, while regulation of groundwater has remained outside of the Act’s jurisdiction. Instead, legislative history surrounding the CWA indicates that Congress intended for groundwater pollution to be regulated through CWA’s nonpoint source programs and other Federal and State laws. For example, releases into groundwater from solid waste units are regulated at a Federal level by the Resource Conservation and Recovery Act (RCRA). Recently, some courts have imposed a broad view of CWA liability based on a theory of hydrological connection between groundwater and surface water. Other courts have taken a more narrow view and have focused on statutory distinctions between surface water and groundwater. The Committees are aware that the Agency has requested comment on its previous statements "regarding the Clean Water Act (CWA) and whether pollutant discharges from point sources that reach jurisdictional surface waters via groundwater or other subsurface flow that has a
direct hydrologic connection to the jurisdictional surface water may be subject to CWA regulation.”
After completing the public comment process, the Committees encourage the Agency to consider whether it is appropriate to promulgate a rule to clarify that groundwater releases from solid waste units are regulated under RCRA and are not considered point sources, and, that releases of pollutants through groundwater are not subject to regulation as point sources under the CWA. The Agency is directed to brief the Committees about its findings and any plans for future rulemaking.

Small Refinery Relief.—The Committees continue the directive contained in Senate Report 114–281 related to small refinery relief. The Agency is reminded that, regardless of the Department of Energy’s recommendation, additional relief may be granted if the Agency believes it is warranted.

Toxic Substances Control Act (TSCA) Risk Evaluations.—Under the agreement, the Agency is directed to implement the Frank R. Lautenbarg Chemical Safety for the 21st Century Act in a manner that reflects the best available science as now required under TSCA section 26.

Agricultural Operations.—The Committees note that Congress never intended the Solid Waste Disposal Act to govern animal or crop waste, manure, or fertilizer, or constituents derived from such sources. The Agency’s longstanding regulations accurately reflect Congress’ intent not to regulate manure and crop residues under the Solid Waste Disposal Act, and the Committees support legislative efforts to clarify and codify the treatment of agricultural byproducts under the Solid Waste Disposal Act.