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Committee on Environment
and Public Works Washington, D.C.

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

Wednesday, April 17, 2018

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The committee met, pursuant to notice, at 10:08 a.m. in room 406, Dirksen Senate Office Building, the Honorable John Barrasso [chairman of the committee] presiding.

Present: Senators Barrasso, Carper, Inhofe, Capito, Boozman, Wicker, Fischer, Rounds, Ernst, Cardin, Gillibrand, Booker, Markey, and Van Hollen.

STATEMENT OF THE HONORABLE JOHN BARRASSO, A UNITED STATES 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 Narraganset 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.

[The prepared statement of Senator Barrasso follows:]

STATEMENT OF THE HONORABLE THOMAS R. CARPER, A UNITED STATES 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 libel for that pollution, period. I believe that law should not change.

Thanks, Mr. Chairman.

[The prepared statement of Senator Carper follows:]

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 Hollerman, 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 five 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:]

Senator Barrasso. Thank you so much, Ms. Water.

Ms. Mettler.

STATEMENT OF MARTHA CLARK METTLER, ASSISTANT COMMISSIONER, OFFICE OF WATER QUALITY, INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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 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 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:]

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:]

Senator Barrasso. Thank you very much, Mr. Guild, for your testimony.

Mr. Hollerman.

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

Mr. Hollerman. 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 seven 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 one 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. Hollerman follows:]

Senator Barrasso. Thank you, Mr. Hollerman. Appreciate your testimony.

Mr. Brown.

STATEMENT OF ANTHONY BROWN, CEO & 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 round 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:]

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.

Senator Barrasso. Do you feel it is helpful, then, for the Federal Government to suddenly step in with what could be duplicative and time-consuming and expensive regulations?

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 sea water 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 form 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. Hollerman?

Mr. Hollerman. 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. Hollerman, 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. Hollerman. 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. Hollerman. 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. Hollerman. 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:]

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 Narraganset 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:]

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 seven minutes, because I may need seven 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 overregulation. 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 discreet conveyance. The groundwater is not discernible, not confined, and not discreet.

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. Okay, 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 groundwater. 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 subcommittee hearing in this Committee on cooperative federalism under the Clean Water Act and how it is the basis of our environmental laws. This includes the Clean Water Act. Congress defined the waters that fall under the Federal

jurisdiction and left the rest to the States. Okay?

In reaching out to our Oklahoma stakeholders, we heard that if these cases are to stand, it would eliminate any concept of cooperative 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 elements 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 conditions 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 process 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 philosophies that you see in government here, Democrats and Republicans.

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. Hollerman, 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 Elisabeth 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. Hollerman. 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. Hollerman. 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 discreet, 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. Hollerman 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. Hollerman. 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:]

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, to 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. Hollerman, 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. Hollerman. 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. Hollerman. 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 eight to ten new lawyers from L.A. and D.C. 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. Hollerman. 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. Hollerman. 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 longstanding 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. Hollerman, 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. Hollerman. 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. Hollerman. 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 three 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. Hollerman. Oh, yes. Now, unfortunately, we have been spending our time and effort to help communities protect

themselves. 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 two 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.]