S. HRG. 118–246

IMPLEMENTING IIJA: PERSPECTIVES ON THE DRINKING WATER AND WASTEWATER INFRASTRUCTURE ACT, PART II

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

SEPTEMBER 7, 2023

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

Available via the World Wide Web: http://www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE

54–997 PDF WASHINGTON : 2024

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

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IMPLEMENTING IIJA: PERSPECTIVES ON THE DRINKING WATER AND WASTEWATER INFRASTRUCTURE ACT, PART II

THURSDAY, SEPTEMBER 7, 2023

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m. in room 406, Dirksen Senate Office Building, Hon. Thomas R. Carper (Chairman of the Committee) presiding.

Present: Senators Carper, Capito, Cardin, Whitehouse, Merkley, Kelly, Padilla, Cramer, Mullin, Ricketts, Boozman, and Sullivan.

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

Senator CARPER. Good morning, everybody. I hope we remember how to do this. It has been a while since we have sat in this room, at this table, but we are delighted to be able to do it today. I am happy to be with my colleagues.

There is just a really encouraging atmosphere, I noticed it yesterday, on the floor. I feel it again today. We did a lot of good work toward the end of just before we broke for the recess. We have plenty of work still to do, but I am encouraged that we are more than up to that. We are delighted to kick it off with this hearing.

In March, our Committee will recall, our Committee held its first oversight hearing on the Bipartisan Infrastructure Law's drinking water and wastewater provisions. Today, we are going to expand upon those efforts, focusing on the law's drinking water programs.

Nearly 2 years after becoming law, the Bipartisan Infrastructure Law is helping to make clean water a reality for millions of households, for schools, and childcare facilities across our country. As the benefits of this law continue to become a reality in more and more communities across America, our Committee is anxious to hear from stakeholders about how you believe this work is progressing and if we can make any improvements. My colleagues have heard me say again and again: Everything I do, I know I can do better. I think everything we do, we know we can do better.

Investing in our Nation's water infrastructure is deeply personal to me. Growing up in West Virginia and Virginia, my sister and I lived near rivers and streams like Beaver Creek, not even 100 feet from our house. Just outside of Beckley is a stream that was contaminated by septic tanks and other waste.

Later, I would attend Ohio State University as a Navy ROTC midshipman. Ohio State is about a 2 hour drive south of the Cuyahoga River, which famously caught fire in 1969. I remember I was down in Pensacola, Florida, as a brand new, newly minted ensign and reading in the news that the Cuyahoga River caught on fire. I couldn't believe it. It did, and the question is what we are going to do about it.

Both of those experiences ingrained in me the importance of water in our daily lives. From protecting our beaches and wetlands to maintaining our service lines and other ports, clean water is critical to our health and our Nation's economy.

As many of us know, Matthew 25 calls on us to care for those who are in need, the least of these, including giving those who are thirsty something to drink. I believe that includes a moral obligation to ensure that all Americans have access to clean, safe, and reliable water services.

Fortunately, I am not alone in that belief. Shortly after taking office, President Biden invited Senator Capito and me, along with Senator Cardin and others, to the Oval Office. He tasked us with leading the charge on updating our Federal infrastructure investments, including our highways, our bridges, and our water systems.

As many of you may recall, we rolled up our sleeves. We got to work after that meeting. Senator Capito, Senators Duckworth, Lummis, Cardin, Cramer, and I, along with our staffs, worked together to draft the Drinking Water and Wastewater Infrastructure Act. We advanced this bipartisan infrastructure legislation out of our Committee unanimously and later passed it in the full Senate by an 89 to 2 vote. I will never forget that day, an 89 to 2 vote on something, as that came right through our Committee, and something that we are enormously proud of.

That water bill, combined with our Committee's historic highway legislation, served as the foundation of the Bipartisan Infrastructure Law, which President Biden signed into law in November 2021, a day that many of us will long remember today. What a day.

To date, the Bipartisan Infrastructure Law is the single largest water infrastructure investment in our Nation's history. Through that law, Congress is investing an unprecedented $55 billion to improve drinking water and wastewater systems in communities across our Nation, including replacing lead service lines and addressing emerging contaminants, and it was fully paid for.

Still, there is more that needs to be done and more that can be done. My hope is that today's hearing will allow us to gain a deeper understanding of how the implementation of those historic funds is going. Our hearing also presents us with the chance to explore future opportunities to improve our drinking water infrastructure and to make sure that the Bipartisan Infrastructure Law's programs are benefiting communities with the greatest need, too.

While I am excited to hear from all of our witnesses, I want to take a moment and welcome back Kishia Powell to the EPW Committee. For those who don't know, Ms. Powell testified before our Committee in 2021 when we were drafting the water portion of the Bipartisan Infrastructure Law. Her testimony was instrumental in

moving that package forward, and we look forward to hearing her perspective on the law's implementation today.

As I mentioned, this is not our first hearing on examining our Nation's water infrastructure needs, and it won't be the last, either. As you will recall, earlier this year, we held a hearing with EPA Assistant Administrator Radhika Fox—I love to say that name, Radhika Fox—and other stakeholders to discuss some of these programs. Just this past May, Senators Padilla and Lummis also held a water affordability hearing at the Subcommittee level looking at low income water assistance programs and what additional authorities or changes might be necessary to make those programs function even better.

Later this month, that same Subcommittee will be reviewing tribal water needs. I hope that this series of hearings will help inform us of what more we can do to ensure that these programs continue to work even better as we face changes in our climate, our population, and our infrastructure needs.

With that, again, we are grateful to our panel of witnesses. We look forward to hearing from each of you today as you bring diverse experiences representing State perspectives, city water utilities, and rural water.

Before we do that, we are going to hear from our Ranking Member, Senator Capito, for her opening remarks.

Senator Capito, great to be back with you. You are recognized.

OPENING STATEMENT OF HON. SHELLEY MOORE CAPITO, U.S. SENATOR FROM THE STATE OF WEST VIRGINIA

Senator CAPITO. Thank you, Chairman Carper. It is great to be back with you. I hope you had a nice break in the beautiful State of Delaware.

This is a great opportunity, I think, for the Committee to get an update from stakeholders and on the progress, as the Chairman has lined out very explicitly, on DWWIA, which was enacted in the bipartisan Infrastructure Investment and Jobs Act.

I thank all of you for being here, several of which we have seen before, and it is nice to see you back in front of the Committee.

Today's hearing will focus on the critical importance of clean and efficient drinking water and wastewater systems for the health, well being, and economies of our communities. It is vital that all Americans, obviously, have access to reliable water and sanitation that they can afford.

The Drinking Water and Wastewater Infrastructure Act authored by this Committee is a critical component of the Infrastructure Investment and Jobs Act, IIJA. It has introduced new programs, opportunities, and support to meet the current needs and challenges in small, rural, and disadvantaged communities.

During this hearing, we will examine the current state of our Nation's water resources, the challenges we face in safeguarding them, successes and failure of Federal agencies' implementation of policies from the IIJA, which was meant to ensure that every individual has access to clean and healthy drinking water and wastewater, and how other Federal policies may be helping or hindering communities adverse to provide for their residents.

The IIJA, as the Chairman said, authorized $55 billion in funding for a variety of water infrastructure programs. These programs aim to address the issues faced by our Nation's water infrastructure, including grants for small and disadvantaged communities, funding for lead service line replacement, and support for innovative water technologies.

The IIJA recognizes that many communities are struggling with aging infrastructure and emerging contaminants, such as PFAS. Small, rural, and disadvantaged communities often lack the necessary resources and technical expertise to tackle these challenges, leaving them vulnerable to water quality issues and also public health risks. The IIJA offers funding opportunities for grants, low interest loans, and technical assistance to help ease some of these burdens.

As we work to implement and secure funding for these programs, it is crucial to ensure that resources are directed toward the communities that are most in need based on actual public health and environmental risks. The Federal Government must also provide the necessary technical assistance and training to support these programs. Many of our small communities do not have this technical expertise.

However, I have significant concerns regarding the EPA's approach to implementing the directives from Congress as it begins to allocate substantial financial investments to our Nation's water infrastructure. The EPA has repeatedly tried to impose its policy priorities on States and communities, often in violation of authorities reserved to them under the Safe Drinking Water and Clean Water Acts. Regulatory obligations to meet vague environmental justice goals and inconsistent and untimely imposition of Build America, Buy America waivers have led to delays, cost overruns, and legal uncertainty.

These unnecessary obstacles imposed by Federal regulators are especially inappropriate when elevated inflation eats away at the historic infrastructure investments that America needs and that were demanded of Congress.

Additional threats to reliability and affordability may come from other environmental regulations. In particular, failure to provide CERCLA liability protections for water systems facing PFAS contamination will slam our water systems and their ratepayers while only enriching trial attorneys. As we have discussed repeatedly, West Virginia has had to deal with PFAS contamination originating, and I know your States have as well, at both industrial and military sites, the two major sources of contamination nationally.

The concept of "polluter pays" is enshrined in CERCLA and has had broad bipartisan support over the years. That is why I find it truly perplexing to hear that environmental groups are actively lobbying against protections for water systems and other passive receivers. With PFAS contamination going back decades and regulatory efforts to protect our drinking water, which I support, there will be an increasing need to protect our water systems that had no hand in creating or didn't have the benefit from these chemicals.

As we look to preserve safety, reliability, and affordability of drinking and wastewater systems for the future and maximize the

benefits of the IIJA's investment, protecting passive receivers is something Congress must get right.

I will close by saying, as everybody in attendance already knows, water infrastructure investments are critical to public health, environmental health, and economic development. The successes we have had to date have been based in cooperative federalism as enshrined in the Safe Drinking Water and Clean Water Acts. Communities and States know their needs the best and need a helping hand from the Government, but not a heavy hand.

Thank you all for all you do to keep our country's water and wastewater systems clean, healthy, and I look forward to hearing your perspectives on these issues. Thank you.

Senator CARPER. Thank you very much for those words and for the opportunity to continue our important and wonderful efforts in this Committee on this front.

I am going to introduce Secretary Biser. Senator Cardin has graciously agreed to introduce Kishia Powell, one of his constituents, and I think Senator Cramer is going to introduce Eric Volk.

Secretary Biser is the Secretary of the North Carolina Department of Environmental Quality.

My wife sends her best. My wife is a North Carolina, Appalachian State graduate. She sends her best.

The position that you hold is a position that you have held, I think, since Governor Cooper appointed you to that leadership role about 2 or 3 years ago in 2021. This is your second tour of duty at the agency, having previously served as the Department's Director of Legislative and Intergovernmental Affairs.

In August 2023, Ms. Biser was elected to serve as President of the Environmental Council of States, ECOS, a national non-profit, non-partisan association of State and territorial environmental agency leaders working to improve the capability of State environmental agencies.

Secretary Biser, we are delighted that you are here. Welcome. Thank you for joining us today. Please proceed.

Before, you do, maybe I should introduce the other two witnesses. No, we will hold off on that. You just go ahead, and then we will come back and let Ben introduce Ms. Powell and Kevin introduce Eric.

OK, go ahead.

STATEMENT OF HON. ELIZABETH BISER, SECRETARY, NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

Ms. BISER. Thank you, Senator Carper, Ranking Member Capito, members of the Committee. I really appreciate the opportunity to be here with you all today and talk about the Infrastructure Investment and Jobs Act and the transformative investment that it has helped enable in North Carolina's water infrastructure.

One of North Carolina's top priorities is ensuring that everyone in our State has access to clean drinking water and reliable water infrastructure, because without that, nothing else matters.

I want to start out by sharing with you a story about the community of Ivanhoe, which is in rural Sampson County in North Carolina. The residents of Ivanhoe have been fighting for decades for the chance to connect to a public water system. Governor Cooper

and I had an opportunity to hear from these residents about what it was like knowing when they wash their white clothes, they would come out stained brown from the well water, and how when it got cold that the water pumps would go out. And a lot of times, they wouldn't have water availability at all.

But in 2022, thanks to Federal funding, we awarded a $13.2 million grant to run 40 miles of waterlines to connect 350 homes in Ivanhoe to the county water system for the first time.

Other citizens in our State are facing failing infrastructure, pumping stations that are being inundated as we have more frequent and more intense storm events, and some are still serviced by terra cotta pipes. In Liberty, North Carolina, I was visiting them, they actually have Orangeburg lines, which I had to look up. It is basically wood pulp sealed with tar, and you can imagine that they are literally disintegrating in the ground. It is vital that we confront each of the needs to improve the resiliency of our system and to protect the health of our residents.

I will add that North Carolina had a head start on handling large sums of water infrastructure dollars. Our State leaders chose to allocate a significant portion of our American Rescue Plan dollars to water infrastructure. It was $1.9 billion. The first thing we did was evaluate our processes, because it is easy to spend money, but the challenge is investing it well.

In order to ensure that the record amount of funding that we received reached the communities like Ivanhoe, we reimagined our grant making process. We canvassed every county health department in the State to identify where we had communities who did not have reliable access to clean drinking water or sewer services. And we conducted outreach to nearby utilities to ensure that they knew about these communities and encouraged them to do projects to connect these folks. We wanted to make sure it wasn't just the well funded, biggest utilities that were ready to go, that we gave everybody in North Carolina an opportunity to benefit from these dollars. And I am proud to say that the changes are resulting in, so far, more than 2,000 homes slated to be connected to public water for the very first time.

North Carolina, Senator, as you mentioned, also has significant levels of PFAS contamination, which have affected rural and urban areas in our State alike. We especially worry about the cost and the burden on our small towns who cannot afford to shoulder the additional cost associated with treatment without outside help.

EPA Administrator Michael Reagan and fellow North Carolinian came to Maysville, North Carolina, a small town that had discovered high levels of PFAS contamination, which was likely the result of firefighting foam, to announce the IIJA Emerging Contaminants funding for small and disadvantaged communities to illustrate the type of community that that was intended to help.

While a facility in North Carolina gave us early experience in dealing with forever chemicals when a PFAS compound known as GenX was discovered in the Cape Fear River in 2017, we also recognized that PFAS is larger than one company or one chemical. DEQ has been working with public water systems to assess PFAS levels and to help prepare for the upcoming national drinking water standards. We have identified 43 of our municipal and coun-

ty drinking water systems that serve 3 million people that will need to take action in order to come into compliance with the proposed MCLs and protect public health.

We are learning from and working with the public water systems that have already addressed PFAS in our State. I will give you an example of the Cape Fear Public Utility Authority who spent $43 million on installation of a granular activated carbon system to treat PFAS coming from the Cape Fear River. From their experience, we know that the testing and planning and design work has to take place before you are ready to construct a treatment system, and this work can take a year to do.

To help other utilities prepare for the needed upgrades that they will need to make, we are making a significant portion of the early rounds of emerging contaminant funding from IIJA available for planning grants to help these systems identify and design the best treatment system for their situation.

We appreciate the $23 million per year over 5 years that North Carolina is receiving for emerging contaminants through IIJA, but this shows how much we are going to need, that what we are getting so far is just scratching the surface of the needs in North Carolina. We estimate that just for our State, it will take between $661 million and $1.3 billion to install treatment technology at the 43 municipal and county water systems, and that number does not take into account the number of small water systems, which we are currently testing.

All of this is on top of our normal water infrastructure needs, because we haven't invested for far too long, of $17 billion to $26 billion that we need over the next 20 years. So this reinforces the importance of IIJA and this Committee's work and of the State Revolving Funds.

I recognize that this is a policy and not the appropriations committee, but as the newly elected President of the Environmental Council of States, I would like to bring the Committee's attention to the long term threat that is being posed to the State Revolving Funds by the fiscal year 2024 appropriations bills. On behalf of ECOS, we are concerned about these developments of using congressionally directed spending out of the corpus of the State Revolving Funds. The proposed cuts would be devastating to States' capacity to meet current and growing environmental needs and harm the State-Federal partnership that is crucial to protect public health and the environment throughout the country.

Using supplemental appropriations in the IIJA to offset cuts in the annual Federal funding undermines the historic opportunity provided by this landmark legislation, which was intended to extend affordable financing for water infrastructure to more communities than ever before.

This is not the time to take our foot off the accelerator. North Carolina will never stop working to ensure that all residents have access to clean drinking water and reliable water infrastructure, and I appreciate this Committee's commitment to that same goal.

Thank you for allowing me to be here today and share our experience with you.

[The prepared statement of Ms. Biser follows:]

Written Statement for the Record

Secretary Elizabeth S. Biser
North Carolina Department of Environmental Quality

Hearing on "Implementing IIJA: Perspectives on The Drinking Water and Wastewater Infrastructure Act, Part II"

Testimony before the

US Senate Committee on Environment and Public Works

September 7, 2023

Chairman Carper, Ranking Member Capito, and members of the Committee, thank you for the opportunity to speak with you today about the Infrastructure Investment and Jobs Act (IIJA) and the transformative investment it has helped enable in North Carolina's water infrastructure. I appreciate the leadership of Congress, this Committee, and this Administration in addressing critical infrastructure needs, especially with regards to our nation's water and wastewater infrastructure.

This is an area that has traditionally not received the attention and funding that is necessary to ensure the integrity of our country's water and wastewater services. North Carolina is just one state of many across the country that are facing historic levels of need, which historic levels of funding for water and wastewater infrastructure are helping to address. So, I want to thank the committee for your attention to this issue, and for the opportunity to share North Carolina's story with you today and how we are using the IIJA funding to address aging infrastructure, current access and capacity, and emerging contaminants.

One of North Carolina's and Governor Cooper's top priorities is ensuring that everyone in our state has access to clean drinking water and reliable water infrastructure—because without that, nothing else matters. This funding means that not only can we address issues of aging and failing water infrastructure across the state, but we can also begin to reach the significant part of our population who have not historically had access to clean and reliable water and wastewater services.

I'd like to share with you a story about the community of Ivanhoe, in rural Sampson County. The residents of Ivanhoe have been fighting for decades for the ability to connect to a public water system. Governor Cooper and I heard from these residents about what it was like knowing their white clothes would come out of the wash stained brown by the well water, and how when it got cold, the well pumps were unreliable, and they might not have water at all. But in 2022, thanks to federal funding, we awarded a $13.2 million[1] grant to run 40 miles of new water lines and connect 350 homes in Ivanhoe to the county water system for the first time. They are all looking forward to turning on the faucet and having clean water every time.

These are the stories that give us hope, and these are the types of issues we'll be able to fix across the state with the landmark level of federal funding that we've received. Many areas in our state are dealing with aging and failing water and wastewater equipment. Some are still serviced by terra cotta pipes or even, in places like Liberty, North Carolina, Orangeburg pipes

[1] *Governor Cooper Highlights $13.2 Million Investment to Create Water Distribution System in Ivanhoe*. (2022). NC Governor Roy Cooper. https://governor.nc.gov/news/press-releases/2022/09/27/governor-cooper-highlights-132-million-investment-create-water-distribution-system-ivanhoe

made of wood pulp and sealed with tar that are literally disintegrating. Additionally, North Carolina has also been on the front lines of addressing emerging contaminants, including PFAS, in drinking water across the state. It is vital that we confront each of these needs to improve the resiliency of our systems and the lives and health of our residents and their communities. Thanks to the historic investment of federal dollars, we are inventorying lead lines; connecting communities to reliable water and sewer service; upgrading aging equipment; increasing the resilience of our infrastructure in the face of more frequent and more intense storms; replacing miles of failing pipes; and beginning to address PFAS in our public water systems.

North Carolina had a head start in handling increased water and wastewater funding because our state leaders chose to allocate a significant portion of ARPA funds to water infrastructure: about $1.9 billion of our state's $5.4 billion allotment,[2] which was a huge increase from the roughly $200 million typically allocated for these projects. The first thing we did was evaluate our processes, because it is easy to spend money—the challenge is investing it well.

We evaluated and addressed three main areas: capacity to manage grants and permitting from an agency level; modernizing the systems associated with applying for grant funding; and changing our approach to soliciting grant applications to ensure that dollars reach the communities that need them most.

My agency, like many environmental agencies across the country, has faced significant funding cuts over the past decade and struggles with maintaining sufficient staffing levels due to uncompetitive salaries. To manage these challenges, we created a new section, our Program Management Office, to oversee our federal funding programs and provide oversight, coordination, and resources to our divisions handling federal funding. This new office has helped hire the staff we need to oversee projects and process permits, created an oversight program to ensure all dollars fulfill their intended purpose, and helped scale our operations to ensure that we could efficiently and effectively operate our water infrastructure program at a scale orders of magnitude larger than our department was accustomed to handling.

We also targeted areas of our operations that needed to be modernized and streamlined. For example, our water infrastructure application process was still paper-based, requiring applicants to hand-deliver their applications in binders to our staff in Raleigh. We subsequently created an online application portal that not only eased the process for applicants but also reduced the stress on our staff, who had been hand-entering data. Our team built an online platform that shows how many projects are in each regional office's territory and are building

[2] *COVID-19 Funding Dashboard*. (2023). NC Pandemic Recovery Office. https://ncpro.nc.gov/data-research/covid-19-funding-dashboard

out a predictive analytics tool to help us better prepare for the impending wave of permit applications resulting from project awards. We've also focused on finding ways to overcome statewide staffing shortages by better leveraging the people, technologies, and processes we already have in place. We can now deploy staff quickly to provide support to teams experiencing high work volumes, from application reviews to permitting and beyond. This is critical to our success, as we currently have a 24 percent vacancy rate for engineering positions.

Above all, we are committed to making sure the funding we administer reaches the communities who need it most, including our small and rural communities and the ones who've been historically bypassed and have lived with unreliable, insufficient, and potentially contaminated service for far too long. We know that government has long served some residents more equitably than others, and we know that we are being entrusted with the responsibility and opportunity to impact and improve the lives of *all* North Carolinians.

In order to ensure that record funding reaches communities like Ivanhoe that have traditionally not benefited from water infrastructure dollars, we knew that we needed to reimagine our grantmaking process. In the past, we had posted the application on our website, conducted a limited number of outreach sessions in various parts of the state, and contracted with technical assistance agencies. In reimagining our process, we canvassed every county health department in the state to identify which communities did not have access to reliable water and wastewater service. We then made a portion of our funding available to water utilities who were using at least 75 percent of their funding request to connect these communities to public water and/or sewer services.[3] We also partnered with many community organizations to spread the word about our funding availability more widely. I'm proud to say that these changes are resulting in more than 2,000 homes, so far, slated to be connected to public water for the first time.

A lack of reliable service is not the only water issue plaguing disadvantaged communities. North Carolina has significant levels of PFAS contamination, which has affected rural and urban areas alike. We especially worry about our small towns who cannot shoulder the burden of costs associated with treatment without outside help. For example, when the Town of Maysville discovered high levels of PFAS in their drinking water supply—likely the result of AFFF (firefighting foam) impacting groundwater—they knew that their residents could not afford the $2,500 in additional costs each household would need to absorb in order to install treatment

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[3] *NC DEQ Division of Water Infrastructure's Plan to Administer American Rescue Plan Act's State Fiscal Recovery Fund Appropriated in the State Budget for Drinking Water, Wastewater and Stormwater Projects.* (2022). NCDEQ. https://www.deq.nc.gov/water-infrastructure/dwi-arpa-administration-plan-feb-2022/download?attachment

technology. With the help of $2.5 million in grants, this community was able to install the necessary treatment system to ensure clean drinking water for their residents.[4]

EPA Administrator Michael Regan, a fellow North Carolinian, came to Maysville to announce the IIJA Emerging Contaminants Funding for Small and Disadvantaged Communities in February of this year to illustrate the type of town that this funding was created to help. There isn't a small town in the state—or the country—with the rate base to afford these types of upgrades. Yet, we cannot afford to allow our communities to continue drinking contaminated water: this is why the $61.7 million[5] that North Carolina will receive through IIJA to help small, rural and disadvantaged communities combat PFAS in their drinking water matters.

In addition to testing large public water systems, we have begun testing over 650 of the small systems in our state, serving daycares, churches, mobile home communities, and other neighborhoods.[6] Our goal is to maximize the impact of this funding to help avoid passing on the cost burden of treatment to our residents, many of whom can ill afford it.

We are committed to holding polluters accountable where there is an identifiable responsible party. North Carolina became a leader in addressing PFAS by necessity when, in 2017, we learned that a PFAS compound known as Gen X had contaminated the Cape Fear River. Since that time, we've learned that the facility, owned by Chemours, has contaminated drinking water in at least an eight-county region. We have taken steps to eliminate wastewater discharges from the site, institute a groundwater cleanup system, and significantly reduce air emissions of PFAS. Thanks to a 2019 consent order, Chemours is required to cover the costs of treating affected drinking water wells.[7]

While the Chemours facility gave North Carolina early experience in dealing with PFAS contamination, we recognize that PFAS is bigger than one company or one chemical. In June of last year, Governor Cooper and I announced our North Carolina Action Strategy for PFAS[8] with three priorities: protecting communities, protecting drinking water, and cleaning up

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[4] *EPA Administrator Michael Regan announces $2 billion for small water systems to address PFAS contamination, $62 million for NC.* (2023). NC Newsline. https://ncnewsline.com/briefs/epa-administrator-michael-regan-announces-2-billion-for-small-water-systems-to-address-pfas-contamination-62-million-for-nc/

[5] *FY2022-23 EC Allotment Memo*. (2023). EPA. https://www.epa.gov/system/files/documents/2023-02/FY22_FY23_Combined_BIL_EC_Allotments Memo to WDDs_February 2023_signed.pdf

[6] *Action Strategy for PFAS.* (2023). NCDEQ. https://www.deq.nc.gov/news/key-issues/emerging-compounds/action-strategy-pfas

[7] *Chemours Consent Order.* (2023). NCDEQ. https://www.deq.nc.gov/news/key-issues/genx-investigation/chemours-consent-order

[8] *North Carolina DEQ Action Strategy for PFAS.* (2022). NCDEQ. https://www.deq.nc.gov/genx/nc-deq-action-strategy-pfas/open

contamination—research, regulate, and remediate. We're prioritizing identification of PFAS contamination so that we can assess the extent of the problem. We are focused both on using existing research and identifying and addressing gaps in the science that will enable us to regulate discharges of these harmful chemicals and protect public health. We are prioritizing source reduction, as it is the most cost-effective way to protect our drinking water. It is much cheaper to stop PFAS pollution from happening than to clean it up after the fact. With our assessment and regulations in hand, we can take steps to remediate existing contamination.

In March, Administrator Regan returned to North Carolina to announce EPA's proposed drinking water regulation for six PFAS compounds. In anticipation of this action, DEQ has been working with public water systems to assess PFAS levels and help prepare for a national drinking water standard. Late last year, we sampled 50 of the municipal and county drinking water systems across our state who had previously reported testing results for PFOA and PFOS above the minimum reporting level in 2019 sampling by the North Carolina Collaboratory.[9] Our sampling results showed that 43 systems serving three million people will need to take action to come into compliance with the proposed MCLs.[10] We're actively working with those systems with a goal to utilize IIJA funding for planning and construction projects to reduce their PFAS levels in preparation for the EPA's drinking water regulations.

We are also learning from and working with the public water systems that have experience addressing PFAS. I'll give you the example of Cape Fear Public Utility Authority (CFPUA), who spent $43 million dollars on the installation of a granular activated carbon filtration system to treat for PFAS coming from the Cape Fear River.[11] CFPUA's customers are spending $70 per year, per customer, to pay for the new system. From their experience, we know that there is a lot of testing, planning, and design work that must take place before a utility is ready to construct a treatment system. CFPUA, and their neighbor in Brunswick County—who is spending over $120 million to expand and upgrade their water treatment plant to address PFAS—are graciously serving as mentors to other systems that are just now grappling with the reality that they will need to install treatment technology to ensure clean drinking water for their residents.

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[9] *Data: PFAS Water Testing Reports by Site (Round 1).* (2023). North Carolina PFAS Testing Network. https://ncpfastnetwork.com/data/

[10] *DEQ PFAS Sampling of Public Water Systems.* (2023). NCDEQ. https://www.deq.nc.gov/news/key-issues/emerging-compounds/understanding-pfas/deq-pfas-sampling-public-water-systems

[11] *The results are in: Wilmington water tests PFAS-free after $43 million CFPUA project.* (2022). Star News Online. https://www.starnewsonline.com/story/news/local/2022/10/11/wilmington-water-free-of-pfas-genx-local-utility-authority-says/69553249007/

We appreciate the $23 million per year over five years that we're receiving for emerging contaminants through IIJA, but these examples show how that amount will only scratch the surface of the needs that we are facing. North Carolina estimates that it will take between $661 million to $1.3 billion to install treatment technology at just the affected municipal and county water systems. Learning from CFPUA and Brunswick County's experiences, we are designating the majority of our first round of IIJA emerging contaminants funding to assist our 43 large public water systems in planning for PFAS treatment. Subsequent rounds of funding will offset construction costs, but we know that the needs will dwarf the amount of funding we have available, and time is of the essence. From our experience, we have seen that the time it takes to construct treatment systems and bring them online can easily reach or exceed three years. Once the federal maximum contaminant levels for PFAS are finalized, all of our impacted systems will only have three years to come into compliance. That means these communities need to plan now in order to have treatment systems in place before compliance deadlines. Funding coming from IIJA for emerging contaminants is exceedingly important. But we are not at the finish line. In fact, we're just getting started.

As a state agency, our job doesn't end when we award grant dollars. In order to be truly successful in distributing IIJA funding and ensure a positive impact to public health and the environment, we have to be able to handle the permitting needs that are coming along with these projects. The historic level of funding also translates to a historic level of permit applications that we need to be able to turn around quickly so that benefits are realized as soon as possible.

As an agency, we've explored creative solutions to addressing permitting capacity. We have a 24 percent vacancy rate of engineers across DEQ, which is a challenge shared by many states. In order to review and issue permits, we rely on highly skilled staff and engineers. As a result of staffing challenges, we have had to find creative ways to get staff to where they're most needed: using administrative funding allocations to establish additional time-limited positions, creating a flexible workforce that can go where the need is greatest, and coordinating our agency response through our Program Management Office so that we can anticipate problems before they happen and smooth the way where possible.

As the newly elected President of the Environmental Council of the States (ECOS),[12] I'd encourage Congress to increase the level of funding for categorical grants, which represent the dollars the federal government gives states to carry out delegated federal programs. The states implement and enforce nearly all of the nation's environmental laws. Funding for categorical

[12] *ECOS.* (2023). ECOS. https://www.ecos.org/

grants has remained stagnant while our responsibilities, including for addressing emerging issues such as PFAS, have grown significantly. While I recognize that this Committee's jurisdiction is over policy and not funding, I feel it is incumbent upon me to let you know that not increasing categorical grant funding to help states keep up with growing regulatory and permitting responsibilities has a material impact on our ability to deliver permits in an effective and efficient manner.

Similarly, I'd like to bring to the Committee's attention the long-term threat to the State Revolving Funds posed by the appropriations bill recently passed by the House and under consideration in the Senate. On behalf of ECOS, we are concerned about these developments. The Clean Water Act and Safe Drinking Water Act State Revolving Funds are two of the nation's most successful and sustainable environmental programs. They are critical to addressing the increasing demands on and risks to the nation's drinking water supplies. The proposed cuts would be devastating to the states' capacity to meet current and growing environmental needs and harm the state-federal partnership that is crucial to protect public health and the environment throughout the country. ECOS urges Congress to build state capacity through these programs rather than diminish it.

Using supplemental appropriations in the IIJA to offset cuts to annual federal funding undermines the historic opportunity provided by this landmark law, which was to extend affordable financing for water infrastructure to more communities than ever before.

I want to express to the Committee North Carolina's gratitude for prioritizing water and wastewater infrastructure funding in the IIJA. It represents a significant downpayment on a costly bill that is coming due across the country for critical infrastructure that has not been maintained. Even with a historic amount of federal and state dollars, North Carolina could only fund 13.7 percent of the funding requested in 2022 for water and wastewater infrastructure needs. In 2023, we have been able to fund less than nine percent of the $2.6 billion dollars communities have requested for their projects. And according to a study done in 2017, the capital cost of the system needs in our state are estimated to range from $17 to $26 billion dollars over the next 20 years,[13] which does not take into account recent storm-related damage or PFAS treatment.

Our work is just beginning—we have already awarded the portion of the Drinking Water and Clean Water State Revolving Funds we've received from EPA so far this year to projects across

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[13] *Statewide Water and Wastewater Infrastructure Master Plan*. (2017). NCDEQ. https://www.deq.nc.gov/about/divisions/water-infrastructure/state-water-infrastructure-authority/statewide-water-and-wastewater-infrastructure-master-plan

the state. We are continuing to build capacity for funding administration and permitting, and we are working tirelessly to address PFAS. We have also created a new Lead Service Line Replacement funding program to respond to over $36 million in initial requests. With that program, we are continuing to engage in proactive outreach to communities that may need support, and our goal is to have firms lined up to assist our communities in a timely manner. Applications for this program will be accepted year-round, and we're thrilled that the first of these funds will be awarded in just two weeks.

We are far from the finish line, but the race is well begun. North Carolina will never stop working to ensure that all residents of our state have access to clean drinking water and reliable water infrastructure, and we appreciate your commitment to that same goal. Our agency's mission is to provide science-based environmental stewardship for the health and prosperity of all North Carolinians. IIJA and other federal funding plays a key role in our ability to achieve this mission, and I am grateful to the committee for allowing me to share these updates on our progress to date.

Addressing PFAS in North Carolina

Federal Standards

In March, EPA announced the proposed regulation of six PFAS compounds for public water systems:

- EPA is proposing an enforceable Maximum Contaminant Level (MCL) for PFOA and PFOS, at 4 parts per trillion, a level that can be reliably measured by most labs.
- The proposed rule would also regulate GenX chemicals, PFNA, PFHxS and/or PFBS using a Hazard Index calculation to determine if the combined levels of these PFAS pose a potential risk to human health.
- Once the proposed EPA rule becomes final, public water systems will have three years to meet the MCLs.

Understanding PFAS

DEQ
NORTH CAROLINA
Department of Environmental Quality

What are PFAS, or per- and polyfluoroalkyl substances?

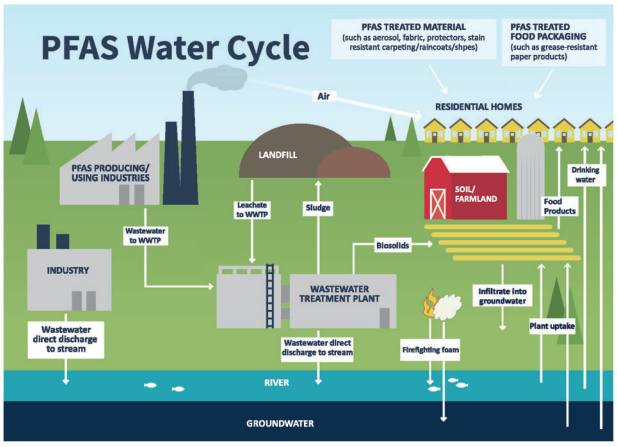
PFAS refers to a group of man-made chemicals. They are widely used in commercial and consumer products such as food packaging, water- and stain-repellent fabrics, nonstick products and firefighting foams. They are also commonly used in industrial processes and manufacturing. Because of their widespread use, these compounds are present in household and industrial waste, air emissions and discharges.

PFAS are often called "forever chemicals" because they don't break down in the environment and can build up, or bioaccumulate, in humans and animals.

Health Impacts and Exposure

Scientific studies have shown that exposure to certain levels of PFAS have been linked to multiple health issues including reproductive effects, developmental effects or delays in children, increased risk of some cancers, reduced ability of the body's immune system to fight infections, including reduced vaccine response, interference with the body's natural hormones; and increased cholesterol levels and/or risk of obesity.

Most Americans have been exposed to PFAS. Scientists have identified ingestion through drinking water as the primary pathway for PFAS exposure in humans. Most standard municipal drinking water treatment systems are not built to filter out PFAS and until recently, testing labs were not able to detect them at lower levels.



PFOA/PFOS Detections above 4ppt

42 SYSTEMS SERVING NEARLY **3 MILLION***

*2.7 MILLION WITH SOME SYSTEM POPULATIONS NOT AVAILABLE

MORE THAN **775 MILLION** GALLONS A DAY (MGD DESIGN CAPACITY)

$661 MILLION **$1.3 TO BILLION** IN CAPITAL COSTS FOR TREATMENT

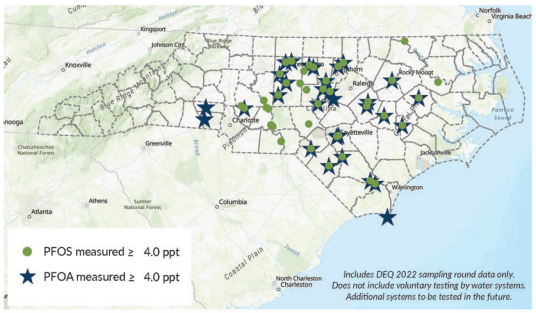
DEQ PFAS Sampling of Public Water Systems

DEQ Action Strategy for PFAS

North Carolina Impact

In North Carolina, we are proactively sampling water systems to determine the extent of PFAS contamination. In 2022, DEQ conducted a three-month sampling event at 50 municipal systems with previous detections above 4ppt. Of those, 42 systems currently have PFOA or PFOS above the proposed MCL. DEQ is actively working with the systems to determine options for treatment, reduction or alternate water sources.

PUBLIC WATER SUPPLY PFOA/PFOS SAMPLING IN NORTH CAROLINA



Based on cost factors from the treatment installation at Cape Fear Public Utilities and Brunswick County Water, DEQ estimates initial treatment system costs in the range of $661 million to $1.3 Billion for the municipal systems sampled. This estimate does not include costs of operation and maintenance, financing, or inflationary pressures.

Many water systems are voluntarily monitoring for PFAS and DEQ is sampling hundreds of smaller water systems to better assess the of PFAS on a statewide basis.

Beyond Drinking Water Treatment

Under the DEQ Action Strategy for PFAS, DEQ is taking a whole-of-department approach to protect communities by identifying, reducing, and remediating PFAS pollution. DEQ has taken a number of actions to better identify PFAS sources and reduce emissions and discharges:

- Requiring PFAS information from new facilities and industries and developing permit conditions as appropriate throughout the state
- Inventorying and prioritizing locations where these substances may have been manufactured, used, discharged or disposed for additional assessment
- Adding permit conditions as appropriate to address PFAS air emissions or wastewater discharges and require disclosure of data and additional monitoring
- Conducting groundwater testing and additional monitoring in areas with known PFAS contamination; and
- Requiring all solid waste sanitary landfills to include PFAS analyses of all regular groundwater, surface water and leachate samples.

DEQ continues to gather data to support setting regulatory standards and to provide technical assistance to facilities to reduce future PFAS pollution. DEQ's actions complement and strengthen actions at the federal level to ensure we are protecting communities.

Senate Committee on Environment and Public Works
Hearing Entitled, *"Implementing IIJA: Perspectives on the Drinking Water and Wastewater Infrastructure Act, Part II"*
September 7, 2023
Responses to Questions for the Record for Secretary Biser

Chairman Carper:

1. On November 4, 2022, the Environmental Protection Agency (EPA) announced the selection of 29 Environmental Finance Centers (EFCs) that will help communities across the country access federal funding for infrastructure projects to improve public health and environmental protection.

   The creation of these centers was made possible by the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law. According to the EPA, the selected EFCs will help serve communities that have historically struggled to access federal funding by delivering targeted technical assistance to local governments, states, tribes, territories, and non-governmental organizations for activities to protect public health, safeguard the environment, and advance environmental justice.

   Please explain the importance of technical assistance to disadvantaged communities so that their grant applications are competitive. Beyond these centers, what more could the federal government do to help disadvantaged communities be more competitive in the State Revolving Fund application process?

Response:
Technical assistance is critical for small, rural and disadvantaged communities that often do not have full-time staff with training in grant writing. They are at a disadvantage in the application process because they may not be aware of all grant opportunities available to them, do not have the capacity to develop a competitive application and lack the resources to address the complex compliance measures required. Any resources that support the application and funding process for these communities are helpful and necessary.

Targeted funding opportunities or set-asides for small and disadvantaged communities are one way to ensure they are competing on a level playing field. Communities would benefit from access to project managers or consultants during the application period, as well as technical assistance, training sessions and dedicated outreach. Making compliance support available for communities who are awarded grants would improve their ability to implement grants effectively. In addition, providing specific funding to state agencies to conduct needs assessments and provide technical assistance and outreach would result in more competitive applications.

Additional options would include extended timelines and planning grants to support assessment and design of projects that could be submitted for future competitive funding rounds.

2. The ability of smart water technologies to enhance a community's ability to comply with drinking water and wastewater regulations has been well documented by the EPA. However, communities are often unable to adopt new and emerging technologies due to the cost, as well as other administrative burdens. As compliance with the proposed per- and polyfluoroalkyl substances (PFAS) drinking water standards and hazardous waste standards becomes a reality, the issue of access to resources such as smart water technologies will become a more pressing issue.

   In your work, have you found that there are burdens for communities beyond cost that hinder a community's ability to access and utilize these technologies? Are there changes to law this committee should consider to help address these burdens?

Response:
What we have seen as a potential barrier for systems is access to knowledgeable and appropriately certified staff to operate the more complex technologies. This is especially applicable to small community water systems and presents an opportunity for workforce development programs and funding.

Additionally, smaller water systems may not have existing contracts with Engineering Consultants who could provide them with information on the applicability of these technologies. Access to technical resources would also benefit these systems.

Our estimates for PFAS treatment costs in North Carolina, already ranging from hundreds of millions to over a billion dollars, do not include ongoing operation and maintenance costs. These costs are a significant added burden for all community water systems installing more complex technologies. For example, the Cape Fear Public Utility Authority estimates that the ongoing maintenance costs will be at least $5 million per year after FY2023, in addition to the initial $43 million spent to install Granulated Activated Carbon Filtration.

Senator CARPER. Since your election as President of ECOS, do you prefer do be called Madam President, or Madam Secretary?

Ms. BISER. Secretary is fine, thank you. I appreciate it.

Senator CARPER. Good enough.

Ben Cardin is willing to introduce his constituent, Kishia Powell. Thanks for doing that.

Senator CARDIN. Mr. Chairman, thank you.

It is really a pleasure to have Kishia Powell with us. As you pointed out, her help in the work of this Committee by her appearance and counsel has been greatly appreciated. She is a dynamic force in the global water sector with 24 years of experience both in the public and private sector across the United States and London, England.

She is the General Manager and CEO of the Washington Suburban Sanitary Commission. That is the largest water utility in the State of Maryland. She manages 1,680 team members and the day to day operations of the water systems, 1.9 million customers. It is an incredible responsibility that she has. She has demonstrated great leadership in that regard. She is a licensed professional engineer in Maryland, graduating from Morgan State University. We always give plugs to our great schools in the State of Maryland.

I particularly want to thank her; Mayor Brandon Scott just announced his appointments to the task force set up by the Maryland General Assembly for the Regional Water Governance Task Force in Baltimore. The Washington Suburban Sanitary Commission does not have jurisdiction in Baltimore, but she is lending her expertise, because we need to find the best way to manage our water systems in the Baltimore area. And I thank her for her willingness to serve on that task force, and thank you for being with us today.

Senator CARPER. Ms. Powell, you are recognized.

STATEMENT OF KISHIA L. POWELL, GENERAL MANAGER AND CEO, WASHINGTON SUBURBAN SANITARY COMMISSION

Ms. POWELL. Thank you, Senator Cardin. It is good to be born, raised, and educated in the city of Baltimore.

Good morning, and thank you Chairman Carper, Ranking Member Capito, and Committee members for the invitation to testify before you today. I am Kishia Powell, the General Manager and CEO of WSSC Water. I would like to recognize our board of commissioners and Chair Regina Speed-Bost.

Senator CARPER. Is she here?

Ms. POWELL. She is not. She couldn't be here today.

Senator CARPER. Thank you.

Ms. POWELL. WSSC Water has the honor of serving more than 1.9 million customers across Prince George's and Montgomery Counties as the largest water and wastewater utility in the State of Maryland and the eighth largest in the country. While the scale of utilities differs across the water sector, we all face similar challenges, most importantly, the need to balance affordability with investments in critical infrastructure.

The passage of the Infrastructure Investment and Jobs Act made us all hopeful that the historic funding levels would unlock the ability to ramp up required investments. Thank you, Committee

members, for your leadership and vision. I am happy to report that we see progress because of the IIJA.

Overall, we have received a total of $60.3 million because of the increased appropriations in clean water and drinking water SRF funding, with over 30 percent being given in loan forgiveness. Most notably, WSSC Water will receive just over $105 million from the State Revolving Funds in the coming year for water main replacement projects, lead service line inventory and replacement, the Piscataway Bioenergy Project, and sanitary sewer reconstruction.

Thank you, Senator Cardin, for your support and leadership in advancing these crucial projects.

While progress is being made thanks to the single largest ever investment in water infrastructure in the history of the United States, the hard reality is, we are still behind when it comes to having the necessary funding required for our infrastructure investment needs. We are truly thankful, but this one time investment was only 5 percent of the funding that is needed for our sector.

EPA estimates a needed investment of $750 billion over the next 20 years just to maintain the existing Nation's drinking water and wastewater infrastructure. Historic decreases in Federal funding, aging infrastructure, climate and cyber threats, and addressing emerging contaminants widens the funding gap.

One of the most expensive and urgent issues our Nation's water sector faces is the presence of PFAS contaminating our water supplies and threatening WSSC Water's mission to protect public health and maintain our track record of zero drinking water quality violations in our 105 year history. We are committed to continuing this level of excellence, despite our projected cost of PFAS compliance of more than $1 billion for drinking water alone.

We are equally concerned about the potential financial, operational, and compliance risks associated with PFAS and wastewater and biosolids, which is why we must hold the polluters financially responsible and not leave our customers to shoulder this burden.

These factors have led to increasingly unaffordable water bills for families across the U.S. According to the Department of Health and Human Services, water is the fastest growing household utility cost nationwide. The Congressional Budget Office reports that over 90 percent of water and sewer infrastructure in the U.S. is funded locally, much higher than other types of infrastructure like roads and transit.

I thank this Committee for authorizing the creation of a water customer assistance program at the EPA and for providing $1.1 billion in various COVID relief packages for a program at HHS. Since 2020, WSSC Water was able to provide over $10 million in financial assistance, including nearly $4 million from the HHS Low Income Household Water Assistance Program to assist more than 5,500 customers. The EPA program has never been funded, and the HHS program will soon expire without additional funding, ending this critical lifeline. We must permanently fund access to water, an equally critical resource.

On behalf of WSSC Water, I thank the Committee members for your support and pledge to work with you to address the water sec-

tor's challenges in the years to come to protect public health, create jobs, enhance economic growth, safeguard our environment, and drive equity and environmental justice.

This concludes my testimony. I would be happy to answer any questions.

[The prepared statement of Ms. Powell follows:]

TESTIMONY OF

Kishia L. Powell
General Manager and Chief Executive Officer

On behalf of

WSSC Water (Washington Suburban Sanitary Commission)

Submitted to the
U.S. Senate Committee on Environment and Public Works

September 7, 2023

Challenges and opportunities with implementation of the IIJA

Good morning, and thank you, Chairman Carper, Ranking Member Capito, and committee members, for the invitation to testify before you on behalf of WSSC Water on the implementation of the Infrastructure Investment and Jobs Act (IIJA) and on drinking water and wastewater infrastructure investment.

I am Kishia Powell, the General Manager and CEO of WSSC Water, also known as the Washington Suburban Sanitary Commission. Established in 1918, WSSC Water is the largest water/wastewater utility in Maryland and among the largest in the nation. Our service area spans approximately 1,000 square miles in Prince George's and Montgomery counties in Maryland, just outside our nation's capital.

We have the honor of serving more than 1.9 million residents, schools and businesses across Prince George's and Montgomery counties as the largest water and wastewater utility in the State of Maryland and the eighth largest in the country. Through $9 billion in infrastructure assets, including two drinking water treatment plants, six water resource recovery facilities and over 11,000 miles of pipeline, we deliver safe, clean drinking water and recover vital resources through innovative wastewater treatment processes.

I serve on the Board of Directors of the National Association of Clean Water Agencies (NACWA), the trade association representing the nation's public wastewater and stormwater agencies, a leader in legislative, regulatory, and legal advocacy on the full spectrum of clean water issues, as well as a top technical resource for water management, sustainability, and ecosystem protection.

WSSC Water is also an active member of the Association of Metropolitan Water Agencies (AMWA), an organization of the largest publicly owned drinking water systems across the U.S. working to ensure federal laws and regulations are protective of public health and cost-effective for utility customers.

Water Sector Funding Needs and Progress

WSSC Water's annual operating budget is $1.6 billion, with a six-year capital improvement program of $5.6 billion. Even with historic levels of federal funding, the current federal share of water infrastructure funding nationwide is still less than 5%, leaving our ratepayers to cover 95% of the financial burden.

While our scales differ from system to system across the water sector, we all face similar challenges like recruiting and retaining a skilled workforce to deliver our core mission and support services; changing regulations that require significant investments

beyond annual operation and maintenance costs; and the impacts of a changing climate which at this very moment is putting pressure on our water supplies; and the rising costs of inflation and supply chain impacts. Not only do we have to confront these challenges head on, but we also need to seize those opportunities that allow us to leverage technology and supplement our operations with smart solutions. All these activities are extremely important, and all are also increasingly expensive.

According to the EPA, our nation's water infrastructure needs about $1 trillion in investment over the next 20 years, simply to get our current systems into a state of good repair. [1] [2] Without significant increases to federal funding, this financial burden will largely fall on the backs of our customers – the families and small businesses we serve and the local economies we support every day. According to the Congressional Budget Office, over 90 percent of water and sewer infrastructure is funded locally, far higher than other core infrastructure sectors like highways and transit. This disparity wasn't always the case – the federal cost-share of water utility capital investment was 63 percent in 1977 but has dropped below 10 percent today. [3]

This dynamic puts a squeeze on our customers' pocketbooks, as incrementally raising rates is often the only way to generate the revenue needed for essential upgrades to protect human and environmental health and comply with increasingly strict regulations. WSSC Water and many utilities around the country have customer assistance programs in place to fill in gaps and ensure continuity of water services for our most vulnerable customers, but these will have limited effectiveness unless the federal government can address our nation's overall water infrastructure funding shortfall.

Making Progress:

This committee made significant progress towards chipping away at this gap in 2021 through its crafting and unanimous advancement of the Drinking Water and Wastewater Infrastructure Act (DWWIA), which became the water title of the IIJA. This bipartisan legislation provided $55 billion – the largest investment in water infrastructure in the history of the US – in direct appropriations through the Clean Water and Drinking Water State Revolving Funds (SRFs) for traditional capital investments, replacement of lead service lines, and remediation of emerging contaminants. The bill also increased authorizations for the SRFs and other existing programs, and authorized the creation of

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[1] https://www.epa.gov/cwns
[2] https://www.epa.gov/system/files/documents/2023-04/Final_FAQ_DWINSA_4.4.23.v1.pdf
[3] https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/49910-infrastructure.pdf

many smaller, issue-specific programs. I thank the committee for your work advancing DWWIA, and for supporting its inclusion in the final IIJA legislation.

I am happy to report we're making progress. The State of Maryland received $184.87 million for its State Revolving Funds for FY 22 and $172.13 million for FY 23. In FY 22, WSSC was allocated $60.28 million in funding from the State Revolving Funds, and the draft intended use plan for FY 23 indicates that WSSC will receive $99.66 million from the State Revolving Funds. The FY 23 funding for WSSC will help fund four water main replacement projects, lead service line inventory and replacement programs, the Piscataway Bio-energy Project, and sanitary sewer reconstruction.

Despite this legislation's historic investments, there are massive gaps between the amount of funding that this committee authorized, and what has been appropriated in the fiscal years that have passed since IIJA was signed into law. According to NACWA, this disparity between authorizations and appropriations totals about $20 billion. [4]

For the two SRF programs--the most significant sources of federal funding for water infrastructure--Congress authorized $3 billion for each program in Fiscal Year 2024. However, the House's proposed FY24 legislation only provides $535 million for the CWSRF and $460 million for the DWSRF. The Senate numbers are better, but only keep appropriations flat year-over-year at $1.64 billion for the CWSRF and $1.13 billion for the DWSRF. To provide our nation's public water systems with the resources needed to address the litany of investment challenges we are up against and ensure affordability for our most vulnerable customers, Congress must, at a minimum, fund the SRF programs at their fully authorized level.

There are also many new programs authorized in IIJA, because of the leadership of this committee, that would serve as important sources of investment for the nation's water utilities. Unfortunately, these programs have gone unfunded or underfunded. Some of these programs include:

- The Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program.

    - This program is created and authorized at $50 million per year in IIJA for the purpose of helping drinking water utilities increase resilience to natural hazards and extreme weather events and to reduce cybersecurity vulnerabilities.

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[4] https://www.nacwa.org/docs/default-source/resources---public/nacwa-affordability-report_dec22.pdf?sfvrsn=1ab5c761_2

- The program received first-time appropriations of $5 million in FY23, far lower than the authorized level, and EPA has yet to stand the program up and make funding available for applications. Another $5 million is included in both the proposed FY24 House and Senate Appropriations bills.

- The Reducing Lead in Drinking Water Program.

  - This existing program's authorization was increased to $100 million per year in IIJA and serves to fund lead reduction projects, with priority given to grantees in disadvantaged communities.

  - The program received appropriations of $25 million in FY23, far lower than the authorized level. Another $25 million is included in both the proposed FY24 House and Senate Appropriations bills.

- The Assistance for Small and Disadvantaged Communities Program

  - This existing program's authorization was increased to $100 million for FY24 in IIJA and serves to fund drinking water and wastewater infrastructure projects for communities that are either unserved and do not have access to modern water services or are served by a water system that is chronically in violation of federal water standards.

  - The program received appropriations of $30 million in FY23, far lower than the authorized level. $23 million is included in the proposed FY24 House Appropriations bill and $30 million is included in the proposed Senate bill.

- The Sewer Overflow and Stormwater Reuse Municipal Grants Program

  - This existing program's authorization was increased to $280 million per year in IIJA and serves to fund projects aimed at reducing harmful combined sewer system overflows.

  - The program received appropriations of $50 million in FY23, far lower than the authorized level. Another $50 million is included in both the proposed FY24 House and Senate Appropriations bills.

- The Clean Water Infrastructure Resiliency and Sustainability Program

· This program is created and authorized at $25 million per year in IIJA for the purpose of helping public clean water utilities increase resilience to natural hazards and extreme weather events and to reduce cybersecurity vulnerabilities.

· The program has not received any appropriations from Congress to date.

- The Connection to Publicly Owned Treatment Works Program

· This program is created and authorized at $40 million per year in IIJA for the purpose of helping public clean water utilities cover the costs of connecting new households to wastewater utility services.

· The program has not received any appropriations from Congress to date. The FY24 Senate bill does not propose funding for the program and the House bill includes $3 million in first-time funding, far lower than the authorized level.

These are just a few of many programs that would have immense positive impacts on water infrastructure for communities across the U.S. but are not receiving the funding that this committee authorized.

Low-Income Assistance

Another key issue for water utilities across the U.S. is assistance for low-income customers.

Water bills are becoming increasingly unaffordable for many of the lowest-income households across the United States. According to the U.S. Department of Health and Human Services (HHS), water is the fastest growing household utility cost nationwide, and bills have risen an estimated 43.2% between 2012 and 2021, significantly outpacing the rate of inflation. [5] This phenomenon is due to a combination of the factors previously mentioned that are driving up the cost of delivering water services – decreasing federal investment, aging infrastructure, emerging contaminants like PFAS, climate and cyber threats, and more, and are further exacerbated by worsening income inequality.

According to the Economic Policy Institute, household income for the top 1% of earners has more than tripled since 1979, but for the bottom 90% of households, income has

[5] https://www.acf.hhs.gov/sites/default/files/documents/ocs/water-survey.pdf

only increased by about 1% per year, barely outpacing inflation. [6] This means that income has barely grown for the vast majority of American families, while at the same time these same families became responsible for the overwhelming majority of the cost of keeping our water safe and reliable. These factors are coming to a head, with more and more households now facing the unconscionable choice between paying their water bill or addressing other critical needs for their family.

A nationwide, permanent low-income assistance program for water would target assistance to the households with the greatest levels of need. This funding would also allow utilities serving a large share of low-income households to ensure financial stability of their operations, filling in gaps left by fluctuations in customer arrearages when hard times set in.

I thank this committee for recognizing this need by authorizing the creation of a low-income water customer assistance pilot program at the Environmental Protection Agency (EPA) in DWWIA and IIJA. This program was the culmination of bipartisan legislative efforts over the previous several Congresses, but absent appropriations the program is unable to help a single family in need.

Congress also included $1.1 billion in COVID-relief packages for the creation of an emergency low-income assistance program – the Low Income Household Water Assistance Program (LIHWAP) – at HHS. This program provided key relief to utilities and the families they serve, including WSSC Water, in maintaining low-income customers' access to water services during the worst of the pandemic's economic impacts. Since the start of the pandemic, WSSC Water has directed over $10.2 million in financial assistance to over 5,500 customers, through a variety of federal and state funding sources, including over $3.75 million from the LIHWAP program.

Absent further appropriations, however, the LIHWAP program will expire at the end of the current fiscal year, ending this critical lifeline. Further, it is well documented that, while COVID served to exacerbate water affordability issues, they existed long before the pandemic and have persisted after. A 2023 analysis from AMWA, NACWA, and other water sector organizations has shown that the nationwide need for low-income assistance is as high as $7.9 billion. [7]

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[6] Decades of rising economic inequality in the U.S.: Testimony before the U.S. House of Representatives Ways and Means Committee, Economic Policy Institute (epi.org) - https://www.epi.org/publication/decades-of-rising-economic-inequality-in-the-u-s-testimony-before-the-u-s-house-of-representatives-ways-and-means-committee/

[7] https://www.nacwa.org/docs/default-source/resources---public/report.pdf?sfvrsn=4e4cc161_2

For decades there have been federal programs for the most vulnerable individuals to access fundamental household needs such as housing, energy bills, groceries, and medicine – we must create this same federal safety net for access to water, an equally critical resource for healthy, thriving communities.

Conclusion

The water sector faces immense investment challenges as it seeks to continue to provide reliable, high-quality, and affordable services to all communities across the United States, regardless of community size, income level, and region. On behalf of WSSC Water and water utilities across the country, I thank the committee for its past support of the water sector and am hopeful for future collaboration on policies that promote a clean water future for all Americans. Thank you again for the opportunity to testify, and I look forward to your questions.

MARYLAND DEPARTMENT OF THE ENVIRONMENT
MARYLAND WATER INFRASTRUCTURE FINANCING ADMINISTRATION
FINAL FFY 2022 (SFY 2024) INTENDED USE PLAN
MARYLAND WATER QUALITY REVOLVING LOAN FUND

TABLE 1: WQSRF FFY 2022 IUP PROJECT FUNDING LIST

APPLICANT	COUNTY	PROJECT NAME (MDE PROJECT NUMBER)	WQSRF TOTAL FUNDING	WQSRF BASE LOAN	WQSRF BASE LOAN FORGIVE.	BIL LOAN	BIL LOAN FORGIVE.	TOTAL GREEN LOAN/PF WQSRF BASE	TOTAL GREEN LOAN/PF BIL	PRIORITY RANK	SCORING POINTS	DAC COMMUNITY	PROJECT TYPE	CONST. START	COMMENTS
CALVERT COUNTY BOARD OF COUNTY COMMISSIONERS	CALVERT	HIGHLANDS SEWER SYSTEM (CW0087/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	1	115	N	SMALL	5/1/2023	Bypass - Water & Sewer and PFA issues
TOWN OF HEBRON	WICOMICO	TOWN OF HEBRON WWTP REPLACEMENT (CW0061/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	2	115	Y	SMALL	9/1/2023	Potential SFY24 grant
ANNE ARUNDEL COUNTY	ANNE ARUNDEL	PRIEY ORCHARD WRF UPGRADE TO ENR (CW0085/24)	$ 23,265,610	$ 23,265,610	$ -	$ -	$ -	$ -	$ -	3	115	N	LARGE	9/1/2023	Potential SFY24 grant
WICOMICO COUNTY	WICOMICO	MARDELA SPRINGS WWTP AND SEWER SYSTEM (CW0022/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	4	115	Y	SMALL	9/1/2023	Bypass - Water & Sewer and PFA issues
ANNE ARUNDEL COUNTY	ANNE ARUNDEL	ANNE ARUNDEL COUNTY SEPTIC TO SEWER PROGRAM (CW0084/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	5	105	N	LARGE	11/1/2023	Bypass - PFA issue
WICOMICO COUNTY	WICOMICO	PARSONSBURG VILLAGE WWRP AND SEWER SYSTEM(CW0023/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	6	100	Y	SMALL	12/1/2023	Bypass - Water & Sewer and PFA issues
WICOMICO COUNTY	WICOMICO	NANTICOKE-BIVALVE-TYASKIN WWTP AND SEWER SYSTEM (CW0024/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	7	100	Y	SMALL	12/1/2023	Bypass - Water & Sewer and PFA issues
WICOMICO COUNTY	WICOMICO	COULBOURNE MILL COMMUNITY WWTP AND SEWER SYSTEM (CW0021/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	8	100	Y	SMALL	12/1/2023	Bypass - Water & Sewer and PFA issues
TOWN OF GREENSBORO	CAROLINE	GREENSBORO REGIONAL WW SYSTEM EXPANSION (CW0063/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	9	100	Y	SMALL	4/1/2023	Potential SFY24 grant
GARRETT COUNTY SANITARY DISTRICT, INC.	GARRETT	OAKLAND TROUT RUN WWRP AND SEWER SYSTEM (CW0088/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	10	100	Y	SMALL	3/1/2023	Bypass - PFA issue
BURGESS AND COMMISSIONERS OF MIDDLETOWN	FREDERICK	MIDDLETOWN WEST WWTP UPGRADE (CW0093/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	11	100	N	SMALL	10/1/2025	Bypass - Water & Sewer issues
TOWN COUNCIL OF CENTREVILLE	QUEEN ANNE'S	CENTREVILLE WWTP EXPANSION (CW0051/24)	$ 14,939,500	$ 14,939,500	$ -	$ -	$ -	$ -	$ -	12	100	N	SMALL	3/1/2024	Potential SFY24 grant
TALBOT COUNTY	TALBOT	REGION V-TILGHMAN ENR TREATMENT & SEPTIC SYSTEM ELIMINATION (CW0068/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	13	95	Y	SMALL	1/1/2026	Bypass - Water & Sewer and PFA issues; ENR not cost-effective
WICOMICO COUNTY	WICOMICO	WHITEHAVEN VILLAGE WWTP AND SEWER SYSTEM (CW0025/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	14	80	Y	SMALL	12/1/2023	Bypass - Water & Sewer and PFA issues
MAYOR AND CITY COUNCIL OF BALTIMORE	BALTIMORE CITY	BALTIMORE CITY MS4 PROGRAM(CW0019/24) (GREEN)	$ 25,000,000	$ 17,195,400	$ 1,500,000	$ 5,304,600	$ 1,000,000	$ 18,695,400	$ 6,304,600	15	80	Y	LARGE	7/1/2022	Partially replace prior WQSRF funding
TOWN OF LONACONING	ALLEGANY	CHARLESTOWN DAM DECOMMISSIONING/STREAM RESTORATION (CW0035/24)	$ 798,520	$ -	$ -	$ 399,260	$ 399,260	$ -	$ -	16	80	Y	SMALL	11/1/2022	Replace prior WQSRF funding
FAMILY FOREST IMPACT FOUNDATION	ALLEGANY	FAMILY FOREST IMPACT PROGRAM (LOAN GUARANTEE) (CW0091/24) (GREEN)	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -	$ 2,500,000	$ -	17	80	N	SMALL	1/1/2023	
TOWN OF LONACONING	ALLEGANY	MIDLAND/GILMORE DAM REPAIR/STREAM RESTORATION (CW0034/24)	$ 399,076	$ -	$ -	$ 199,538	$ 199,538	$ -	$ -	18	80	Y	SMALL	11/1/2022	Replace prior WQSRF funding
TOWN OF HURLOCK	DORCHESTER	JONES VILLAGE SEPTIC ELIMINATION PROJECT (CW0049/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	19	75	Y	SMALL	12/1/2023	Bypass - Water & Sewer issues
TALBOT COUNTY	TALBOT	REGION V-SEWER EXTENSION TO FAIRBANK AND BAR NECK VILLAGES (CW0067/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	20	75	Y	SMALL	11/1/2022	Bypass - Water & Sewer issues
CITY OF FRUITLAND	WICOMICO	FRUITLAND TUXENTS BRANCH DRAINAGE(CW0059/24) (GREEN)			$ -			$ -	$ -	21	75	Y	SMALL	4/1/2023	Fully funded with prior WQSRF & State Grant
OVERLEA SEWER CONSORTIUM	MONTGOMERY	OVERLEA DRIVE SEWER CONSTRUCTION PROJECT (CW0090/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	22	75	N	LARGE	09/01/2022	Loan unwanted; private - ineligible for loan
TALBOT COUNTY	TALBOT	REPLACEMENT WWTP FOR THE PRESERVE AT WYE MILLS (CW0070/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	23	70	Y	SMALL	4/1/2023	Potential SFY24 grant
COLLEGE OF SOUTHERN MARYLAND	CHARLES	WWTP UPGRADE COLLEGE OF SOUTHERN MARYLAND (CW0083/24)	$ 2,359,000	$ 2,359,000	$ -	$ -	$ -	$ -	$ -	24	70	N	SMALL	7/1/2023	Potential SFY24 grant
CARROLL COUNTY COMMISSIONERS	CARROLL	HAMPSTEAD VALLEY WATERSHED RESTORATION (CW0073/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	25	70	N	LARGE	11/1/2023	Loan unwanted
THE HABONIM CAMP ASSOCIATION CO. INC.	HARFORD	CAMP HOSHAWA WASTEWATER SYSTEM (CW0078/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	26	65	N	SMALL	8/1/2023	Loan unwanted - Potential SFY24 grant
TOWN OF CECILTON	CECIL	CECILTON WWTP (CW0045/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	27	65	Y	SMALL	11/1/2023	Loan unwanted - Potential SFY24 grant
ALLEGANY COUNTY COMMISIONERS	ALLEGANY	BEDFORD ROAD SANITARY SEWER REHAB-PHASE VII (CW0027/24)	$ 1,000,000	$ -	$ -	$ 500,000	$ 500,000	$ -	$ -	28	65	Y	SMALL	12/1/2022	
CITY OF FROSTBURG	ALLEGANY	FROSTBURG CSO ELIMINATION PROJECT PHASE X-C (CW0031/24)	$ 3,000,000	$ 110,814	$ 110,814	$ 1,389,186	$ 1,389,186	$ -	$ -	29	65	Y	SMALL	6/1/2023	Potential SFY24 grant
MAYOR AND CITY COUNCIL OF CUMBERLAND	ALLEGANY	EVITTS CREEK CSO UPGRADES PHASE IV INTERCEPTOR SEWER TO EOPS (CW0030/24)	$ 3,550,900	$ 550,900	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	30	65	Y	LARGE	12/1/2023	
MAYOR AND CITY COUNCIL OF CUMBERLAND	ALLEGANY	EVITTS CREEK CSO UPGRADES PHASE III GRAVITY SEWER THROUGH CSX RAILYARD (CW0029/24)	$ 2,141,112		$ -	$ 1,070,556	$ 1,070,556	$ -	$ -	31	65	Y	LARGE	7/1/2023	
MAYOR AND CITY COUNCIL OF CUMBERLAND	ALLEGANY	78" PARALLEL PIPELINE FROM MILL RACE TO CSO STORAGE (PROJECT # 19-16-S) (CW0028/24)	$ 12,809,000	$ 9,809,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	32	65	Y	LARGE	1/1/2023	Funding in addition to prior WQSRF & State Grant
ST. MARYS COUNTY METROPOLITAN COMMISSION	ST. MARYS	ST. CLEMENT SHORES WWTP ENR UPGRADE (CW0055/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	33	60	N	SMALL	9/1/2023	Loan unwanted - Potential SFY24 grant
CITY OF BRUNSWICK	FREDERICK	BRUNSWICK SEPTIC CONNECTIONS TO WWTP (CW0003/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	34	60	N	SMALL	2/1/2023	Loan unwanted
WASHINGTON SUBURBAN SANITARY COMMISSION	PRINCE GEORGES	PISCATAWAY WRRF BIO ENERGY PROJECT (CW0058/24) (GREEN)	$ 25,000,000	$ 21,000,000	$ 1,000,000	$ 1,500,000	$ 1,500,000	$ 22,000,000	$ 3,000,000	35	60	Y	LARGE	6/1/2019	
MONTGOMERY COUNTY DEPT ENVIRONMENTAL PROTECTION	MONTGOMERY	MONTGOMERY COUNTY/M-NCPPC MS4 ROUND 2 (CW0089/24) (GREEN)	$ 14,350,000	$ 13,350,000	$ 1,000,000	$ -	$ -	$ 14,350,000	$ -	36	60	N	LARGE		
WASHINGTON SUBURBAN SANITARY COMMISSION	PR GEO/MONT	SANITARY SEWER RECONSTRUCTION PROGRAM - SECTION 7 (CW0026/24)	$ 25,000,000	$ 22,000,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	37	60	Y	LARGE	12/1/2023	
COMMISSIONERS OF CAMBRIDGE	DORCHESTER	TRENTON STREET SEWAGE PUMPING STATION REHAB (CW0050/24)	$ 4,044,000	$ 1,044,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	38	55	Y	LARGE	6/1/2023	
CITY OF BRUNSWICK	FREDERICK	BRUNSWICK STREAM RESTORATION (CW0004/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	39	50	N	SMALL	11/1/2025	Loan unwanted
MAYOR AND CITY COUNCIL OF CUMBERLAND	ALLEGANY	WRF GRIT SEPARATION AND UV DISINFECTION (CW0033/24)	$ 4,445,000	$ 1,445,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	40	45	Y	LARGE	7/1/2024	
TOWN OF LUKE	ALLEGANY	TOWN OF LUKE SEWER COLLECTION SYSTEM-PHASE 3 (CW0036/24)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	41	40	Y	SMALL	6/1/2023	Loan unwanted - Potential SFY24 grant
CITY OF CRISFIELD	SOMERSET	JERSEY ISLAND WASTEWATER PUMP STATION REPLACEMENT (CW0053/24)	$ 650,000	$ -	$ -	$ 325,000	$ 325,000	$ -	$ -	42	40	Y	SMALL	5/1/2023	
TOWN OF WESTERNPORT	ALLEGANY	WESTERNPORT SANITARY SEWER REPLACEMENT (CW0068/24)	$ 21,165,000	$ 18,165,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	43	40	Y	SMALL	4/1/2023	Potential SFY24 grant
TALBOT COUNTY	TALBOT	WINDMILL FORCE MAIN REPLACEMENT (CW0071/24)	$ 2,418,000	$ -	$ -	$ 1,209,000	$ 1,209,000	$ -	$ -	44	40	Y	LARGE	1/1/2023	
MAYOR AND CITY COUNCIL OF BALTIMORE	BALTIMORE CITY	SC-1014 JONES FALLS SEWERSHED I&I REDUCTION PROJ.01 (CW0015/24)	$ 12,564,826	$ 9,564,826	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	45	40	Y	LARGE	12/1/2023	
MAYOR AND CITY COUNCIL OF BALTIMORE	BALTIMORE CITY	SC-1016 JONES FALLS SEWERSHED I&I REDUCTION PROJ.03 (CW0019/24)	$ 10,896,946	$ 7,896,946	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	46	40	Y	LARGE	12/1/2023	
CITY OF HAGERSTOWN	WASHINGTON	EDGEMONT RESERVOIR EMERGENCY REPAIR (CW0038/24)	$ 17,250,000	$ 14,250,000	$ -	$ 1,500,000	$ 1,500,000	$ -	$ -	47	35	Y	LARGE	10/1/2025	Replace prior WQSRF funding
			$ 229,366,090	**$ 179,265,596**	**$ 3,610,814**	**$ 25,397,140**	**$ 21,092,540**	**$ 57,545,400**	**$ 9,304,600**						
				Max 30% LF test	**$ 8,396,500**	**49% LF test**	**$ 21,092,540**	**$ 2,798,500**	**$ 4,304,600**	**Min 10% Green test**					

WQSRF FFY 2022 IUP - Sources & Uses

Total Sources		Total Uses	
Federal Funds for Capital Projects-Base Grant	$ 27,984,860	Capital projects - Loans and Grants	$ 229,366,090
State Match for Base for Capital Projects	$ 5,597,000	SRF Revenue Bond Debt Service (P&I)	$ 3,437,850
Federal Funds for Capital Projects-BIL Grant	$ 43,046,000	CWSRF Transfer to DWSRF	$ 40,000,000
State Match for BIL for Capital Projects	$ 4,304,600	2% Admin for Technical Assistance for Small Systems	$ 860,920
Total Revenue Bonds	$ 40,000,000	EPA in Kind - Clean Watershed Need Survey	$ 500,000
Est. Invest. Earnings/Repayments/Reprogrammed Funds	$ 156,332,280	Transfer to Admin (WRRDA provision)	$ 3,100,000

Loan Forgiveness/Grant - Base Grant	$ 3,610,814		Green $ Cap. Grant	3	$ 57,545,400
Loan Forgiveness/Grant - BIL Grant	$ 21,092,540		% of Cap. Grant		205.63%
% of Cap. Grant	13%	> Min 10%, <30% Max	Green $ BIL	1	$ 9,304,600
% of BIL Grant	49%	49%	% of BIL		22%

> 10% (green requirement met)

Equivalency Projects for the Purpose of Federal Compliance (e.g. FFATA)		
Equivalency projects - Base Grant	12	$ 125,462,300
Equivalency projects - BIL Grant	15	$ 44,642,084

Cash Flow Proportionality	Total	Capital Proportionality
Federal Capital-Base Grant	$ 27,985,000	83.33%
State Match	$ 5,597,000	16.67%
Total Base Grant	$ 33,582,000	100.00%
Federal Capital-BIL Grant	$ 43,046,000	90.91%
State Match	$ 4,304,600	9.09%
Total BIL Grant	$ 47,350,600	100.00%

MARYLAND DEPARTMENT OF THE ENVIRONMENT
MARYLAND WATER INFRASTRUCTURE FINANCING ADMINISTRATION
FINAL FFY 2022 (SFY 2024) INTENDED USE PLAN
MARYLAND DRINKING WATER REVOLVING LOAN FUND

TABLE 1: DWSRF FFY 2022 IUP PROJECT FUNDING LIST

APPLICANT	COUNTY	PROJECT NAME (MDE PROJECT NUMBER)	DWSRF TOTAL FUNDING	DWSRF BASE LOAN	DWSRF BASE LOAN FORGIVE.	BIL LOAN	BIL LOAN FORGIVE.	PRIORITY RANK	SCORING POINTS	CONST. START	SYSTEM SIZE/OWNERSHIP SMALL/LARGE	SYSTEM SIZE/OWNERSHIP PUBLIC/PRIVATE	DAC COMMUNITY	PROJECT TYPE	COMMENTS
MARYLAND AMERICAN WATER CO	HARFORD	NEW WINTERS RUN WATER TREATMENT FACILITY (DW0016/24)	$ -	$ -	$ -	$ -	$ -	1	117	8/1/2022	LARGE	PRIVATE	NO	TREATMENT	Bypass - Water & Sewer and PFA issues
POCOMOKE CITY	WORCESTER	POCOMOKE CITY WIIN-CIPP LINING MARKET STREET MAINS - PHASE I (DW0004/24)	$ -	$ -	$ -	$ -	$ -	2	110	5/1/2023	SMALL	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	Loan Unwanted - Possible State Grant
FREDERICK COUNTY	FREDERICK	BRIERCREST APARTMENTS WATER SERVICE (DW0017/24)	$ -	$ -	$ -	$ -	$ -	3	100	10/1/2023	SMALL	PRIVATE	NO	TRANSMISSION/DISTRIBUTION	Fund with PFAs/CEC BIL $
LAVALE SANITARY COMMISSION	ALLEGANY	WINCHESTER ROAD WATER LINE REPLACEMENT (DW0025/24)	$ 3,802,800	$ 1,801,400	$ 1,500,000	$ -	$ 301,400	4	97	6/1/2023	SMALL	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	Possible State Grant
BOARD OF CARROLL COUNTY COMMISSIONERS	CARROLL	SPRINGFIELD WELLS / FAIRHAVEN WELL HOUSE (DW0015/24)	$ -	$ -	$ -	$ -	$ -	5	97	3/1/2023	LARGE	PUBLIC	NO	SOURCE	Bypass - Water & Sewer issues
FREDERICK COUNTY	FREDERICK	SPRINGVIEW MOBILE HOME PARK WATER SERVICE (DW0021/24)	$ -	$ -	$ -	$ -	$ -	6	95	11/1/2023	LARGE	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	Fund with PFAs/CEC BIL $
TOWN OF SNOW HILL	WORCESTER	COULBOURNE LANE WELL BACKUP POWER (DW0002/24)	$ 27,258	$ 13,629	$ 13,629	$ -	$ -	7	90	6/1/2023	SMALL	PUBLIC	YES	SOURCE	Possible State Grant
TOWN OF EMMITSBURG	FREDERICK	EMMITSBURG NORTH SETON AVENUE WATER LINE REPLACEMENT (DW0018/24) (GREEN)	$ 859,164	$ 859,164	$ -	$ -	$ -	8	90	10/1/2023	SMALL	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	Possible State Grant
TOWN OF EMMITSBURG	FREDERICK	EMMITSBURG DEPAUL STREET WATER LINE REPLACEMENT (DW0019/24)	$ 632,500	$ 632,500	$ -	$ -	$ -	9	90	10/1/2023	SMALL	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	Possible State Grant
CITY OF HAGERSTOWN	WASHINGTON	MACK WATER STORAGE TANK REPLACEMENT (DW0034/24)	$ 4,000,000	$ 2,000,000	$ -	$ -	$ 2,000,000	10	90	5/1/2023	LARGE	PUBLIC	YES	STORAGE	
WASHINGTON SUBURBAN SANITARY COMMISSION	PRINCE GEORGE'S	POWHATAN STREET WATER MAIN REPLACEMENT (DW0042/24)	$ 2,461,000	$ 1,230,500	$ 1,230,500	$ -	$ -	11	87	6/1/2023	LARGE	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	
WASHINGTON SUBURBAN SANITARY COMMISSION	PRINCE GEORGE'S	HORIZON WAY WATER MAIN REPLACEMENT (DW0041/24)	$ 3,400,000	$ 1,458,745	$ 1,144,637	$ 241,255	$ 555,363	12	80	6/1/2023	LARGE	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	
TOWN OF GRANTSVILLE	GARRETT	TOWN OF GRANTSVILLE CHESTNUT RIDGE WATER SYSTEM (DW0030/24)	$ 8,035,000	$ 5,363,492	$ -	$ 171,508	$ 2,500,000	13	80	5/1/2023	SMALL	PUBLIC	YES	OTHER	
TOWN OF BOONSBORO	WASHINGTON	BOONSBORO DRINKING WATER RESERVOIR REPLACEMENT (DW0036/24)	$ -	$ -	$ -	$ -	$ -	14	75	1/1/2023	SMALL	PUBLIC	NO	STORAGE	Loan Unwanted
WASHINGTON SUBURBAN SANITARY COMMISSION	MONTGOMERY	MONTGOMERY KNOLLS WATER MAIN REPLACEMENT (DW0040/24)	$ 4,418,000	$ 4,418,000	$ -	$ -	$ -	15	72	3/1/2023	LARGE	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	
BALTIMORE CITY	BALTIMORE CITY	WC-1199 ASHBURTON PUMPING STATION REHABILITATION (DW0007/24)	$ 10,000,000	$ 5,000,000	$ -	$ 2,500,000	$ 2,500,000	16	72	7/1/2023	LARGE	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	
BALTIMORE COUNTY	BALTIMORE COUNTY	WC-1199 ASHBURTON PUMPING STATION REHABILITATION (DW0022/24)	$ 10,000,000	$ 10,000,000	$ -	$ -	$ -	17	72	7/1/2023	LARGE	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	
MAYOR AND COUNCIL CITY OF BRUNSWICK	FRED/WASH	YOURTEE SPRINGS WATER DISTRIBUTION (WSG, ONLY) (DW0020/24)			$ -	$ -	$ -	18	70	12/1/2022	SMALL	PUBLIC	NO	TRANSMISSION/DISTRIBUTION	Loan Unwanted
TOWN OF WESTERNPORT	ALLEGANY	TOWN OF WESTERNPORT-WATER DISTRIBUTION SYSTEM IMPROVEMENTS-PHASES 5-7 (DW0038/24)	$ 10,000,000	$ 5,000,000	$ -	$ 2,500,000	$ 2,500,000	19	70	12/1/2023	SMALL	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	Fund balance on FY21 IUP
CITY OF HAGERSTOWN	WASHINGTON	TRANSMISSION MAINS REPLACEMENT-HAGERSTOWN (DW0033/24)	$ 7,500,000	$ 2,500,000		$ 2,500,000	$ 2,500,000	20	70	10/1/2023	LARGE	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	
TOWN OF BERLIN	WORCESTER	FRANKLIN AVENUE WELL REPLACEMENT (DW0003/24)	$ 130,000	$ 65,000	$ 65,000	$ -	$ -	21	65	6/1/2023	SMALL	PUBLIC	YES	SOURCE	
TOWN OF GRANTSVILLE	GARRETT	TOWN OF GRANTSVILLE WATER IMPROVEMENT PROJECT (DW0031/24)	$ -	$ -	$ -	$ -	$ -	22	65	5/1/2023	SMALL	PUBLIC	YES	OTHER	Bypass - Water & Sewer Issues
GARRETT COUNTY SANITARY DISTRICT	GARRETT	MOUNTAIN LAKE PARK & LOCH LYNN HEIGHTS WATER LINE REPLACEMENT PROJECT (DW0029/24)	$ 1,587,274	$ -	$ -	$ 793,637	$ 793,637	23	60	8/1/2023	SMALL	PUBLIC	YES	TRANSMISSION/DISTRIBUTION	
TOWN OF LONACONING	ALLEGANY	MIDLAND/LIMORE RAW WATER STORAGE TANK (DW0027/24)	$ 9,904,840	$ 4,904,840	$ -	$ 2,500,000	$ 2,500,000	24	60	10/1/2023	SMALL	PUBLIC	YES	STORAGE	Fund balance on FY21 IUP
			$ 76,766,836	**$ 46,445,270**	**$ 3,953,766**	**$ 11,206,400**	**$ 16,150,400**								
				SDWA-DAC	$ 3,953,766										

DWSRF FFY 2022 IUP - Sources & Uses

Total Sources		Total Uses	
	$ 89,121,026		$ 89,121,026
Federal Funds for Capital Projects	$ 12,837,000	DWSRF Capital Projects Loans and Grants-Base+BIL Grants	$ 76,755,836
State Match for Capital Projects	$ 2,567,400		
BIL for Capital Projects	$ 32,960,000	Federal Set-asides - Base+BIL Grants:	
State Match for BIL for Capital Projects	$ 3,296,000	2% Technical Assistance	$ 915,940
Funds Transferred from WQSRF	$ 40,000,000	4% DWSRF Admin	$
Future Revenue Bonds	$ (40,000,000)	10% Drinking Water Program Support	$ 4,579,700
Est. Investment Earnings/Repayments/Reprogrammed Funds	$ 37,460,626	15% Local Assistance/State Activities	$ 6,869,550

Cash Flow/ Proportionality	Total	Capital Proportionality
Federal Capital-Base Grant	$ 12,837,000	
Less: 2%/10%/15% set asides	$ (3,495,990)	
Fed Cap-Base net of Set-Asides	$ 9,371,010	78.49%
State Match	$ 2,567,400	21.51%
Total Base Grant Capital	$ 11,938,410	100.00%
Federal Capital-BIL Gen Grant	$ 32,960,000	
Less: 2%/10%/15% set asides	$ (8,899,200)	
Fed BIL-Gen net of Set-Asides	$ 24,060,800	87.95%
State Match	$ 3,296,000	12.05%
Total BIL Grant Capital	$ 27,356,800	100.00%

Loan Forgiveness/Grant-Base	$ 3,953,766	Total
% of Base Cap Grant	31%	> Min 26% and < 49% Max
Loan Forgiveness-Base-SDWA/DAC	$ 3,953,766	SDWA-DAC
% of Base Cap Grant	31%	> Min 12% and <35% Max
Loan Forgiveness/Grant-BIL	$ 16,150,400	
% of BIL Grant	49%	49%

System Type	Treatment	Distribution	Source	Storage	Other	Total
Number	1	15	3	3	2	24
Funding $	$ -	$ 54,658,736	$ 157,258	$ 13,904,840	$ 8,035,000	$ 76,755,836
% of Total IUP	0.00%	71.21%	0.20%	18.12%	10.47%	100.00%

System Size	Number	Funding $	%
LARGE	10	$ 41,777,000	54.43%
SMALL	14	$ 34,978,836	45.57%
Total	24	$ 76,755,836	100.00%

Equivalency Projects for the Purpose of Federal Compliance (e.g. FFATA)		
Equivalency projects - Base Grant	8	$ 30,673,114
Equivalency projects - BIL Grant	9	$ 27,356,800

Senate EPW Committee
Follow-Up Responses to Chairman Carper for WSSC Water

1. **Based on your leadership experience at multiple utilities across the country, what are the most critical actions that water systems must take to maintain an aging infrastructure network while keeping rates affordable? How has the Bipartisan Infrastructure Law helped you, and what more needs to be done?**

   Maintaining an aging infrastructure is critical to delivering the core mission of every water system; roughly 55,000 across the United States alone. Maintaining an aging infrastructure is largely accomplished through day to day operations and maintenance (O&M) or capital investments. In fact, capital investments are the biggest lever we have to ensuring the Utility is reliable and resilient as well as in compliance with a myriad of regulations to protect the public's health.

   Both day to day O&M and capital investments requires adequate funding. Day to day operations and maintenance costs are funded primarily through rate revenue from customers, while capital investments are funded by rate revenues, borrowing and external funds like those that are available through the BIL.

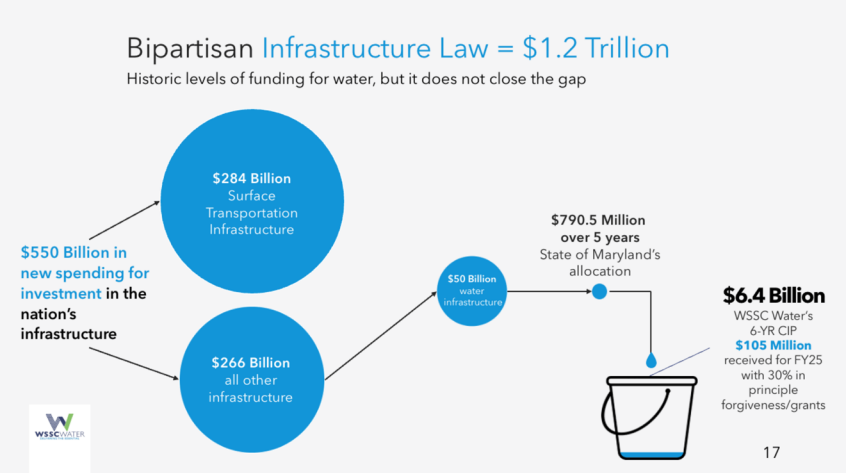
   The challenge is keeping rates affordable yet adequate. We look at affordability as a three legged stool:

   - **Affordable, adequate rates:** Though rates are rising, largely due to the decline in federal funding, we are intentional about factoring in some benefit or relief for those most vulnerable to the impacts of rising rates (affordability), where possible, while still recovering the cost of service (adequacy). It must be noted that we are not-for-profit utilities. The revenues we receive must be invested in the costs to deliver the services.

   - **Increased Federal Funding:** while the BIL has helped with providing funding (still mostly in the form of Loans with 30% principle forgiveness) the historic levels of water funding are not enough to close the gap (see graphic below). Additionally appropriations are needed in all programs that were authorized under the BIL. While Surface Transportation has received more than half of new spending in the BIL, water received significantly less and in fact falls behind Surface Transportation, Power and Broadband. Yet water is no less important. In fact it is absolutely critical and deemed a lifeline service to communities by FEMA. Without the necessary levels of funding, the costs to maintain existing infrastructure will continue to be a burden of community's rate payers.

   - **Local, State and Federal Customer Assistance Programs:** because there remains a significant burden on rate payers, customer assistance at the Federal level must continue. Even with our own customer assistance programs in place, since March 2020 WSSC Water has provided more than $10M in state and federal customer assistance including $3.7M from the State of Maryland and $4.6M in LIHWAP funds. Unfortunately, the State water assistance grant program is not a permanent program and the Federal LIHWAP program was not authorized as a permanent program. However, there should be a permanent program akin to LIHEAP for the Country's most precious resource.

More federal funding is needed for the Water Sector. The funds available do not support the capital improvement of the existing infrastructure. For all the water system failures we have seen in this country we are not providing the levels of funding needed on the front end to make sure that those failures don't happen. More funding in the form of grants. Authorization and appropriations for a permanent low income household water assistance program, particularly to assist the utilities in those states that do not allow Utility based customer assistance programs.



2. The ability of smart water technologies to enhance a community's ability to comply with drinking water and wastewater regulations has been well documented by the EPA. However, communities are often unable to adopt new and emerging technologies due to the cost, as well as other administrative burdens. As compliance with the proposed per- and polyfluoroalkyl substances (PFAS) drinking water standards and hazardous waste standards becomes a reality, the issue of access to resources such as smart water technologies will become a more pressing issue. In your work, have you found that there are burdens for communities beyond cost that hinder a community's ability to access and utilize these technologies? Are there changes to law this committee should consider to help address these burdens?

Smart water technologies not only help customers to better manage their own consumption but provide utilities with the tools to manage this vital resource for the benefit of everyone, from distribution system sensors designed to decrease energy use or detect water quality issues to technologies that aid in finding system leaks or preventing sewer overflows. Reducing leaks, managing water quality and ensuring a reliable distribution system help improve the quality of life for all. Beyond cost, what

hinders a community's ability to access and utilize these technologies is increasing regulations without the funding to support the implementation. Or in the case of PFAS, and other emerging contaminants, having the burden of the cost of compliance placed on the Utility and it's ratepayers which takes funding away from innovation and deploying smart technologies across the utility's value chain. Additionally, community acceptance and understanding of smart water strategies and technologies is a barrier. For instance, there is a perception that use of automated metering infrastructure will cause health concerns. However, other utilities have deployed the same technology and are leveraging the benefits. There is also a fear that implementation of smart water technologies will displace workforce, when we actually need to up-skill workforce to assist in maintaining the new systems and infrastructure. In these two cases, there is a nexus with funding. Water utilities need ready and specific access to funds under the Department of Energy to support smart water technology implementation.

Additionally, an authorized program and funding are needed to train a workforce for our future state through the Department of Labor specific for the Water Sector.

We are often trying to build workforce pipelines to replenish headcount instead of leveraging the skill sets of new generations of workers and enhancing the skill set of our tenured employees.

Senator CARPER. Ms. Powell, thanks so much. It is great to see you again, and thanks for that testimony and for your help earlier and again today.

Before Senator Cramer introduces our witness from North Dakota, Eric Volk, I just want to say to my colleague, Kevin, I was back on the campus of the University of Delaware last month and had an opportunity to speak, and we spent a fair amount of time with their president and others on the campus about the intersection between Federal policy and what we are trying to accomplish at the University of Delaware.

We talked a little bit about sports, and we talked about the upcoming football season that is underway. We talked about the University of Delaware's experience in playing North Dakota State. I asked my staff to share with me some football scores from North Dakota State and Delaware in the last couple of years. They came up with September 2019, University of Delaware, 22, North Dakota State, 47; September 2018, University of Delaware, 10, North Dakota State, 38.

In basketball, it gets worse. Basketball, University of Delaware, 66, North Dakota State, 85. When the president of the University of Delaware was leaving, and we were saying goodbye, he said, do you have any advice for me before you leave? I said, stop playing North Dakota State.

[Laughter.]

Senator CRAMER. They probably pay them a lot to play them; that is the weird thing, but they are not alone.

Thank you, Mr. Chairman, and thank you Senator Capito, for this important hearing and for this opportunity.

It really is an honor for me to be able to introduce Eric Volk, who serves as the Executive Director of the North Dakota Rural Water Systems Association where he has a staff of 11 professionals who oversee and provide services to over 300 water systems in the State, and wastewater systems. They include things like onsite troubleshooting, training, leak detection, water audits, emergency response, work force challenges, of course, just to name a few.

The assistance provided by Eric and his team to my staff and me has been invaluable. It is part of what makes the partnership work so well. He also serves on several boards, including the North Dakota Water Coalition and the North Dakota Education Foundation. He is a past chair of the North Dakota section of the American Water Works Association.

I don't know what he does in his spare time, but he does hold a bachelor's degree in biology from the University of Mary, and he is a two time member of the University's athletic hall of fame. Fortunately for Delaware, he didn't go to North Dakota State.

Eric is an excellent resource to me and to my staff. We really appreciate Eric's being here and offering his expertise to the whole Committee.

Senator CARPER. Thanks for that introduction.

Please proceed, Eric. We are delighted that you are here. Thanks so much.

STATEMENT OF ERIC VOLK, EXECUTIVE DIRECTOR, NORTH DAKOTA RURAL WATER SYSTEMS ASSOCIATION

Mr. VOLK. Good morning, Chairman Carper, Ranking Member Capito, Senator Cramer, and distinguished members of the Committee. My name is Eric Volk, and I am the Executive Director of North Dakota Rural Water.

The Association was established in 1974 and provides technical, managerial, financial assistance, training, and advocacy for rural water and wastewater systems in the State. A huge thanks goes to my staff, who tirelessly work every day to provide access to affordable, ample, and quality water. It is a true honor to be here today to give a small State rural perspective to the implementation of the Drinking Water and Wastewater Act.

I grew up in Granville, North Dakota, a community of around 240 residents, so this topic is near and dear to me. I am also here on behalf of National Rural Water Association, the country's largest utility association, with over 31,000 members dedicated to drinking water quality, environmental protection, and public health in all 50 States.

I have enjoyed living in North Dakota my entire life and have been helping water and wastewater systems for nearly 23 years. We have 306 active community water systems. Two hundred ninety-six of them serve less than 10,000 in population.

Meeting the demands in repairing or replacing aging infrastructure and complying with rules and regulations are taking its toll on many small and rural systems. Another major challenge is the ever increasing elk migration, which continues to decrease the population base, adding to the cost of these services to the individual consumer. Without significant State and Federal grant funding, the cost to the consumer would be too much for the average family to afford.

In 2022, the association partnered with the North Dakota Department of Water Resources and our league of cities to survey our water supply needs. The results indicated a 10 year need of approximately $2.1 billion and a 20 year need of approximately $3.6 billion. North Dakota's current drinking water SRF program Intended Use Plan shows a need of about $1.1 billion, and demands on the Clean Water side are similar. Those are huge needs for a State that only has 280,000 residents.

In preparing for this hearing, I visited with several water systems engineers and suppliers to develop a snapshot of how projects are being completed in the State. First and foremost, they are all very appreciative of the investments being made on the Federal level to help our citizens. Several systems talked about the shortage of contractors.

A key factor contributing to the shortage is labor, which is required reductions in the number of crews that they can operate and limits their scope of work. There is also a sense with the large amount of funding available for all infrastructure that some contractors are not as hungry as they were before.

The cost of pipe, valves, and fitting is dramatically increasing. Since 2019, certain PVC pipe has increased over 200 percent, and the cost of installing a fire hydrant that serves a small community

of 135 people has more than doubled since 2020, now more than $15,000.

Various products such as meters, meter pits, certain valves, drives, and generators have extremely long wait times. One system has been waiting for a year and a half for a specific pressure reducing valve. However, the availability of pipe and related materials is improving slowly. American manufacturers have been required to expand their facilities and improve logistics, which has driven down lead times and enhanced trackability.

Overall, the costs of completing projects seem to be ever increasing. It is very hard for small systems to properly plan for and complete projects under these circumstances.

Another important aspect of the IIJA is the multiple technical assistance provisions and set asides included by this Committee to help communities that lack the financial, managerial, and technical capacity to access SRF programs. Rural water is proud to be the trusted resource and technical expert for small, rural, disadvantaged, and tribal communities to comply with EPA regulations, avoid EPA fines, and access the historic water infrastructure funding for safely operating our utilities.

The regulatory burden surrounding PFAS are another challenge facing water systems, which we are extremely supportive of the Water Systems PFAS Liability Protection Act introduced by Senator Lummis. This legislation aligns with the goal shared by all rural communities to eliminate PFAS from the public drinking water while preserving the essential "polluter pays" principle for cleanups under the Superfund law.

Finally, the water sector work force problem is daunting, with over 50 percent of our water workers estimated to leave in the next 10 years. Alongside strong support from Ranking Member Capito, Rural Water has established an apprenticeship program for operators.

As of this year, 36 State rural water associations, including North Dakota, have completed the rigorous process of obtaining federally approved apprenticeship programs and are now attracting, training, and retaining the next generation of the water work force, with over 600 apprentices enrolled or graduated so far.

Thank you, Mr. Chairman and members of the Committee, for giving me the opportunity to share rural water's perspective today. We appreciate the many opportunities you have provided rural America in crafting Federal water legislation and policy.

[The prepared statement of Mr. Volk follows:]

Testimony of
Eric Volk, Executive Director
North Dakota Rural Water Systems Association
And on behalf of
The National Rural Water Association
Before the
U.S. Senate Committee on Environment and Public Works
Subject
Implementing IIJA: Perspectives on The Drinking Water and Wastewater Infrastructure Act, Part II
September 7, 2023

Good morning, Chairman Carper, Ranking Member Capito, Senator Cramer and distinguished members of the Committee. My name is Eric Volk, and I am the Executive Director of the North Dakota Rural Water Systems Association (NDRWSA). NDRWSA was established in 1974 as the unified voice of rural water development in the state. Today, the association provides technical, managerial, and financial assistance, training, and advocacy for rural & small water and wastewater systems across North Dakota. The vision of the Association is to make certain that all of North Dakota has access to affordable, ample, and quality water. A huge thanks to my staff who work tirelessly every day to make this vision a reality. It is a true honor to be here today to give a small state and rural perspective on the Implementation of the Drinking Water and Wastewater Infrastructure Act. I grew up in Granville, ND, a community of around 240 residents, so this topic is near and dear to me.

I am also here on behalf of the National Rural Water Association (NRWA), the country's largest utility association with over 31,000 members dedicated to drinking water quality, environmental protection, and public health protection. NRWA provides energy audits, certification, financial management, emergency response, disaster relief, environmental compliance, governance, and on-site technical assistance to water and wastewater utilities to enhance the public health and safety of our citizens in small and rural communities in all 50 states and Puerto Rico.

The Infrastructure Investment and Jobs Act passed by this Committee and enacted back in November 2021 will be remembered as one of the most significant public water and wastewater achievements in this country, especially in rural America. Rural Water enthusiastically supported the bill's precursor, the Drinking Water and Wastewater Infrastructure Act of 2021 which was graciously introduced by Chairman Carper at my counterpart Delaware Rural Water Association's headquarters earlier that year in April. I only mention that to highlight Rural Water's commitment to this Committee's mission and underscore our appreciation for the bill's beneficial provisions for America's small communities like the dedicated funds for emerging contaminates, lead service line replacement, grants for disadvantaged communities and expansion of the state revolving funds with corresponding technical assistance

initiatives. We are also grateful that the legislation did not include any new federal mandates on local governments. On behalf of all small and rural communities in all 50 states, thank you.

The vast majority of public water and wastewater treatment systems are communities with populations of 10,000 or less. About 91% of the approximately 50,000 community drinking water systems (typically their local governments) are small and 80% of the country's more than 16,000 wastewater systems serve fewer than 10,000 people.

In Delaware, 200, or 96%, of the total 207 community water systems serve a population of fewer than 10,000 persons.
In West Virginia, 393, or 94%, of the total 418 community water systems serve a population of fewer than 10,000 persons.
In North Dakota, 296, or 96%, of the total 306 community water systems serve a population of fewer than 10,000 persons.

These small communities have a much more challenging time complying with the myriad of federal regulations and operating complex water and wastewater treatment systems due to the lack of technical resources and economies of scale. While we have fewer resources, we are regulated in the exact same manner as a large community.

For the next few minutes, I'd like to discuss how small and rural community water systems are implementing this historic water infrastructure investment, highlight Rural Water's technical assistance initiatives, and outline challenges with PFAS and the current water industry workforce.

IIJA Implementation- North Dakota Water Systems Summary
I have enjoyed living in North Dakota my entire life and have been helping water and wastewater systems for nearly 23 years. I would like to take this opportunity to share some data about my state's water systems to give the committee an idea of the types of water systems that serve our great citizens. We have 306 active community water systems, 296 systems serve less than 10,000 in population. Of that total, 24 serve between 3,301 & 10,000, 94 serve between 501 & 3,300 and 178 serve less than 500 residents. Only 10 systems serve over 10,000 in population. Meeting the demands of repairing and replacing aging infrastructure and complying with rules and regulations are taking its toll on many small and rural water systems. Another major challenge facing rural and small water systems is the ever increasing rural to urban migration, which continues to decrease the population base, and which adds to the cost to the individual consumer. This does offer a challenge in finding affordable ways to bring quality water to rural areas. Without significant state & federal grant funding, the cost to the consumer is just too much for the average family to afford.

North Dakota Water System Needs
In 2022, NDRWSA partnered with the North Dakota Department of Water Resources and the North Dakota League of Cities to conduct a survey related to the state's aging water supply needs. The survey covered the next 10 and 20 year timeframes and looked at storage, distribution/supply lines, wells/intakes, water treatment plants and other water supply infrastructure. The results indicated a 10-year need of approximately $2.1 Billion and a 20-year need of approximately $3.6 Billion. Our State's current Drinking Water State Revolving Fund (DWSRF) Program Intended Use Plan indicates a current need of a little over $1.1 Billion and the Clean Water State Revolving Fund (CWSRF) Program shows a similar need. Huge needs for a state that only has 780,000 residents.

Current Water Project Completion Environment in North Dakota
In preparing for this hearing, I visited with several water systems, engineers, and suppliers to develop a snapshot of how projects are being completed in the state. First and foremost, they are all very appreciative of the investments being made on the federal level to help our citizens. Several systems talked about the shortage of contractors in the state. One of the key factors contributing to the shortage of contractors is labor, which has resulted in a reduction of the number of crews they operate or limits the scope of work or range that they can cover. Two major companies that specialized in rural projects also left the water business in the last four years. Historically, the more companies bidding on projects resulted in more competitive bids which normally saved the customer money. There is also a sense with the large amount funding available for all infrastructure, contractors are not as "hungry" as they were before. A great climate for contractors but not so much for water systems and the end user. There have been recent instances where the owner of the project has rejected bids and postponed project development due to high or no bids.

The cost of pipe, valves, and fittings have increased exponentially since 2019. Here are a few examples of what systems are facing in North Dakota:

2-inch class 200 PVC pipe was $0.51 per foot in 2019 is now $1.69 per foot, an increase of 231%. The 2-inch PVC is a standard size pipe used in rural water distribution systems. 6-inch class 200 PVC pipe was $4.05 per foot in 2019, today, that same pipe is $12.40 per foot, an increase of 206%. A small town (population 135) in the state replaced a fire hydrant in 2020 for $7,500 (materials/labor). They replaced a similar hydrant this summer and the price tag was $15,500.

The availability of pipe and related materials seem to be improving slowly. Domestic requirements have required American manufacturers to expand their facilities and improve upon their logistics, which has driven down lead times and improved trackability. Various products such as meters, meter pits, certain valves, drives, and generators have extraordinarily long wait times. One system has been waiting for a year and a half for a specific pressure reducing valve.

Overall, the costs of completing projects seem to be ever increasing. It is very hard for our small and rural water systems to properly plan for and to ultimately complete projects under these circumstances.

State Implementation of the BIL Funding through our SRF Programs – Highlights and Challenges
Additional Water Funding to our Drinking Water SRF (DWSRF) Program
Supplemental: $115.047M
Emerging Contaminants: $39.195M
Lead: $142.95M*
BIL Total: $297.192M

The DWSRF Program has spent all of the base cap funds for 2022 and has obligated all of the supplemental and emerging contaminants funding for 2022. The state is entering its historically busy draw request season and should see an increase of activity this fall. One thing to note about the lead funding is that DWSRF is using approximately 26% of total available funding for set-asides to provide technical assistance to water systems to complete their lead service line inventories. It has taken extra time to get the procurement completed for the technical assistance but work on those projects is going to be starting soon.

Additional Wastewater Funding to our Clean Water SRF (CWSRF) Program
Supplemental: $56.971M
Emerging Contaminants: $4.631M
BIL Total: $61.602M

The CWSRF Program is spending the funds as soon as they are available. For example, the 2023 Base Cap Grant was received in early August 2023 and spent down in two weeks of payment requests. The 2023 Supplemental Cap Grant became available at the end of August, and they anticipate spending those funds by October.

Summary of Challenges

1. Project Costs & Lack of Contractors
2. Getting the Lead Funding Out the Door has been difficult.
    a. The limits to only using 49% of the grant as additional subsidization is particularly troublesome.
    b. Partial lead service line replacements need to have flexibility.
    c. The timing of the funding is concerning. Lead Service Line Inventory deadline is Oct. 16, 2024.
3. Sunsetting of the Build America, Buy America (BABA) waivers is an issue.

On the national scale, we are hearing much of the same. Many systems and states report that the funds provided in the bill have been slow to be implemented due to cost overruns, supply chain disruptions, and the lack of engineers to do the work. Our members do an excellent job maximizing limited resources, funds, and economies of scale. However, these current, challenging industry conditions highlight how the financial health and viability of a small utility is inextricably tied to rate payment affordability, infrastructure status, and expertise of the trained workforce.

Currently, a significant portion of funding from the State Revolving Funds (SRF) is directed towards larger communities- approximately 72% of clean water SRF funding is awarded to large communities (EPA's Clean Water State Revolving Fund Annual Review) and approximately 71% of drinking water SRF funding is awarded to large communities (EPA's Drinking Water State Revolving Fund National Information Management System). However, provisions within the SRF, such as principal forgiveness, negative interest loans, and grants, or a combination thereof, can help alleviate financial burdens on smaller systems. Every year, Rural Water advocates for at least the previous fiscal year's appropriated funding level for EPA's SRF programs and associated technical assistance, emphasizing the need and results of this most important water infrastructure investment initiative.

Training & Technical Assistance
For over 45 years, the National Rural Water Association and our 50 state affiliates have been providing small, rural, tribal, and disadvantaged communities with local, on-site technical assistance and training. This is not a new concept. The Infrastructure Investment and Jobs Act of 2021 (IIJA) included multiple technical assistance provisions and set asides to provide assistance directly to communities that lack the financial, managerial, and technical capacity to access the State Revolving Fund (SRF) programs. Rural Water, through trusted relationships and exceptional technical expertise, has established itself as the premier resource and partner for small, rural, disadvantaged, and tribal communities to comply with the

numerous federal Environmental Protection Agency (EPA) regulations, avoid EPA fines, access water infrastructure funding, and safely operate drinking water and wastewater systems.

The vast majority of U.S. water systems are small; 91% of community water systems and 80% of the country's wastewater systems serve populations of 10,000 or less. Small and rural communities have more difficulty affording public water and wastewater service due to the lack of population density and economies of scale. Some communities are so small they rely on volunteers to operate their systems. These challenges are compounded by the fact that rural communities have lower average median household incomes and often have higher rates of poverty. Despite these challenges, small communities want to ensure quality water and stay in compliance—rural water provides them the shared technical resources to do so.

The EPA Water Training and Technical Assistance Program is designed to strengthen the technical capacity in small water systems, with the aim to reduce the number of systems out of compliance with health-based standards. An important part of Rural Water's long-standing public-private partnership with EPA has been to travel to small and rural communities and assist them with operating, governing, financing, upgrading, and maintaining their water and wastewater infrastructure. This includes compliance with all federal Clean Water and Safe Drinking Water Act regulations, as well as all the training needed to keep local officials and operators certified and educated on the latest rules, regulations, and technologies. This type of hands-on assistance is the most effective method to help staff and management become more successful operating their systems, and results in a better understanding of the laws' requirements. In fact, National Rural Water's combined state affiliates-including North Dakota- delivered over 75,000 on-site technical assistance visits and 150,000 hours of training to more than 37,000 utilities in 2022.

NRWA has also been afforded the opportunity to manage EPA's Region 8 Finance Center which provides finance-related training, technical assistance, finance studies, and other analytical support to help communities develop sustainable solutions for meeting environmental standards. Attached to this testimony is a presentation characterizing NRWA's approach to provide paradigm shifting technical assistance in EPA Region 8 by collaborating with our esteemed, established state affiliates listed below. This information is consistent with the other state rural water associations nationwide.

	Years in Existance	Total Employees	TA Providers	Experience	How Many Members?
Colorado	42	30	24	336	520
Montana	44	13	6	323	421
North Dakota	49	11	9	177	280
South Dakota	47	15	12	280	280
Utah	43	19	12	326	500
Wyoming	34	13	9	180	220
		101	72	**1622**	2221

On June 28, 2023, NRWA was awarded $8,000,000 in fiscal year 2022 funds from EPA's Training and Technical Assistance Program for Small Public Water Systems which will provide for 51 Training Specialists in all 50 states and Puerto Rico from August 1, 2023 to July 31, 2024. Highlights from the workplan include:

- Training and Technical Assistance (T/TA) to small, rural, disadvantaged, and tribal water systems serving populations of less than 10,000 persons.
- T/TA dedicated to natural and manmade disasters to help rural water systems prepare for and operate their systems in events like ice storms, flooding, tornados, snowstorms, drought, earthquakes, landslides, wildfires, and etc.
- Classroom training sessions in rural, disadvantaged, low-income, tribal, and manufactured housing communities' areas to small water system operators and personnel who seek training.
    - Topics could include accessing water infrastructure funding, Safe Drinking Water Act and Clean Water Act compliance, Lead and Copper Rule implementation, guidance for developing and maintaining a service line inventory, PFAS training to reduce risks and to increase understanding of the health and safety risks, Cyber Security, and developing financial planning, rate and fee structures.
- T/TA dedicated to tribal communities and Alaskan Native Villages community water systems and their personnel.
    - Rural Water works with Indian Health Services and the Bureau of Indian Affairs to help tribal water systems expand resources.
- T/TA to Puerto Rico to focus on compliance assistance to non-PRASA water systems.
- T/TA case studies and success stories to communicate and showcase the impact of the program and give a voice to the rural and small water systems.

The year prior, on August 30, 2022, NRWA received $7,800,000 in fiscal year 2021 funding from EPA's Training and Technical Assistance to Improve Water Quality and Enable Small Public Water Systems to Provide Safe Drinking Water Program. National Rural Water overperformed the workplan by providing 1,000s of additional hours of T/TA as originally intended, hosted hundreds more classroom session hours, and spent thousands of hours identifying needs, developing projects for state Intended Use Plans and/or Project Priority Lists, applying for SRF funding, designing and implementing projects, building capacity at the local level, and providing access to career paths for interested water and wastewater workers entering the water workforce.

Challenges

It is of the utmost importance for the EPA to recognize that small and rural communities are a solution, not a problem, to improving public health and protecting the environment. We urge the Agency to recognize that small, local governmental water utilities are all governed directly by local citizens to benefit local citizens. Our constituency exists to improve drinking water and sanitation in rural and small communities and on-site technical assistance initiatives are the most effective environmental protection efforts for drinking water and wastewater, ground water, source water, and compliance with the Clean and Safe Drinking Water Acts.

Many small systems face unique challenges in providing reliable drinking water and wastewater services that meet federal and state regulations, including a lack of financial resources, aging infrastructure, and high staff turnover. The onsite technical assistance we provide helps small and rural communities build the technical, managerial and financial capacity necessary to effectively operate drinking water and wastewater systems to comply with regulations, improve operations and management practices, promote system sustainability predominantly through funding access, and better protect public health and the environment. We believe this assistance is most effective when it comes from a trusted individual who is willing to travel directly to the community, has technical expertise to remedy the specific issue with existing treatment and infrastructure, and can be available on-site at any time.

Solutions
National and State Rural Water Associations are key, proven technical assistance partners with EPA and have an unmatched track record of supporting a significant majority of the country's drinking water and wastewater systems and protecting public health and the environment. In December 2015, Congress unanimously passed, and the president signed the Grassroots Rural and Small Community Water Systems Assistance Act (Public Law 114-98), which directs the EPA to provide on-site technical assistance in a manner that is most effective to small and rural communities. By following the authorities under the Act, and by leveraging the new-found resources in the Infrastructure Investment and Jobs Act of 2021, we are hopeful on-site technical assistance can be reestablished in our states and ultimately make the program more effective and easier for the EPA to implement-which is the intent of Congress.

Emerging Contaminants: PFAS
Most public water systems impacted by any future federal actions for PFAS will be small water systems who have a much more challenging time complying with federal regulations and operating complex water treatment systems due to the lack of technical resources in small communities. NRWA shares the goal of eliminating all concentrations of per- and polyfluoroalkyl substances (PFAS) from the public's drinking water and environment. However, regulation, civil enforcement and liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are not the appropriate federal remedies for addressing this problem for local governments. Small and rural communities are not responsible for introducing PFAS into the environment or the public drinking water. The regulatory and enforcement provisions of CERCLA result in the unintended consequence of penalizing the communities whose drinking water or environment was contaminated. This dynamic will be especially problematic in economically disadvantaged communities and populations with limited resources.

Challenges
In the near term, Rural Water's primary focus is on protecting water systems and their customers from the potential legal liability, remediation costs, and reputational risks associated with the Environmental Protection Agency's (EPA) proposed hazardous substance designation of PFOS and PFOA under the CERCLA. CERCLA is intended to uphold a "polluter pays" principle, whereby those responsible for releasing hazardous substances into the environment are held liable for the cost of cleaning up contaminated sites. However, absent a statutory exemption from PFAS liability for drinking water and wastewater systems who merely passively receive PFAS in providing their respective public health services, polluters could pass these costs on to our customers and your constituents, effectively creating a "public pays" principle under CERCLA.

EPA does not have the authority to provide any formal legal shield, leaving water systems with a commitment that would be formalized through a policy memorandum, at best. This leaves water systems and their customers vulnerable to litigation by potentially responsible parties who may attempt to reduce their own cleanup costs by recovering from others, especially as EPA plans imminently to designate additional PFAS as hazardous substances.

NRWA and NDARWS want to emphasize the significant financial burden that PFAS testing and treatment costs already place on our communities. When PFAS is designated under CERCLA as a hazardous substance, the disposal costs will further exacerbate financial instability and potentially lead to insolvency. This burden cannot be overlooked, and equitable solutions must be identified.

Solutions
The only viable option for water systems and ultimately the public is for Congress to provide a statutory exemption from PFAS liability for drinking water and wastewater systems under CERCLA.

NRWA and NDRWSA want to express our strong support for the "Water Systems PFAS Liability Protection Act" legislation, S. 1430, introduced by Senator Lummis. This legislation aligns with the goal shared by small and rural communities across the country to eliminate PFAS from the public's drinking water and environment while preserving the essential "polluter pays" principle for cleanups under CERCLA. It is crucial to recognize that small and rural communities are not responsible for introducing PFAS into the environment or public drinking water. Extending CERCLA liability to these communities, which are innocent bystanders of PFAS contamination, would have unintended consequences and unjustly penalize them. This approach would disproportionately impact economically disadvantaged communities and populations with limited resources, further exacerbating financial burdens.
Instead, it is imperative to hold responsible parties accountable for the remediation, treatment, and provision of alternative sources of safe drinking water for the affected communities. They should bear the responsibility for the consequences of their actions, rather than shifting the burden onto innocent parties.

Our members and affected communities need assistance in various forms, including funding for treatment, monitoring, on-site technical assistance for immediate response, credible public health information, emergency access to safe drinking water, and compensation from the responsible parties.

Finally, the EPA's focus on reporting costs drastically underestimates the overall expenses incurred by water systems. These include biosolids management, disposal of PFAS-laden media, legal fees, fines, and potential cleanup costs, which water systems cannot absorb. Public drinking water systems could face an estimated $52 billion in treatment costs for managing PFAS-laden media alone. Biosolids management costs have already increased by approximately 37% due to PFAS concerns. In Maine, biosolids disposal costs have increased by an average of 170%, reaching up to 455% in some cases. The designation of PFAS as a hazardous substance under CERCLA could result in a 27-fold increase in annual disposal costs for water treatment residuals nationally, exceeding $3.7 billion per year. Transporting residuals to hazardous waste facilities would require significantly longer distances, increasing costs. Additionally, installing PFAS-specific carbon treatment for a public water system serving about 10,000 people in New Jersey is estimated to range from $500,000 to $1,000,000, with operating costs of approximately $80,000 per year. (Water Coalition Against PFAS Talking Points, attached)

Rural Water Apprenticeship Program
Supporting the country's public drinking water and sanitation systems is a highly skilled, low skilled and diversified labor force of water utility workers. In any given water utility, water utility personnel may be operating heavy equipment to repair broken lines, managing toxic chemicals, keeping public records, conducting tests in the laboratory, operating process controls, reviewing engineering plans, participating in the local municipal government, monitoring biological treatment processes, complying with federal environmental or labor standards, managing large construction projects, operating and maintaining pumps, engines, and generators, collecting samples, filling out operational reports, and the list goes on *ad infinitum*. The water utility workforce must be available during emergencies like rainstorms, floods, hurricanes, earthquakes and intentional acts of sabotage. Many facets of operating water utilities are inherently dangerous such as operations of heavy machinery and management of large quantities of toxic chemicals.

Water workers are often trained in emergency management response and safety. All water utilities must be operated 24 hours a day, holidays and weekends. The exact duties of water workers typically depend on the size and complexity of the water utility. In smaller utilities, one person may run and service the equipment, make repairs, perform tests, and keep records. In larger utilities with many employees, workers may be limited to specific functions such as repair crews, reading individual meters, monitoring treatment, etc.

Challenges
Safe and effective water utility management is vital to rural America and the nation. There are currently 50,067 community water supplies in the country, 91% serve less than 10,000 population and 55% serve populations of 500 or less. Employment data indicates up to 50% of this workforce will leave the water industry within the next 10 years. Rural water and wastewater utility owners and operators need a pipeline of skilled workers to help ensure clean and safe water for the public and to maintain the water infrastructure necessary to keep rural service areas economically viable. The majority of rural and small community water systems have been unable to attract, train and retain the next generation workforce due to the lack of an identifiable career path coupled with low salary levels and population density.

Solutions
Alongside unwavering support from Ranking Member Capito since 2016, National Rural Water, State Rural Water Associations, local small and rural community water utilities, and federal agencies including the U.S. Department of Agriculture, U.S. Department of Labor, and the U.S. Environmental Protection Agency have been collaborating successfully to establish the first nationally recognized Registered Apprenticeship Program for water and wastewater system operators (O*NET-SOC CODE: 51-8031.00), while creating jobs in rural America. As of this year, thirty-six State Rural Water Associations have completed the rigorous process of obtaining federally approved Registered Apprenticeship Programs and are now attracting, training, and retaining the next generation water workforce with **over 600 apprentices enrolled or graduated so far**. Because of this novel effort, water and wastewater systems are now empowered to leverage workforce development activities including an identifiable career path and a modern, systematic apprenticeship model for the first time.

The NRWA Water and Wastewater Operator Apprenticeship Programs include 4,000 hours of on-the-job training with a one-to-one mentor to apprentice ratio and 288 hours of technical instruction over a 2-year period with an increasing wage schedule suggested every six months. NRWA Apprenticeship Program graduates serve as public health officials and will often be the only person responsible for complying with the multitude of applicable federal Safe Drinking Water Act and Clean Water Act regulations to supply their small community with safe drinking water and sanitation services every second of every day.

Apprenticeship Program activities include learning the basics of the tools, pipe and other materials used in system operation, personal protective equipment and safety procedures, general plant safety and security operations, operate vehicles and heavy equipment, system operations and maintenance, perform installation and inspection of new water lines and services, implement customer metering and billing procedures, perform leak detection and understand water loss control, read water meters and interpret maps and drawings of the water system to locate valves and water mains, assist with installation, maintenance and repair of the treatment plant, storage tanks, and the distribution system, preventive maintenance, troubleshooting and repair of mechanical equipment, quality control, sampling, monitoring and testing required to maintain compliance with Federal, State and Local

regulations, learn emergency response procedures, and collaborate with other members of the industry to learn new technologies and techniques.

The Water and Wastewater System Operations Specialists Registered Apprenticeship Program allows NRWA and our state affiliates to enhance water workforce participation and retention in small, rural and tribal communities, protect the federal investment in America's water and wastewater systems, improve these vital services to customers, certify water worker proficiency with an identifiable career path, modernize the water industry's approach to workforce development, enhance professionalism and upskill the incumbent worker, increase the recognition of the public benefit that water and wastewater systems deliver to their communities, schedule wage increases, and provide access to sophisticated and advanced technology.

Thank you, Mr. Chairman and Members of the Committee, for the honor of testifying on behalf of rural America. We appreciate all the opportunities this committee has provided to rural America for crafting federal water and environmental legislation and policy.

Attachments

North Dakota Water and Wastewater BIL Highlights:

Additional Water Funding to our Drinking Water SRF Program

Supplemental: $115.047M

Emerging Contaminants: $39.195M

Lead: $142.95M*

BIL Total: $297.192M

The DWSRF Program has spent all of the base cap funds for 2022 and has obligated all of the supplemental and emerging contaminants funding for 2022. The state is entering its historically busy draw request season and should see an increase of activity this fall. *One thing to note about the lead funding is that DWSRF is using about 26% of it for set-asides to provide technical assistance to water systems to complete their lead service line inventories. It has taken extra time to get the procurement done for the technical assistance but work on those projects is going to be starting soon.

Additional Wastewater Funding to our Clean Water SRF Program

Supplemental: $56.971M

Emerging Contaminants: $4.631M

BIL Total: $61.602M

The CWSRF Program is spending the funds as soon as they are available. For example, the 2023 Base Cap Grant was received in early August 2023 and spent down in two weeks of payment requests. The 2023 Supplemental Cap Grant became available at the end of August, and they anticipate spending those funds by October.

North Dakota Wastewater Systems who have benefited thus far: the cities of Strasburg pop. 379 (Wastewater Treatment Facility), Center pop. 588 (Wastewater Treatment Lagoon Improvements), Gardner pop. 129 (Wastewater Treatment Improvements), Northwood pop. 982 (Sanitary Sewer Project), and Fargo pop. 170,311 (Wastewater Treatment Plant Expansion and Landfill Improvements) have or will receive additional subsidization (aka loan forgiveness) from FY22 and FY23 BIL grants. In the past, only one or two cities received loan forgiveness from the base grant and this new funding has expanded to additional cities being offered loan forgiveness.

North Dakota Water Systems who have benefited thus far: Dakota RWD pop. 2,618 (WTP manganese removal), East Central RWD pop. 3,641 (WTP manganese removal), Ashley pop. 613 (water tower replacement), Bismarck pop. 73,622 (lead service line replacement), Fargo pop. 125,990 (WTP PFAS removal), Central Plains RWD pop. 3,504 (WTP improvements), and Medina pop. 264 (WTP improvements) will receive loan forgiveness from the FY22 and FY23 BIL grants.

Challenges of Implementation per the North Dakota SRF Programs:

It is just taking projects a lot longer to get started due to the increased costs and limited availability of contractors. Projects are regularly coming in significantly over the engineer's estimate and may only get one bidder. They are working on spending down their grants, but because of the above, the funds are going out slower than usual.

Getting the lead funding out the door has been difficult. The limits to only using 49% of the grant as additional subsidization is particularly troublesome. Lead service lines are found predominantly in disadvantaged communities or disadvantaged portions of communities and cannot afford to pay for 51% of the costs associated with a replacement. Replacements can cost $5,000 to $10,000 per connection depending on the circumstances. Timing is also an issue with the Lead funding. All Community Public Water Systems (CWS) and Non-Transient Non-Community Public Water Systems (NTNCWS) must develop and submit a Lead Service Line Inventory by Oct. 16, 2024. Many systems do not know if they have an issue, so the funding is ahead of the work. States need sufficient time to figure out the full extent of Lead replacement. Unfortunately, with the 2023 Lead funding, the state may not have that luxury and run the risk of those funds being reallocated to other states.

Partial lead service line replacements need to have flexibility. Utilities will typically have co-ownership of the service line. The utility will own the portion of the line from the main to the curb stop and the homeowner will own the portion from the curb stop to the home. EPA is requiring either full replacement or leaving the whole lead service line in place. Most utilities, when completing a water main replacement project, will also replace their portion of the service line at the same time. Now when they use DWSRF funding, they need to know that the homeowner will replace their portion before the utility can replace theirs. This creates a logistical nightmare for the utility where they would need to do all of this extra coordination with homeowners that they normally would not have to do. Systems cannot guarantee that their residents will consent to replacing their portion of the service line. Systems do not want to proceed under those uncertainties, so they are choosing not to use the DWSRF and instead complete the partial replacements with other funding sources. If the homeowner wants their portion of the service line replaced, they are using the DWSRF for that portion only.

Sunsetting of the Build America, Buy America (BABA) waivers is an issue. EPA proposes an end date of September 30, 2024, for waiving projects from the BABA requirements that began design prior to May 14, 2022. When the adjustment period waiver was first announced, there was no mention of a sunset. Setting a hard end date poses significant problems and cost increases for a number of projects in development. The waivers should just be allowed to naturally end.

Clean Water SRF

North Dakota

	Non-BIL	BIL Funding					
	2021	2022	2023	2024	2025	2026	BIL Total
Base	$7,779,000	$5,681,000	$3,683,000	[1] $310,219	$ -	$ -	$ -
Supplemental	-	8,738,000	10,233,000	12,000,000	13,000,000	13,000,000	56,971,000
Emerging Contaminants	-	459,000	1,043,000	1,043,000	1,043,000	1,043,000	4,631,000
CW Funding	$7,779,000	$14,878,000	$14,959,000	$13,353,219	$14,043,000	$14,043,000	$61,602,000
Additional Subsidization	-777,900	-5,876,820	-6,793,770	-6,954,022	-7,413,000	-7,413,000	-32,546,790
Added to the CW Fund	$7,001,100	$9,001,180	$8,165,230	$6,399,197	$6,630,000	$6,630,000	$29,055,210

[1] July 19, 2023, House Approved Budget for 2024 which requires 10% additional subsidization.

Drinking Water SRF

North Dakota

	Non-BIL Year	BIL Funding					
	2021	2022	2023	2024	2025	2026	BIL Total
Base	$11,001,000	$7,008,000	$4,938,000	[1] $503,012	$ -	$ -	$ -
Supplemental	-	17,992,000	21,055,000	24,000,000	26,000,000	26,000,000	115,047,000
Emerging Contaminants	-	7,555,000	7,640,000	8,000,000	8,000,000	8,000,000	39,195,000
Lead	-	28,350,000	28,650,000	28,650,000	28,650,000	28,650,000	142,950,000
DW Funding	$11,001,000	$60,905,000	$62,283,000	$61,153,012	$62,650,000	$62,650,000	297,192,000
Additional Subsidization	-3,740,340	-25,845,300	-33,279,330	-33,868,922	-34,778,500	-34,778,500	-165,613,530
Added to the DW Fund	$7,260,660	$35,059,700	$29,003,670	$27,284,090	$27,871,500	$27,871,500	$131,578,470

[1] July 19, 2023, House Approved Budget for 2024 which requires 14% additional subsidization.

Drinking Water SRF

Lead Service Lines – Potential Lost Funds

	Non-BIL Year	BIL Funding					
	2021	2022	2023	2024	2025	2026	BIL Total
Base	$11,001,000	$7,008,000	$4,938,000	$503,012	$ -	$ -	-
Supplemental	-	17,992,000	21,055,000	24,000,000	26,000,000	26,000,000	115,047,000
Emerging Contaminants	-	7,555,000	7,640,000	8,000,000	8,000,000	8,000,000	39,195,000
Lead	-	28,350,000	-	-	-	-	28,350,000
	$11,001,000	$60,905,000	$33,633,000	$32,503,012	$34,000,000	$34,000,000	182,592,000
Additional Subsidization	-3,740,340	-25,845,300	-19,240,830	-19,830,422	-20,740,000	-20,740,000	-109,459,530
Added to the DW Fund	$7,260,660	$35,059,700	$14,392,170	$12,672,590	$13,260,000	$13,260,000	$73,132,470

[1] July 19, 2023, House Approved Budget for 2024 which requires 14% additional subsidization.

Introducing the Region 8 Environmental Finance Center

David Laughlin, NRWA EFC Director

Introducing NRWA's Region 8 EFC

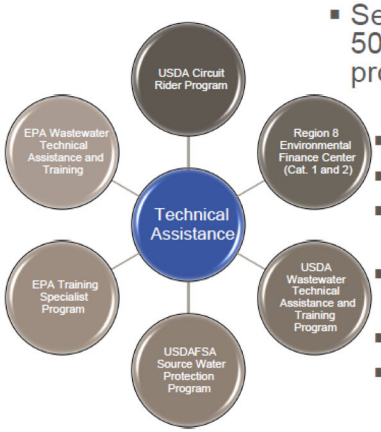
What is the Environmental Finance Center?

- A pair of technical assistance and training programs administered by the National Rural Water Association and funded by the Environmental Protection Agency
- NRWA was awarded the programs (Category 1 and 2) in Q1 2023 and began fieldwork in the summer of 2023

2

NRWA's Region 8 Impact

NRWA is no stranger to EPA's Region 8



- Serves the six-state region through six of its 50 State Affiliates and its federally funded programs
  - Colorado Rural Water Association
  - Montana Rural Water Systems
  - North Dakota Rural Water Systems Association
  - South Dakota Association of Rural Water Systems
  - Rural Water Association of Utah
  - Wyoming Rural Water Association

NRWA Region 8 Impact (*2022*)

3,320,051
Population Assisted

18,566
On-Site TA Hours

91%
Non-Remote TA

1,617
Systems Assisted

NRWA's Region 8 Impact

NRWA is no stranger to EPA's Region 8

- Colorado Rural Water Association – 42 years
- Montana Rural Water Systems – 44 years
- North Dakota Rural Water Systems Association – 49 years
- South Dakota Association of Rural Water Systems – 47 years
- Rural Water Association of Utah – 43 years
- Wyoming Rural Water Association – 34 years

NRWA Region 8

72
TA Providers on Staff

1,622 Years
Total Experience

2,200
Member Systems

Category 1 Breakdown

Programmatic Goals:

- Provide at least one in-person or hybrid training directed to rural, tribally owned, overburdened, distressed communities (water and wastewater) that are vulnerable to climate change impacts and drought conditions
- Work with one water or wastewater system to complete a Climate Change Risk Assessment using EPA's Climate Resilient Evaluation and Awareness Tool (CREAT)

Training Topics

- Conservation
- Source Protection
- Re-use Strategies
- Best Management Practices
- Funding Sources
- Project Design
- Drought Mitigation

Category 2 Breakdown

Assistance Topics

- Asset Management
- Best Management Practices
- Bid Support
- Capacity Building
- Board Education
- Emerging Contaminants
- Environmental Reviews
- Financial Planning
- Funding Application Support
- Help Identify funding Options
- Lead Service Line Inventories
- Plan Dev. and Coordination
- Plan Studies and Assessments
- Prelim. Engineering Reports
- Rate and Revenue Analysis

Programmatic Goals:

- Collaborate with State Primacy to identify systems and communities with the most need for technical assistance
- Provide at least 200 hours of on-site, hands-on technical assistance that prioritizes rural, tribally owned, overburdened, distressed, or underserved communities
- Provide engineering support or access to assistance for specialized support to help communities complete engineering requirements to progress through the SRF Process

NRWA's Goal for EFC Region 8

Paradigm-shifting Technical Assistance

- Leveraging its 40+ years as the premier technical assistance and training provider for Rural America's water and wastewater systems, NRWA – through its six State Affiliates in EPA Region 8 – will provide paradigm-shifting technical assistance and training to support, empower, and improve rural, tribally owned, overburdened, distressed, or underserved communities in EPA's Region 8 through the Environmental Finance Center Category 1 and 2 programs

Colorado Rural Water Association · Montana Rural Water Systems, Inc. – Technical Assistance – Training – Friends helping friends! · North Dakota Rural Water Systems Association · SDARWS · Rural Water Association of Utah · Wyoming Rural Water

NATIONAL RURAL WATER ASSOCIATION
NRWA America's Largest Utility Membership

July 13, 2023

The Honorable Thomas Carper
Chairman
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

The Honorable Shelley Moore Capito
Ranking Member
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Chairman Carper and Ranking Member Capito,

The National Rural Water Association (NRWA) is the non-profit association representing all 50 state rural water associations which have a combined membership of over 30,000 small and rural communities. NRWA is the largest water utility association and community-based environmental organization in the country. State Rural Water Associations are non-profit associations governed by elected board members from local communities. Our member utilities have the very important public responsibility of complying with all applicable U.S. Environmental Protection Agency (EPA) regulations and for supplying the public with safe drinking water and sanitation all day, every day.

The great majority of public water and wastewater treatment systems affected by any future federal action for per- and polyfluoroalkyl substances (PFAS) will be communities with populations of 10,000 or less. About 91% of the approximately 50,000 community drinking water systems (typically their local governments) are small and 80% of the country's more than 16,000 wastewater systems serve fewer than 10,000 people. Small and rural communities have a much more challenging time complying with the myriad of federal regulations and operating complex water and wastewater treatment systems due to the lack of technical resources in small communities. While we have fewer resources, we are regulated in the exact same manner as a large community.

NRWA appreciates the Senate Environment and Public Works (EPW) Committee's initiative in releasing draft PFAS legislation for stakeholder comment. We share the Committee's important goal of eliminating environmental and public health risks including the elimination of all concentrations of PFAS from the public's drinking water and environment. We also acknowledge the bipartisan effort and the goals set forth in the draft legislation to support EPA in addressing PFAS contamination through new research and technology development efforts, expanding EPA science related to PFAS, and assisting communities dealing with PFAS contamination through emergency remediation assistance and risk management communication strategies.

However, NRWA and our 30,000 water and wastewater system members across the country strongly urge the Committee's PFAS legislation ensures water and wastewater systems are not subject to liability claims when EPA designates PFAS compounds as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Civil enforcement and CERCLA liability are inappropriate federal solutions for addressing PFAS contamination in small communities.

Small and rural communities are not responsible for introducing PFAS into the environment or public drinking water. In fact, local governments (and non-profit water utilities) exist solely to protect and assist their citizens and do not profit from PFAS chemicals. Last year, the EPA formally announced plans to designate two of the most common PFAS "hazardous substances" under CERCLA. While EPA has stated that this action will help ensure that manufacturers and users of these chemicals are held responsible for the cost of remediating contaminated sites, without legislative action by this Committee, drinking water and wastewater utility customers, the American public, will remain at risk of incurring catastrophic CERCLA legal defense fees and cleanup liability costs for PFAS, exacerbating financial instability and potentially leading to insolvency for impacted communities.

This is why NRWA expresses strong support for S. 1430, the "Water Systems PFAS Liability Protection Act" introduced on May 4, 2023, by Senator Lummis. The legislation aligns with our goal to eliminate PFAS from the public's drinking water and environment while preserving the essential "polluter pays" principle under CERCLA. The regulatory and enforcement provisions contained in CERCLA result in the unintended consequence of penalizing the communities whose drinking water or environment was contaminated. This dynamic is especially problematic in economically disadvantaged communities and populations with limited resources.

In addition, NRWA emphasizes the significant financial burden that testing, treatment, and disposal costs related to PFAS contamination place on our membership. Local governments' water and wastewater utilities are not "producers" or users of PFAS, and none of these essential public service providers utilize or profit from PFAS chemicals. Rather, we are "passive receivers" of these chemicals that were once used by manufacturers and everyday consumers and are now ubiquitous in the environment. We are saddled with the responsibility of managing traces of PFAS coming into our systems daily. This burden cannot be overlooked, and the responsible parties should be held accountable.

Finally, communities impacted by PFAS contamination need assistance in various forms, including funding for treatment, monitoring, on-site technical assistance for immediate response, credible public health information, emergency access to safe drinking water, and compensation from responsible parties for remediation, treatment, and provision of alternative sources of safe drinking water.

NRWA supports the draft legislation's goals and recommends additional language to exempt water systems and wastewater treatment facilities from CERCLA liability for releases of PFAS.

We are committed to working with the Committee to ensure the legislation effectively addresses the PFAS challenges facing local governments, while also supporting the critical public health and environmental protection services provided by our membership.

Sincerely,

Matthew Holmes, CEO

August 29, 2023

The Honorable Mark Kelly
United States Senate
Washington, D.C. 20510

Dear Senator Kelly,

On behalf of over 1,500 water and wastewater utility systems served by the Rural Water Association of Arizona (RWAAZ), we write to request your support for liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for water and wastewater systems that follow all laws and regulations in the treatment and disposal of per- and polyfluoroalkyl substances (PFAS). Our membership of small and rural communities serve people across Arizona and we are seriously concerned about the implications of potential CERCLA liability on our utilities and ratepayers.

In August 2022, the Environmental Protection Agency (EPA) proposed to designate two PFAS – PFOA and PFOS – as hazardous substances under CERCLA. EPA is also in the process of soliciting public feedback to designate additional PFAS chemicals as hazardous substances under CERCLA. Though CERCLA is intended to target manufacturers and polluters who knowingly released these chemicals into the environment, the law does not explicitly protect passive receivers like water and wastewater systems who merely convey PFAS through no fault of our own. Civil enforcement and CERCLA liability are inappropriate federal solutions for addressing PFAS contamination in our communities.

To protect public health, of over 1,500 water and wastewater utility systems served by RWAAZ will soon be responsible for treating and disposing of PFAS chemicals. Without an explicit exemption from liability under CERCLA, water and wastewater systems could incur catastrophic CERCLA legal defense fees and liability costs for the cleanup of PFAS contamination, despite having never manufactured, used, or profited from PFAS. The testing, treatment and disposal costs related to PFAS contamination will place a significant financial burden on us. This dynamic is especially problematic in our economically disadvantaged communities who serve populations with limited resources. Manufacturers and polluters should not have the opportunity to shift their own financial burden onto the ratepayers (your constituents) that we serve.

As the Senate Committee on Environment and Public Works considers legislation to address PFAS, I urge you to uphold CERCLA's "polluter pays" principle and protect

Rural Water Association of Arizona
P.O. Box 31029, Flagstaff, AZ 86003
480-982-0301 I rwwaz.org

water systems and the ratepayers we serve by supporting a narrowly tailored legislative exemption for water and wastewater utilities from PFAS-related liability.

Thank you for your time and attention to this very important request.

Sincerely,

The Rural Water Association of Arizona

Ronny Deming, President, Ponderosa DWID
Ethan Estes, Vice President, Graham County
Carol P. Shrock, Secretary, Thunderbird DWID
Robert Fickett, Director, San Simon WID
Brian Fickett, Director, Tohono O'odham Utility Authority
Matt Rencher, NRWA Director, City of Eloy

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July 12, 2023

The Honorable Tom Carper
Chairman
United States Senate Environment and Public Works Committee
Washington, DC

The Honorable Shelley Moore Capito
Ranking Member
United States Senate Environment and Public Works Committee
Washington, DC

Dear Chairman Carper and Ranking Member Capito,

On behalf of organizations representing the nation's drinking water and clean water utilities, we want to commend the Senate Environment and Public Works (EPW) Committee for taking proactive steps to address the PFAS crisis through the proposed bipartisan legislation to address gaps in PFAS research and technology and enhance mitigation efforts. By opening up the opportunity for public input, the Committee has demonstrated a commitment to transparency and inclusivity. Welcoming the submission of perspectives and expertise helps ensure that the final legislation is well-informed and considers the diverse needs and concerns of those affected by per- and polyfluoroalkyl (PFAS) contamination.

Drinking water, wastewater, and stormwater utilities neither manufacture nor use PFAS but rather are passive receivers of PFAS by virtue of providing the vital public services of treating and managing local water supply, wastewater, stormwater, and biosolids. Our organizations individually have submitted comments to the Committee on specific provisions included in the draft bill. However, as the Water Coalition Against PFAS, we are jointly writing to emphasize our overarching concern that as the Committee works to advance the legislation, a provision must be incorporated protecting clean and drinking water systems from CERCLA liability for PFAS.

As stewards of their communities, public clean water and drinking water utilities stand ready to do their part under the proper Clean Water Act (CWA) and Safe Drinking Water Act (SDWA)

authorities to meet PFAS-related standards necessary to continue our mission of ensuring the highest level of protection of human health and the environment. We look forward to working with Congress and regulators to ensure these are promulgated under a proper scientific and regulatory approach.

However, as you are aware, in August of 2022 the U.S. Environmental Protection Agency (EPA) proposed designations of two of the most common PFAS chemicals, Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), as hazardous substances under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). EPA is also in the process of soliciting public feedback on potentially listing additional PFAS chemicals under CERCLA.

EPA has touted CERCLA as a way of providing a "polluter pays" approach to PFAS remediation activities, but unfortunately given CERCLA's construct and the ubiquity of PFAS throughout the country, clean water and drinking water utilities and the communities they serve will be exposed under EPA's approach to the threat of unprecedented PFAS cleanup costs – despite never producing, using, or profiting from these chemicals. The regulatory and enforcement provisions contained in CERCLA result in the unintended consequence of penalizing the communities whose drinking water, clean water, or environment was contaminated by PFAS.

This dynamic is especially problematic and acute in economically disadvantaged communities and populations with limited resources. Ultimately, public water utility ratepayers will bear the brunt of the costs of remediating PFAS pollution instead of the private companies that created the pollution to make a profit in the first place. Water affordability is already a significant challenge for millions of U.S. households, so ratepayers from coast to coast should not be presented with the bill to clean up industrial pollution created by others.

As such, it is imperative that as the Committee moves forward with this proposed legislation, Congress must clearly exempt "passive receivers" like clean water and drinking water utilities from PFAS-related CERCLA liability and ensure that Congressional and Agency efforts to control PFAS hold actual polluters accountable. Without legislative action by this Committee, customers of drinking water and wastewater services will remain at risk of incurring catastrophic CERCLA legal defense fees and eventual cleanup liability costs for PFAS, exacerbating financial instability for many impacted communities.

The Coalition strongly requests that as the Committee moves forward with this proposed PFAS legislation, Congress provide drinking water and clean water systems with a tailored legislative exemption from CERCLA liability for PFAS-related cleanups or ensure that any passive receivers exemption included is protective of all activities involved in the clean water and drinking water treatment process and for entities that have not benefited nor profited from the use of PFAS.

It is our hope that the comments and feedback submitted by the Coalition will be carefully considered during the legislative deliberations. The impact of PFAS contamination extends beyond partisan politics, and we urge the committee to approach this issue with a commitment

to public health, environmental sustainability, and science-based decision making. By enacting comprehensive and science-based policies, we can take significant strides towards mitigating the risks posed by PFAS and safeguarding the health and economic wellbeing of our communities.

Thank you for your time, attention, and commitment to addressing this critical issue.

Sincerely,

The Water Coalition Against PFAS:

American Water Works Association
Association of Metropolitan Water Agencies
National Association of Clean Water Agencies
National Rural Water Association
Water Environment Federation

April XX, 2023

The Honorable Cynthia Lummis
United States Senate
Washington, DC 20510

Dear Senator Lummis,

The Water Coalition Against PFAS writes to express our strong support for the "Water Systems PFAS Liability Protection Act," legislation that will preserve the important "polluter pays" principle for cleanups of Per- and Polyfluorinated Substances (PFAS) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Last year, EPA formally announced plans to designate two of the most common PFAS – Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) – as hazardous substances under CERCLA. While EPA has stated that this action will help ensure that manufacturers and users of these chemicals are held responsible for the cost of remediating contaminated sites, without congressional action drinking water and clean water utility customers—the same American public that was unwittingly exposed to these chemicals now contaminating their water supplies—will also be at risk of incurring the significant cost of cleaning up sites that are tainted with these chemicals.

This is because drinking water and clean water systems are innocent receivers of PFAS contamination from upstream polluting industries and PFAS-laden products. This causes the water system to possess residuals that contain those PFAS, which are disposed of in accordance with applicable law. However, should disposal be to a landfill or other facility that ever became a Superfund site, then the water system could be treated as a PFAS polluter — and be responsible for a portion or even all of the cleanup costs — forcing local ratepayers to cover the cleanup bill after they already paid to remove the contaminants from their source water. This challenge will become even more acute as EPA has proposed a National Primary Drinking Water Regulation for six different PFAS – which if finalized will require communities to remove these substances through treatment processes that will capture and concentrate PFAS in filtration media.

Wastewater and stormwater utilities would face similar liability through no fault of their own because they either receive PFAS chemicals through the raw influent that arrives at the treatment plant or through the municipal stormwater runoff that they manage. These flows can come from domestic, industrial, and commercial sources and may contain PFAS constituents ranging from trace to higher concentrations, depending on the nature of the dischargers to the sewer or stormwater system. These flows are not generated by the utility; rather, the utility provides the critical human health and environmental service of managing and treating this influent to meet all the requirements of the Clean Water Act. Congressional action is necessary to distinguish these utilities from the entities responsible for introducing PFAS into the environment.

We appreciate that EPA is pursuing an "enforcement discretion" policy that intends to concentrate the Agency's CERCLA enforcement activities related to PFAS on the polluters that have long profited from PFAS and are responsible for the contamination these chemicals have caused. However, any such policy will be wholly insufficient to ensure that drinking water and clean water utility customers will not be faced with potentially catastrophic CERCLA legal defense costs and cleanup liability for PFAS.

Not only could such a policy easily be changed by future administrations, but, more pressingly, industry has already publicly indicated that it will use every legal means available to it to require public agencies to pay for PFAS cleanups. As they have done countless times in the past, corporate polluters will use the extensive means provided to them by CERCLA to defray the costs of the pollution they created directly onto the backs of the communities they have harmed by dragging public agencies into CERCLA litigation. And, unfortunately, these communities are often those that have been the most overburdened with pollution and are therefore the least able to afford such costs. As well-intentioned as EPA is, the Agency simply cannot legally stop this from happening.

Passage of the "Water Systems PFAS Liability Protection Act" is therefore necessary to guarantee drinking water, wastewater and stormwater system ratepayers are entirely protected from incurring the likely billions of dollars of costs of cleaning up environmental PFAS pollution caused by others.

As the Senate debates this issue in the coming months, we will be eager to work with you on any necessary revisions to the scope of the bill, such as to ensure that the bill's definition of covered PFAS fully captures all PFAS that EPA may choose to designate as hazardous substances under CERCLA.

Removing harmful chemicals like PFAS from drinking water, wastewater and stormwater is central to the public health and environmental protection mission of our members. The "Water Systems PFAS Liability Protection Act" will support this mission of supporting clean and safe water while ensuring that water system ratepayers are not burdened by unwarranted liability through a misapplication of CERCLA's "polluter pays" principle. We support this legislation, and we thank you for your leadership on this important issue.

Sincerely,

American Water Works Association
Association of Metropolitan Water Agencies
National Association of Clean Water Agencies
National Rural Water Association
Water Environment Federation

American Water Works Association
Dedicated to the World's Most Important Resource™

ASSOCIATION OF METROPOLITAN WATER AGENCIES

NACWA
A CLEAR COMMITMENT TO AMERICA'S WATERS

NATIONAL RURAL WATER ASSOCIATION
NRWA America's Largest Utility Membership

Water Environment Federation
the water quality people®

RE: Water Coalition Against PFAS Talking Points

Cost-Specific Talking Points

- Public drinking water systems could incur $52 billion in treatment costs associated with management of PFAS-laden media *(Black & Veatch, page 6)*.
- In a study of 29 solids management facilities conducted in 2020, average biosolids management cost increased by approximately 37% in response to PFAS concerns. Notably, these cost spikes to public utilities were incurred prior to newer policies and regulations taking effect over the last two years – these impacts are anticipated to only grow. (*NACWA/NEBRA/WEF 2020 study, page ES-2*).
- In Maine, biosolids disposal costs have seen an increase of anywhere from 37% to 455%, with the latter resulting in a jump from roughly $74M to $410M. Ultimately, based on reported data from a number of utilities, biosolids disposal costs are increasing or have increased by an average of 170%, and this data does not even reflect all costs associated with biosolids management changes when PFAS screening levels were initially adopted.
- The designation of PFAS as a hazardous substance under CERCLA could result nationally in a 27-fold increase in annual disposal costs for water treatment residuals, from $138 million per year to over $3.7 billion per year *(Hazen & Sawyer, page 7)*.
  - Other costs include the handling charges for hazardous waste generators and per mile surcharges for transport based on the quantity of hazardous waste generated.
  - Transportation of residuals to hazardous waste facilities require much farther travel distances relative to a non-hazardous disposal site. On average, the transport distance increases from 10 to 200 miles.
- New Jersey estimates the cost of installing PFAS-specific GAC treatment for a PWS serving about 10,000 people ranges from $500,000 to $1,000,000, with estimated operating costs of approximately $80,000 per year" (Environmental Council of the States).
- Cost of non-hazardous disposal in a Subtitle D municipal landfill: $64.41/ton *(Hazen & Sawyer) (Page 6)* (Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances)
- Cost of hazardous disposal: The EPA unit cost for Hazardous Waste Incineration from the 2020 Interim PFAS Destruction and Disposal Guidance was used at $1,738/ton *(Hazen & Sawyer) (Page 6)*.
- EPA's Drinking Water Treatment Technology Unit Cost Models has a report on 'Reverse Osmosis/Nanofiltration Drinking Water Treatment' (which includes membrane treatment).

COALITION REPORT

Correcting PFAS Myths: Misperceptions Risk Higher Clean-up Costs for Water Ratepayers

ASSOCIATION OF METROPOLITAN WATER AGENCIES · Water Environment Federation · American Water Works Association · NACWA · NATIONAL RURAL WATER ASSOCIATION NRWA

Regulating forever chemicals, also known as per- and polyfluoroalkyl substances (PFAS), presents enormous challenges for lawmakers and regulators due to their unique characteristics.

In the stampede to address this complex issue, Congress and EPA have often applied faulty cost projections to remediation, ignored or downplayed input from the water sector, and created policies that hamper accountability as part of regulations that will inevitably determine who pays for the clean-up of harmful PFAS pollution. New, fact-based regulations that trace back the history of PFAS must be crafted to hold the real polluters accountable.

Forever chemicals have been used in various industrial and consumer products for decades. They are resistant to heat, water, and oil, making them ideal for applications such as firefighting foam, non-stick coatings, waterproofing materials, and more. The extensive use of PFAS in numerous industries makes it difficult to control their release and prevent further contamination.

Complex regulatory landscape – Regulating forever chemicals is complicated due to the wide range of PFAS compounds with different properties and potential risks. US EPA is on a path to implement regulations and guidelines for specific PFAS compounds, instead of taking a more comprehensive approach. Many states are also moving ahead with different PFAS regulations that are separate from what is happening at the federal level. This lack of harmonized regulations will lead to inconsistencies in holding PFAS polluters accountable and enforcing effective control measures.

Treatment and remediation – Removing PFAS from drinking water sources and as part of the wastewater treatment and stormwater management process is technically challenging and costly. Conventional treatment methods like filtration and activated carbon adsorption are not always effective in completely removing PFAS from water. Developing efficient and scalable treatment technologies is crucial to mitigate the ongoing contamination and ensure safe drinking water supplies.

Given the persistence, bioaccumulation and potential health risks associated with forever chemicals, the Water Coalition Against PFAS – a group of leading associations representing every corner of the water sector (drinking water, wastewater, stormwater, and rural utilities) believes that correcting the myths of PFAS and addressing the regulatory challenges is vital to protecting human health and the environment effectively.

PFAS Myth #1

The cost to clean up forever chemicals can be easily borne by water sector utilities and their customers

New research from the water sector and state regulators indicate that the costs to address PFAS will be much higher than Congress and EPA anticipate. These figures represent new estimates, which show that PFAS clean-up costs are actually much higher than current EPA projections being used to inform PFAS regulation in the pipeline. If nothing is done, these costs will ultimately be paid for by drinking water, clean water, and rural water utility providers and their customers – meaning that the American public will essentially be subsidizing the private, for-profit companies that made and profited from PFAS chemicals.

Drinking Water – According to a report commissioned by the American Water Works Association (AWWA) and prepared by Black & Veatch, **drinking water utilities will need to invest more than $50 billion to install and operate treatment technology over the next 20 years in order to comply with new PFAS standards.** Additional analysis by Hazen & Sawyer estimates that a hazardous substance designation for PFOA and PFOS under CERCLA could add another $3.5 billion per year in disposal costs for the water sector.

Wastewater – New information from a survey conducted by the National Association of Clean Water Agencies (NACWA) suggests that **operational costs for individual clean water utilities will increase by up to 60% as a direct result of new PFAS regulations.** Total amounts can vary from utility to utility and depend on the specific regulations implemented. Additionally, a recent study from Minnesota showed total wastewater costs to remove PFAS to be between $14 and $28 billion over 20 years in that state alone. Extrapolating this number to a national level, it is clear that wastewater utilities alone are looking at tens of billions of dollars a year in additional costs to address PFAS – all of which must be passed on to ratepayers.

Various technologies can be employed for PFAS remediation, and once the remediation technology is chosen, the design and construction of treatment systems come into play. This includes designing the system layout, purchasing necessary equipment, and constructing the infrastructure required for the treatment process. The complexity and scale of the treatment system can significantly influence the overall costs.

PFAS remediation will also require long-term operation and maintenance of drinking water and wastewater treatment systems to ensure effective and continuous treatment. This will involve regular monitoring, system maintenance, replacement of consumables (such

as activated carbon filters), and disposal of waste generated during the treatment process. The costs associated with ongoing operation and maintenance can be substantial, particularly for large-scale and long-term remediation projects.

The disposal of PFAS-contaminated waste posed a much larger cost consideration. The generated waste during remediation needs to be properly managed and disposed of in accordance with applicable regulations. Also, the treatment and disposal of PFAS-contaminated waste can be expensive due to the specialized processes and facilities required.

Finally, compliance with relevant legal and regulatory requirements can add to the overall clean-up costs. This includes obtaining necessary permits, complying with waste management regulations, and meeting reporting obligations.

The bottom line is that PFAS clean-up costs for water sector utilities – which never produced nor profited from PFAS in the first place – will be substantial, especially for large-scale or long-term remediation projects.

PFAS Myth #2

New EPA regulations will help clean water utilities to curtail costs associated with PFAS remediation

Instead of helping the water sector with the growing PFAS clean-up cost burden, a new rule proposal from EPA created to identify PFAS substances in drinking water may wind up shifting the financial burden even more onto clean water utilities and ratepayers.

EPA's new piecemeal approach will set new regulations for six PFAS compounds, including the two leading chemicals, perfluorooctanoic acid (PFOA) and perfluorobutane sulfonic acid (PFOS). With the new rule in place, water utilities will need to monitor for all six chemicals and treat water if concentrations exceed the maximum contaminant level (MCL). Water industry experts agree that implementing a new federal MCL will require additional treatment technology, which will result in added costs for utilities.

A broad-based cost projection by EPA, pegged to the new rule, estimates the annual cost for PFAS clean-up could be anywhere between $772 million to $1.2 billion, with economic benefits between $908 million and $1.2 billion. Even with such a wide-ranging estimate, leading water associations vehemently disagree with this assessment.

In March 2023, the American Water Works Association (AWWA) released new information showing the national cost for treatment systems to remove PFOA and PFOS to levels by the EPA rule would exceed $3.8 billion annually. The EPA rule as proposed would require more than 5,000 water systems to develop new water sources or install advanced treatment technologies. Another 2,500 water systems in states with established standards would need to adjust their existing PFAS treatment systems.

As for accountability, the Water Coalition Against PFAS believes the proposed hazardous substance designation of PFOS and PFOA under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is intended to uphold a "polluter pays" principle, whereby those responsible for releasing hazardous substances into the environment are held liable for the cost of cleaning up contaminated sites. However, absent a statutory exemption from PFAS liability for water sector utilities, polluters will continue to pass these costs on to American households and families, effectively creating a "public pays" principle under CERCLA.

Experts from across the water sector have expressed concerns to EPA, but the Agency believes it does not have the authority to provide any formal legal shield, leaving water systems with potential protection from EPA that would be formalized through a policy memorandum, at best.

For this reason, the only viable option for water systems and ultimately the public is for Congress to provide a statutory exemption from PFAS liability for water sector utilities under CERCLA.

PFAS Myth #3

Drinking water, wastewater and stormwater utilities are sources or "polluters" of PFAS

The responsibility for cleaning up PFAS is currently being shared among various stakeholders, including government agencies, the water sector, and occasionally the private sector companies that created them, which often creates a misperception among policymakers and the public that utilities are point sources for PFAS. **Despite this shared responsibility and the optics of it for lawmakers and the public, drinking water and clean water utilities themselves do not produce forever chemicals.**

PFAS compounds are discharged into water bodies as part of industrial processes or from manufacturing facilities. They can also be discharged from industrial facilities into municipal sewer systems. Additionally, PFAS chemicals are discharged from homes, where they can be found in all kinds of domestic products, into sewer systems. Wastewater treatment facilities then become passive receivers of these chemicals, which they have no role in producing or profiting from. There is no current technology that can feasibly and affordably remove PFAS during the wastewater treatment process, and the chemicals are ultimately discharged from wastewater treatment plants to local receiving water bodies.

If these water bodies serve as sources of drinking water, the PFAS can be taken up by water utilities during the treatment process. In addition, PFAS can contaminate groundwater due to releases, accidental spills, or improper disposal practices. Water utilities that rely on groundwater sources may unintentionally extract water containing PFAS and subsequently distribute it to consumers.

For these reasons, water utilities strive to provide safe drinking water to consumers and are subject to new regulatory standards for water quality. As awareness about PFAS contamination increases, water utilities will be responsible for implementing more complex measures to detect, monitor, and treat PFAS in their water supplies to ensure compliance with regulations and minimize consumer exposure.

Bearing in mind the obligation of the water sector to ensure clean water and to protect public health and the environment, the industries that have historically used PFAS or are directly responsible for dangerous contamination must be expected to contribute to the clean-up costs. That's why industries that manufactured or used PFAS-containing products, such as chemical manufacturers, textile manufacturers, and manufacturers of firefighting foam, must be held financially responsible for clean-up efforts.

It's important to note that the allocation of clean-up costs can vary depending on the jurisdiction and specific circumstances of each PFAS contamination case. The legal and regulatory framework, along with the level of government involvement and the ability to identify responsible parties, can significantly impact the distribution of financial responsibility.

PFAS MYTH #4

Water utilities – and the communities they serve – will not be saddled with legal liability for PFAS cleanups

When it comes to PFAS cleanups, environmentalists, members of Congress, and the US EPA all say the same thing: polluters should pay to get these "forever chemicals" out of our water and off our lands. And, in theory, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – the federal statute designed to make responsible parties pay for cleanups of hazardous substances – is a good tool to achieve that goal. The reality of

CERCLA liability, however, is much more complicated. Clean water utilities collect, manage, treat, and sustainably reuse the billions of gallons of wastewater and stormwater and tons of biosolids generated throughout the country each day. These services are foundational for our modern society, but they also often fall within CERCLA's broad categorizations of "disposal" and "releases," and therefore can lead to clean water utilities being incongruously labeled as CERCLA "potentially responsible parties" (PRPs).

On the flip side, the chemical companies that created PFAS and profited from their sale often do not – in the legalese of CERCLA – ultimately "dispose" of them, but instead sell them as a "useful product." Ironically, this fact may allow the biggest "polluters" of them all – PFAS manufacturers – to escape paying for clean-ups conducted under CERCLA. In other words, CERCLA may lead to the very communities that have suffered from PFAS pollution paying for its clean-up through increased utility bills, while polluters with teams of lawyers skirt legal liability and get around paying their fair share.

EPA has indicated that it will use its CERCLA enforcement discretion to go after polluters and help shield utilities from this outcome. Public utilities appreciate this, and EPA can provide some relief under CERCLA using its discretion. But in spite of what environmentalists may say, these protections have holes big enough for PFAS manufacturers to drive trucks through, because CERCLA provides third parties – including polluters – with statutory rights to bring suits and foist cleanup costs on any PRP, like water utilities. In many cases, EPA can't do anything to stop it. And utilities make juicy targets. They are reliable sources of funding that polluters are more than willing to use to defray their own costs.

Bottom line: absent action from Congress to change the way CERCLA works in the context of PFAS, there is a significant risk that clean water utilities and the public they serve will be burdened with the costs of PFAS cleanups and legacy pollution, not polluters.

PFAS Myth #5

New technologies being developed will mitigate PFAS clean-up costs for the water sector in the future

While the field is still evolving, policymakers have started to focus on innovative technologies for PFAS remediation. To address PFAS in drinking water, the water sector is working to implement advanced treatment processes to remove or reduce PFAS concentrations, ensuring the provision of clean and safe drinking water to consumers. **However, new technologies are not a silver bullet for the utilities, and they can be very expensive. Also, the cost of remediation technologies can vary dramatically, depending on the extent of contamination, the selected remediation method, and the scale of the project.**

Advanced oxidation processes (AOPs) involve the use of chemical reactions to break down and destroy PFAS compounds. Techniques such as ultraviolet (UV) light, ozone, or hydrogen peroxide are applied to generate highly reactive radicals that can degrade PFAS molecules. AOPs have shown effectiveness in treating PFAS-contaminated water, although further research is needed to optimize the process and ensure complete degradation.

Electrochemical methods use an electric current to induce reactions that can degrade or remove PFAS compounds. Electrochemical oxidation and electrocoagulation are two approaches that have been investigated for PFAS remediation. These techniques can be effective in treating both water and soil contaminated with PFAS.

Researchers are developing novel adsorbent materials specifically designed to capture PFAS from water sources. These materials have high affinity and selectivity for PFAS, allowing for efficient removal. Examples include modified clays, activated carbon-based materials, and nanomaterials. Research efforts focus on enhancing adsorption capacity, stability, and cost-effectiveness of these materials.

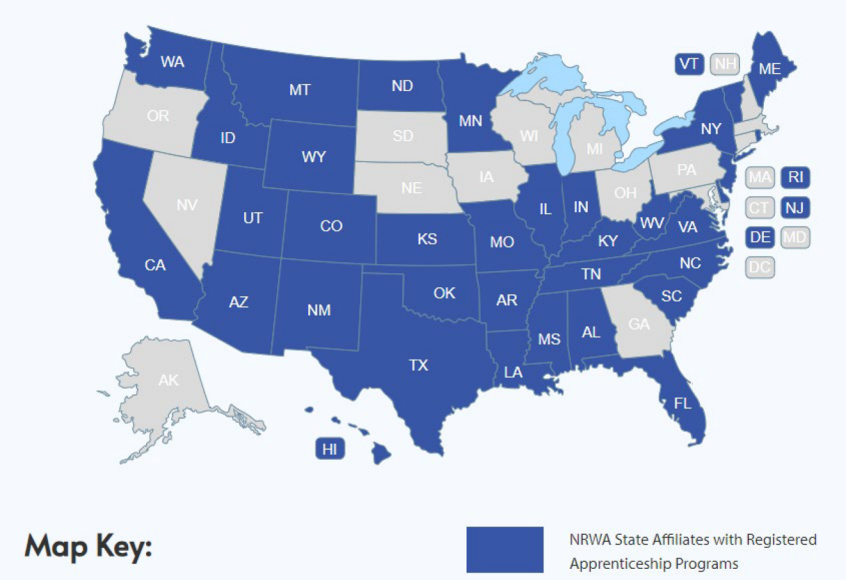
Membrane-based separation processes, such as reverse osmosis (RO) and nanofiltration (NF), have been effective in removing PFAS from contaminated water. These technologies work by selectively rejecting PFAS compounds while allowing clean water to pass through. Advances in membrane materials and processes aim to improve PFAS removal efficiency and reduce energy consumption.

It's worth noting that while these technologies show promise, each has its own limitations, and their effectiveness may depend on the specific PFAS compounds, concentrations, and site conditions. Continued research and development are essential to optimize these technologies and make them commercially viable for large-scale PFAS clean-up efforts.

Other cost factors to consider include research and development efforts. Investing in innovation and improving the efficiency and effectiveness of existing technologies can could help reduce overall expenses. PFAS remediation also obviously requires perpetual operation and maintenance to ensure effective treatment. The costs associated with operating treatment systems, including energy, chemicals, consumables, and personnel, can be substantial, particularly for long-term remediation projects.

Lawmakers and media must work to debunk the common myths associated with PFAS so that Americans from all walks of life understand who is responsible and what must transpire to fix this massive problem. While the costs associated with PFAS remediation can be significant, it's important to weigh them against the potential risks of contamination to human health and the environment. That's why Congress and EPA must work together and listen to water industry experts to ensure that the American public is not forever on the hook for cleaning-up forever chemicals.

NRWA Apprenticeship Program



The Need for Apprentices

It takes more than 380,000 highly skilled water and wastewater professionals to ensure the public supply of safe drinking water and to protect our lakes, streams and groundwater. If there are water and wastewater services in your community, state laws require that there must be certified operators in responsible charge of those facilities. This means that even in the most rural of communities, job opportunities exist in the water and wastewater industry.

Over the next decade, the water sector is expected to lose between 30 – 50 percent of its workforce to retirement. Many of these water professionals have worked at the same utility for the majority of their careers and they will depart with decades of valuable institutional knowledge. Furthermore, advancements in water treatment and supply technology have increased the skills and training required of this workforce. Our industry must address the need to train the next generation of skilled workers in order to protect and provide what is arguably the most valuable resource that is essential to all life—clean water.

About the NRWA Apprenticeship Program

The NRWA Apprenticeship Program provides guidelines to states to assist with developing their own apprenticeship programs to meet the training demands of the next generation of water professionals. With little to no cost, apprentices will attend an approximate 2-year training program made up of classroom technical instruction and on-the-job training, providing apprentices the tools necessary to become successful operations specialists in their communities. During the apprenticeship program,

apprentices will earn-while-they-learn with knowledgeable, passionate people who strive to deliver clean drinking water to their community and treat wastewater before returning to the environment. This program starts as a job and emerges as a solid and secure career as either a Water Operations Specialist or Wastewater Operations Specialist.

Benefits of Apprenticeship

- Earn & Learn: From their first day of work, apprentices receive a paycheck that is guaranteed to increase as their training progresses. Apprentices also complete a combination of job-related instruction and hands-on training at the job site leading to a nationally-recognized, portable credential.
- Hands-on career training: Apprentices receive practical on-the-job training resulting in improved skills and competencies as well as the potential to earn college credit toward an associate's or bachelor's degree.
- A career: Once the apprenticeship is complete, workers are on their way to a successful long-term career with a competitive salary and little or no educational debt.
- National credential: When an apprentice graduates from a career training program, he or she earns a certified portable credential accepted by industries and employers across the nation.
- Community Impact: apprenticeship offers an opportunity for the apprentice to make a difference in their own communities. They will be providing clean water to their family and friends. That is surely something to take pride in!

Who Can Apply?

To be eligible, applicants must:

- Be 18 years old or older
- Have a high school diploma or GED
- Have a valid driver's license
- Be physically capable of performing the essential functions of the apprenticeship program

**Note: Please review your State's apprenticeship program standards for any additional eligibility requirements that may exist.*

Non-Discrimination Statement

NRWA and our State Affiliate Registered Apprenticeship Program sponsors will not discriminate against apprenticeship applicants or apprentices based on race, color, religion, national origin, sex (including pregnancy and gender identity), sexual orientation, genetic information, or because they are an individual with a disability or a person 40 years old or older. The sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations, part 30.

Senate Committee on Environment and Public Works
Hearing Entitled, *"Implementing IIJA: Perspectives on the Drinking Water and Wastewater Infrastructure Act, Part II"*
September 7, 2023
Questions for the Record for Mr. Volk

Chairman Carper:

1. On November 4, 2022, the Environmental Protection Agency (EPA) announced the selection of 29 Environmental Finance Centers (EFCs) that will help communities across the country access federal funding for infrastructure projects to improve public health and environmental protection.

   The creation of these centers were made possible by the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law. According to the EPA, the selected EFCs will help serve communities that have historically struggled to access federal funding by delivering targeted technical assistance to local governments, states, tribes, territories, and non-governmental organizations for activities to protect public health, safeguard the environment, and advance environmental justice.

   Please explain the importance of technical assistance to disadvantaged communities so that their grant applications are competitive. Beyond these centers, what more could the federal government do to help disadvantaged communities be more competitive in the State Revolving Fund application process?

The National Rural Water Association (NRWA), through its Environmental Protection Agency (EPA) funded Region 8 Environmental Finance Center (EFC), provides paradigm-shifting technical assistance to disadvantaged water and wastewater systems in Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming. Through a collaborative planning process, NRWA combines the input of state primacies to identify disadvantaged and underserved communities with the local experience of its State Affiliates, who each have more than 40 years of experience assisting communities in Region 8, to identify the communities with the most need to provide targeted technical assistance.

NRWA's Region 8 EFC aims to provide technical assistance to systems and communities and provide guidance and assistance to communities in navigating the State Revolving Fund (SRF) process, and close any technical, managerial, or financial gaps that may be preventing the system from progressing through the SRF process. Because the SRF process varies by state, NRWA's EFC Funding Specialists are well-versed in their respective state's SRF process. Many of the critical components of the SRF process require skills and expertise that small, rural, and disadvantaged systems and communities simply do not possess. The technical assistance provided by NRWA's EFC is meant to help the identified communities run the gauntlet of their state's SRF process and gain access to the generational investment in state-revolving funds made possible by the Bipartisan Infrastructure Law.

Without the technical assistance provided by NRWA's Region 8 EFC, many communities with failing, antiquated, or inadequate water and wastewater services would be unable to make critical infrastructure updates. These upgrades inherently bring enhanced economic viability to those communities, improving quality of life.

To help disadvantaged communities be more competitive in the State Revolving Fund application process:

- Continue fully funding TA providers that positively impact communities with boots-on-the-ground assistance.
- Change the rules to tip the scales in their favor.
    - Define and implement a standard definition of SRF-eligible communities and systems. For instance, projects that are eligible in Montana may not be eligible in Wyoming.
    - Define and implement a standard definition of "disadvantaged."
    - Require a portion of a state's SRF allocation to target funding to eligible disadvantaged communities.
    - If a community meets the federal definition of disadvantaged and is eligible, require the state to place the proposed project at the top of its Intended Use Plan.
- Bypass the States and uncomplicate the process for eligible systems and communities that meet the federal definition of disadvantaged.
    - Use USDA-RD Apply as a model to build a funding mechanism/apparatus that allows eligible disadvantaged systems and communities to apply for funding assistance directly through EPA.

2. How is the North Dakota Rural Water Systems Association helping small systems prepare for and address extreme weather events, and how has the Bipartisan Infrastructure Law supported these efforts?

North Dakota Rural Water Systems Association (NDRWSA) is part of the USEPA Region 8 Environmental Finance Center, which is supported by BIL funds. Part of our focus is on climate resiliency. We are assisting small and rural systems in the state to become more resilient and sustainable in the face of a changing climate through training and working collaboratively with systems to conduct climate risk assessments and to provide climate resiliency training.

The training/assessment will result in an increase in systems being more prepared for catastrophic events and will lead to more cost-effective operating solutions that are adapted to current and future climate conditions.

3. The Bipartisan Infrastructure Law provided $15 billion in funding to assist systems with the identification of sources of lead in service lines and with the planning, design and replacement of water service lines, in accordance with EPA's Lead and Copper rule. How has the North Dakota Rural Water Systems Association helped its members to take advantage of this assistance to remove sources of lead contamination from its systems? What more can be done to assist communities in meeting the requirements of the lead and copper rule?

North Dakota Rural Water Systems Association's (NDRWSA) staff has been helping our small and rural systems navigate the complex lead requirements through numerous onsite visits, in

person training sessions, and conferences throughout the state. The NDRWSA is helping connect systems with EPA lead funding through our state's Department of Environmental Quality (DEQ). The Association is currently working with the NDDEQ to develop a list of systems who are still in need of Lead Service Line Inventory assistance. Once the list is finished, NDRWSA staff will focus their attention on those systems in most need of inventory assistance.

Getting the lead funding out the door has been difficult. The limits to only using 49% of the grant as additional subsidization is particularly troublesome. Lead service lines are found predominantly in disadvantaged communities or disadvantaged portions of communities and cannot afford to pay for 51% of the costs associated with a replacement. Replacements can cost $5,000 to $10,000 per connection depending on the circumstances. Timing is also an issue with the Lead funding. All Community Public Water Systems (CWS) and Non-Transient Non-Community Public Water Systems (NTNCWS) must develop and submit a Lead Service Line Inventory by Oct. 16, 2024. Many systems do not know if they have an issue, so the funding is ahead of the work. States need sufficient time to figure out the full extent of Lead replacement. Unfortunately, with the 2023 Lead funding, the state may not have that luxury and run the risk of those funds being reallocated to other states.

4. A recent EPA Drinking Water Needs Survey identified the needs of drinking water systems serving American Indians and Alaska Native Villages at $4.1 billion. While this represents a small percentage of the nation's total drinking water needs, we know that these small and often remote systems face unique challenges that often result in higher than average per-household water utility costs. Adding to this concern, a report from the U.S. Water Alliance and Dig Deep found that Native American households are 19 times more likely than white households to lack indoor plumbing.

   From the rural water perspective, what are some of the unique challenges facing tribal communities, and what can the federal government do to help these communities gain access to safe, clean and reliable drinking water and wastewater services?

A unique challenge facing tribal water systems as compared to other water systems in North Dakota is in the acquisition of easements. There are a few components to the easements on tribal systems that make them more difficult. The first issue is with allotted lands with numerous owners. It is common to run into tracts on the reservation that have 30 plus owners, all with fractioned small interests in the tract. This creates difficulties, as the current policy requires tribal water systems to obtain a minimum of 51% of the landowners to sign for the easement. There is a too numerous clause which allows the water system to obtain easements on tracts with over 50 owners without getting 51% signatures. It would be helpful to see the too numerous requirements be lowered from the current 50 owner requirements to something lower, perhaps 15 -20.

The other issue with easements on the reservations is the Bureau of Reclamation (BOR) requires that the tribal water systems obtain easements with survey grade maps of definite location. Other non-tribal water districts typically acquire blanket easements which are much less involved and do not require each parcel to be surveyed. If that requirement could be revisited and the policy be reversed to allow tribal programs to obtain blanket easements, it would be a great help to the tribal water systems and save a significant amount of time and money.

Tribal systems have also run into funding issues when working with the Bureau of Reclamation. Recently, projects were approved for "Aging Infrastructure" funding. Only after the projects were approved, were the Tribes and consultants made aware that contracts and agreements would have to be redone before the funding was dispersed. Systems have been told this could take 12-18 months. In 12-18 months, these projects will end up costing more than what was originally submitted for the projects. A more streamlined approach would be more effective.

5. The ability of smart water technologies to enhance a community's ability to comply with drinking water and wastewater regulations has been well documented by the EPA. However, communities are often unable to adopt new and emerging technologies due to the cost, as well as other administrative burdens. As compliance with the proposed per- and polyfluoroalkyl substances (PFAS) drinking water standards and hazardous waste standards becomes a reality, the issue of access to resources such as smart water technologies will become a more pressing issue.

   In your work, have you found that there are burdens for communities beyond cost that hinder a community's ability to access and utilize these technologies? Are there changes to law this committee should consider to help address these burdens?

Small and rural communities are not responsible for introducing PFAS into the environment or the public drinking water. The regulatory and enforcement provisions of CERCLA result in the unintended consequence of penalizing the communities whose drinking water or environment was contaminated. This dynamic will be especially problematic in economically disadvantaged communities and populations with limited resources. The Water Systems PFAS Liability Protection Act (S. 1430) will help small and rural communities avoid incurring costs and potential liability that ratepayers will be unable to shoulder. Rural Water applauds Senator Lummis's leadership and the introduction of this critically important piece of legislation which will hold those accountable for PFAS contamination.

What is needed in communities with PFAS contamination is assistance like health-based thresholds, funding for treatment, monitoring assistance, on-site technical assistance for immediate response, credible public health information, emergency access to safe drinking water, and compensation from the responsible parties.

Without an exemption from CERCLA liability, small and rural utilities will be forced to pass on the increased cost of operating the utility to the local customers in the form of rate increases. Our boards and system managers would continuously struggle to adopt operating plans to meet our financial obligations without raising rates- particularly jeopardizing our low and fixed-income customers' ability to afford their water service.

In rural communities, where such a high percentage of people living at or near the poverty rate, any rate increase is unaffordable for many residents. Financially strapped water utilities would be forced to develop alternative payment plans for increasing numbers of distressed customers. Unfortunately, many low and fixed-income households would need to choose to pay their water bill using funds that would have previously been used for food, medicine, or other necessities.

While the field is still evolving, policymakers have started to focus on innovative technologies for PFAS remediation. To address PFAS in drinking water, the water sector is working to implement advanced treatment processes to remove or reduce PFAS concentrations, ensuring the provision of clean and safe drinking water to consumers. However, new technologies are not a silver bullet for the utilities, and they can be very expensive. Also, the cost of remediation technologies can vary dramatically, depending on the extent of contamination, the selected remediation method, and the scale of the project.

Advanced oxidation processes (AOPs) involve the use of chemical reactions to break down and destroy PFAS compounds. Techniques such as ultraviolet (UV) light, ozone, or hydrogen peroxide are applied to generate highly reactive radicals that can degrade PFAS molecules. AOPs have shown effectiveness in treating PFAS-contaminated water, although further research is needed to optimize the process and ensure complete degradation.

Electrochemical methods use an electric current to induce reactions that can degrade or remove PFAS compounds. Electrochemical oxidation and electrocoagulation are two approaches that have been investigated for PFAS remediation. These techniques can be effective in treating both water and soil contaminated with PFAS.

Researchers are developing novel adsorbent materials specifically designed to capture PFAS from water sources. These materials have high affinity and selectivity for PFAS, allowing for efficient removal. Examples include modified clays, activated carbon-based materials, and nanomaterials. Research efforts focus on enhancing adsorption capacity, stability, and cost-effectiveness of these materials.

Membrane-based separation processes, such as reverse osmosis (RO) and nanofiltration (NF), have been effective in removing PFAS from contaminated water. These technologies work by selectively rejecting PFAS compounds while allowing clean water to pass through. Advances in membrane materials and processes aim to improve PFAS removal efficiency and reduce energy consumption.

It's worth noting that while these technologies show promise, each has its own limitations, and their effectiveness may depend on the specific PFAS compounds, concentrations, and site conditions. Continued research and development are essential to optimize these technologies and make them commercially viable for scalable PFAS clean-up efforts.

Other cost factors to consider include research and development efforts. Investing in innovation and improving the efficiency and effectiveness of existing technologies can help reduce overall expenses. PFAS remediation also obviously requires perpetual operation and maintenance to ensure effective treatment. The costs associated with operating treatment systems, including energy, chemicals, consumables, and personnel, can be substantial, particularly for long-term remediation projects.

Rural Water emphasizes the significant financial burden that testing, treatment, and disposal costs related to PFAS contamination place on our membership. Local governments' water and wastewater utilities are not "producers" or users of PFAS, and none of these essential public

service providers utilize or profit from PFAS chemicals. Rather, we are "passive receivers" of these chemicals that were once used by manufacturers and everyday consumers and are now ubiquitous in the environment. We are saddled with the responsibility of managing traces of PFAS coming into our systems daily. This burden cannot be overlooked, and the responsible parties should be held accountable.

Senator Boozman:

1. I have been hearing from various segments of the water sector about the Build America, Buy America Act (BABA) domestic content procurement mandate and how this mandate could delay, or even prevent, the construction of critical water infrastructure due to the non-availability of BABA-compliant technology.

    a. Is this something you are seeing in North Dakota and how is that impacting the delivery process?

The challenge at the outset, as with the American Iron and Steel (AIS) provisions, was a clear understanding of what materials fell under the new requirement for water infrastructure projects. The quality of the products the owner receives are of a much higher standard. Domestic requirements have necessitated stateside manufacturers to expand their facilities and improve upon their logistics, which has driven down lead times and improved trackability. Because the majority of our projects are now domestic, local stock levels have been easily justified as well. Systems are hoping prices of products will also level out as this process continues.

However, the sunsetting of the Build America, Buy America (BABA) waivers poses a challenge to small and rural communities in North Dakota and across the country. EPA proposes an end date of September 30, 2024, for waiving projects from the BABA requirements that began design prior to May 14, 2022. When the adjustment period waiver was first announced, there was no mention of a sunset. Setting a hard end date poses significant problems and cost increases for a number of projects in development. NDRWSA strongly recommends waivers should be permitted to end once the project is completed.

North Dakota has been able to use the BABA adjustment period waiver for most of the current projects, so they only have one project right now that is required to comply with BABA. Fewer and fewer projects will qualify for the adjustment period waiver so they may have to pursue project-specific waivers. This looks to be a very lengthy process. It is very similar to the American Iron and Steel requirements that has been in place since 2017 and have been currently waiting 9 months for a waiver on one particular project. For BABA, electrical control systems and mechanical equipment like pumps are of the greatest concern. There is a worry that BABA-compliant components for certain items might not be available at all. There is a significant need for a national waiver for these components to minimize the burden of going through the project-specific waiver process.

Senator CARPER. Mr. Volk, thanks very much.

Our thanks to all of you for your testimony today.

I am going to lead off the questions and then yield to Senator Capito. There is another hearing going on in Homeland Security and Governmental Affairs on postal issues that are important. I may have to slip out for a few minutes to go there, as well.

As I mentioned in my opening statement, the Bipartisan Infrastructure Law provided more than $55 billion for drinking water and wastewater improvements, the largest investment in our Nation's history, which is in addition to the significant investments Congress has made through the American Rescue Plan. Even then, we knew that this was only a down payment, and the continued need is clearer now.

This past April, EPA released its most recent drinking water infrastructure needs survey and assessment, which estimated that the 20 year national drinking water infrastructure need is a staggering $625 billion. That is $625 billion worth, with a B.

My question is really a question for each of you. I will start off with Secretary Biser, also known as President Biser.

Please share with us, if you would, some of your beliefs with respect to the Bipartisan Infrastructure Law, your experience with respect to the Bipartisan Infrastructure Law's funding, what you have been able to achieve with that funding in North Carolina. Tell us a bit about the financial gap, if any, that remains in your efforts to address water infrastructure challenges. You have spoken to this already, but you can reiterate it, if you will. Repetition is a good thing. Thank you. Go ahead.

Ms. BISER. Thank you, Senator. Thank you for that question.

One of the things that we think about a lot in North Carolina is that people don't tend to think about water infrastructure unless they turn on their faucet and water doesn't come out, or they don't have clean water, and they have to boil water, or if they can't flush a toilet. That is when we typically think about water infrastructure.

As a result, we have underinvested for decades in our systems. This piece of legislation has provided a huge shot in the arm for us. You mentioned that the EPA needs survey is identifying hundreds of billions of dollars in additional needs. That is true in North Carolina as well.

We have a 2017 study that we are in the process of right now because it doesn't take into account some hurricanes that we dealt with, that estimated our needs at $17 billion to $26 billion just for our basic water infrastructure. That is not including looking at the needs associated with upgrading our drinking water to deal with PFAS and protect public health. That is quite significant.

To give you another dollar figure, we were only able in 2023 so far to fund 9 percent of the $2.6 billion that have been requested by our local utilities thus far. That number has held pretty steady for the past few years.

We have had a record investment, which is wonderful. I mentioned the $1.9 billion from the American Rescue Plan on top of the wonderful funding we are getting from IIJA, and we are working hard to make sure that that funding is reaching every community that needs it in the State. That means, as I mentioned earlier, not

just rewarding those who are first in line, but making sure that we have strong technical assistance. North Carolina has a lot of small and rural communities, a lot of poor communities, so we want to make sure that that funding is reaching those communities as well.

Senator CARPER. I am going to ask you to hold it right there. That is a lot, and you certainly have gotten our attention.

Ms. Powell, same question, if you would.

Ms. POWELL. Certainly.

I think, overall, our experience in working with stakeholders to make sure that we got off to a good start with implementing the Bipartisan Infrastructure Law has been a positive one. We understand that there had to be guidance provided up front for implementation, and certainly, for the State of Maryland, they took some time to update their definition of disadvantaged communities to make sure that funding is going to support those communities across the State.

We are starting to see funding, as I shared in my testimony, from IIJA, and we are starting to see some principle forgiveness.

But what we talked about in the hearing before was that we needed to see more funding in the form of grants and not loans. Many communities cannot afford loans, and for us, ourselves, we are financially constrained, as well. It counts against the debt that we are taking out for our capital program, so there is still a funding gap there.

We submitted a project, a list of project requests, worth $800 million, and we are projected to receive $105 million. We are still shy of the need. I think it has been very good that we have been able to assist customers that need assistance getting their bills back in good standing from impacts during the pandemic, but those impacts existed before the pandemic and continue to persist.

The last thing I will stress, if I could, is that we talk a lot about investment in infrastructure. We can't forget about the people that run the facilities and fix the pipes. We also have to invest in work force.

Senator CARPER. Good. Thank you very much for those words.

Mr. Volk, and then I will turn it over to Senator Capito.

Mr. VOLK. Thank you, Chairman.

Our SRF group has been working very hard to navigate through the new rules and regulations to get the money out as best as they can, visiting with them in the last couple weeks, getting a lot of the money out to all sorts of systems. I have in my written testimony a snapshot of those systems, both on the clean water side and on the drinking water side from our very small up to our largest community of Fargo.

Senator CARPER. Thank you.

Senator Capito.

Senator CAPITO [presiding]. Thank you, Mr. Chairman.

I am going to, because there is lots going on, I am going to yield my first opportunity to question to Senator Boozman.

Senator BOOZMAN. Well, thank you very much, and I appreciate that. I have to run up to Farm Bill here, it is important to you, and I think, to the witnesses.

I want to just ask one question, really quickly, regarding, as Ranking Member on Agriculture, to Ms. Biser.

I understand how critical it is that we protect farmers, ranchers, and others not directly responsible for PFAS contamination from being potentially held liable by the EPA or subject to sweeping private legal action that could wreak havoc on their ability to operate. So I was pleased to be a part of a bill with Senator Lummis giving the agriculture community assurance they would not be subject to PFAS liability claims if the EPA rule were to be finalized.

Ms. Biser, can you talk about the importance of providing farmers, ranchers, and water utilities with this certainty?

Ms. BISER. Thank you, Senator Boozman, for that question. One of the things that we think about in North Carolina a lot is making sure, PFAS operates fundamentally different than most of the traditional contaminants that we regulate. PFAS is called a forever chemical for a reason, and it stays persistent in the environment and accumulates.

One of the things that we are doing at a State level is reviewing our rules and regulations and permitting to make sure that we have common sense measures to make sure that we are still protective of public health and environment in that context. I think, as you pointed out, Senator, it is a good and worthy conversation to have to make sure that we are looking at where to appropriately draw those lines to ensure that you are not having unintended consequences because PFAS is operating differently than what we have traditionally dealt with, especially under a CERCLA context, as you mentioned.

Senator BOOZMAN. If they did go all the way down to farmers, ranchers, water utilities, what effect would that have on North Carolina?

Ms. BISER. I will say, as a strong agricultural State, I always think about our farmers, but I also think about our public water systems. One of the main areas I think about is ratepayers are already paying for treatment costs to make sure that their water meets Federal drinking water standards and is safe for public health. I would hate to see a scenario where we have public water systems, ratepayers, essentially, on the hook twice.

Thank you for your question.

Senator BOOZMAN. Good. Thank you very much.

Thank you all.

Senator CAPITO. Senator Cardin.

Senator CARDIN. Thank you, Madam Chair.

Ms. Powell, let me first relate a story. A couple years ago, I was invited by a candidate for City Council in Baltimore to join him going door to door to try to get political support for him. It was an opportunity to do some grassroots politics. Every house that we had knocked on the door where someone answered the door, the questions they raised were about water prices and the affordability of water from our public utility. You mentioned that in your testimony.

Obviously, and Secretary Biser, you are absolutely right, there is a tremendous shortage in the modernization and replacement of our water infrastructure. The pressure on the ratepayers makes it virtually impossible to make the type of investment through the ratepayers that are necessary to make those improvements, but we

are stuck with the current circumstances where these rates are way too high on affordability.

We have the LIHEAP Program for other utilities, and you mentioned in your testimony, Ms. Powell, that you have used the COVID relief funds that were provided under HHS, and the Bipartisan Infrastructure Bill contained the provision that I sponsored with Senator Wicker and Senator Stabenow to allow us to develop a pilot program on affordability with help for those that cannot afford it.

Could you go into a little more detail as to the need on affordability as to the customers in your region struggling to pay their current water bills, let alone if additional responsibilities are imposed upon them because of the challenges that you have mentioned?

Ms. POWELL. Yes, sir. Thank you, Senator Cardin, for the question. Thank you for your leadership on this issue, as well.

Since the start of the pandemic, WSSC Water has applied over $10 million in financial assistance to 5,500 customers through a variety of Federal and State funding sources, including $3.75 million just from LIHWAP alone, which has helped over 4,000 customers. The Federal Low Income Household Water Assistance Program has been another opportunity for us to assist customers that have needs.

As I said, those needs existed before the pandemic, because rates have been increasing, and they will continue to persist after. Right now, we have over 90,000 customers that are behind on their water bills, leaving more than $51 million in arrears. When we can't get the funding from our customers, because we are not for profit, we then look to raise rates, and that is an unsustainable solution.

Having a permanent Low Income Household Water Assistance Program provides us another way of providing the needed funding to help customers with the rising cost of water and sewer bills, because our costs are increasing to deal with just maintaining the infrastructure we have. New regulations that require us to invest billions of dollars will further add to that financial burden.

Senator CARDIN. Secretary Biser, you mentioned the concerns of the ratepayers in North Carolina. Do you have a similar concern about the affordability in your State?

Ms. BISER. That is something we think about a lot. We want to make sure that water is affordable. This is something that we think about in the context of PFAS, as well. I gave the example of the Cape Fear Public Utility Authority. Their customers are now paying an extra $70 per year to pay for that treatment system. So we are thinking about this all the time and looking at how do we make sure that everybody is at the table to help, so that the ratepayers don't shoulder the entire burden.

Senator CARDIN. Ms. Powell, I mentioned my thanks for your being willing to join the task force in regard to the Baltimore system. The WSSC is a model governance. It has worked extremely well among the Maryland, Washington, and suburb counties. It is well supported and respected by all the jurisdictions.

The Baltimore system is one that is based upon the city's management, which has been historic and goes back hundreds of years. We have serious problems at Back River, as I am sure you are

aware, and Patapsco. And I just hope that you can add some expertise as to how we can have a structure that can provide the future needs for the customers in the Baltimore region that depend upon the Baltimore Water Authority.

Ms. POWELL. Yes, sir. I am looking forward to lending my expertise and working with the entire task force to ensure that the city of Baltimore has the structure that it needs for the water and wastewater utility, which is a regional utility, and also among the top 10 largest in the country.

I started my public sector career as the Bureau Head of Water and Wastewater for the city of Baltimore, so I know the operation well, and I know many of the challenges. I think those have only become more difficult over time. And I do see that the city of Baltimore is now starting to receive funding as well from IIJA. And I hope that the work that we do helps to inform how those funds should be spent going forward.

Senator CARDIN. Thank you.

Thank you, Madam Chair.

Senator CAPITO. Thank you.

This is for all the panel, but I am going to start with you, Mr. Volk. I want to go back to the PFAS CERCLA liability issue. You have all three addressed it, and I appreciate it. As the Chairman just said, repetition is good.

CERCLA liability creates a significant risk for passive receivers. In other words, you didn't create it, but it comes into your water system. Often, you are required to receive or treat PFAS due to State or Federal regulations.

Water and wastewater utilities are particularly vulnerable to CERCLA liabilities due to the essential and growing role in receiving and filtering PFAS. I believe in North Carolina you said 43 systems had just installed carbon systems. There are treatments, as you mentioned, treatment technologies that can remove it, and it gets in granulated carbon filters. But it has to be transported then, and disposed of, the used filters, as you put new filters in.

Wastewater utilities must contend with both industrial and residential contributors of PFAS upstream, the latter of which poses unique challenges due to the prevalence, as we talked, of PFAS in many consumer products.

My questions are, can you elaborate on the risks and costs associated with transporting and disposing of PFAS contaminated materials, and does CERCLA liability impact your ability to manage these byproducts effectively without fear of severe legal challenges? If the EPA is requiring you to provide PFAS free drinking and wastewater, are you kind of caught between a rock and a hard place?

Mr. Volk.

Mr. VOLK. Senator, great questions. A lot of these are on the minds of not only the small and rural systems in North Dakota, but across the Nation. There are a lot of unknowns, especially in our State with what the extent of the PFAS is, and then, if you find it, what do you do with it?

Then, if you are told you need to dispose of it, where do I dispose of it? How much is it going to cost? Who is going to pay for it? If it is the ratepayers, like we have already talked, in the short time,

we are already strapped with razor thin budgets. That is where being exempt from the liability would be an extreme help to water systems, where they are, just like you said, the passive receiver. They didn't profit from the PFAS, but now they are——

Senator CAPITO. Responsible?

Mr. VOLK. Responsible for that, exactly.

Senator CAPITO. Have you tested your water systems in North Dakota?

Mr. VOLK. Senator, they have done a couple years of testing. In North Dakota, we have been lucky, knock on wood, that it has come back with very few positives across the State.

Senator CAPITO. Ms. Powell, would you respond to that? You mentioned it in your statement, but I would just like to reinforce it, please.

Ms. POWELL. Yes, I mentioned it in my statement that we have been, we initiated looking at some alternatives to deal with PFAS in drinking water. While we have done voluntary testing, and it shows that our levels are low and that we would be under the MCL that has been proposed by EPA, we have seen an anomaly in the data that showed a spike that could potentially mean that we could be out of compliance in the future.

That is why I mentioned financial compliance and operational risks associated with not only drinking water, but also wastewater. We have to understand what will happen there, and biosolids. On the drinking water side, our estimates now are upwards of a billion dollars to be able to address PFAS in drinking water.

Just in terms of biosolids, the Piscataway Bioenergy Facility Project, where we have received funding from the State, that project is upwards of $270 million, the single largest investment that we have made as a utility, and it is supposed to be a positive one to take our biosolids to a Class A to allow us to better manage biosolids. That investment stands to be threatened should we have to address PFAS and biosolids. So it is important that water and wastewater utilities have the protections from CERCLA and from liability.

Senator CAPITO. Secretary Biser, you have some experience with this, obviously, with some of your systems already doing the carbon filters. What kind of liability issues are they having or would they have if we didn't specifically exempt them from transporting and trying to destroy, managing, once you catch it, it doesn't go away. What are you going to do with it?

Ms. BISER. Senator Capito, thank you for that question.

There are two large systems that we have, that, as you mentioned, are dealing with this. One has installed a reverse osmosis system, the other a carbon filtration system, a granular activated carbon system. With the carbon system, one of the things that we worry about is we know that there is air transport of PFAS as well, and so as it gets refreshed, it gets basically heated up.

There is a lot we still need to learn about, are we putting it back into the air, where it essentially continues a cycle? I think that points to a need for some research and development to help us as we are tackling these issues.

As it relates to CERCLA, I think, again, it is a really worthy conversation to have to take a look at all the case law surrounding

CERCLA, having everybody around a table to say, where are the unintended consequences, and how do we avoid unintended consequences so we don't overburden our ratepayers?

Senator CAPITO. Thank you.

Senator Merkley.

Senator MERKLEY. Thank you very much, Madam Chairman, and welcome to you all.

I want to direct my questions to you, Mr. Volk, because I have two rural pollution problems that I want to address. One is in Morrow County. For decades, people have had an accelerating level of nitrates in their water, to where it is way above safety now. They are experiencing all kinds of health problems.

They are adjacent to an area that does have a public water system. The DWWIA grants, the $35 billion that we have directed to DWWIA, wouldn't that be appropriate money to be spent to connect these folks to a public water system that is free of nitrates? Isn't that kind of the purpose?

Mr. VOLK. Yes, Senator. I believe those would be questions to ask your Department of Environmental Quality or whoever runs the SRF, but definitely could be part of the supplemental funding. That is just extra additional funding and there are additional subsidies that could be used there. They could use their base funding, but definitely could be something to get those users on a reliable, quality source of water.

Senator MERKLEY. But isn't that kind of the core purpose of the DWWIA money, is to help folks in rural areas be able to address this kind of challenge?

Mr. VOLK. Senator, definitely. Definitely. It would be up to each State to divvy that money up how they see fit.

Senator MERKLEY. Right.

I want to turn to another challenge in Crook County. In Crook County, we have had in 2022 a whole bunch of residents who have a very, very high level of manganese that has appeared in their water. Now, Canada has a limit of 120 micrograms, and the World Health Organization, 80 micrograms.

EPA is at 300 micrograms. And the estimate for the impact on memory, attention, and motor skills on children is when there is 120 to 400 micrograms. Ten of the 13 nearby family wells have tested over the EPA 300 level, and one well tested at over 1,000 micrograms. So people are incredibly worried about their health.

The calves are dying. At Billy Johnson's dairy, a record number of cows have been dead, same story at Brian Zednick's place. A farmer, Dick Zimmerly, said, "It just chapped my backside that Goliath could get away with running over everybody else." And the Goliath in this case is a gravel pit that opened nearby.

In this case, there is no public water system nearby to tap in. What can these funds in DWWIA do to help our rural farmers and families that are being impacted in such a fashion?

Mr. VOLK. Senator, I can only tell you what we have done in North Dakota over the last 50 years. We have a great network of rural regional systems that would provide water to that farmer. We have worked hard on it. I know that manganese is an issue. In North Dakota, we have been able to use the funding through the

Emerging Contaminants section, that is eligible use and that is at 100 percent subsidy.

So if they were able to hook up to a regional supplier like we have done in North Dakota, that would be an option for those rural residents and farmers.

Senator MERKLEY. You are talking about piped water, right?

Mr. VOLK. Correct.

Senator MERKLEY. But if people are too far away from a piped system to make that feasible, are there other things these funds can do?

Mr. VOLK. Senator, I'm not exactly sure. I would have to get back to you on that.

Senator MERKLEY. Madam Chair, I want to provide for the record several articles about both the nitrates in Morrow County and the challenge faced there for health, and also about the manganese in Crook County. I think these two instances are examples of the sorts of challenges that people face.

It isn't just the farmers and ranchers. The families' water systems, that is, their pipes, their filters, their water heaters, their toilets are filling up with black sludge, massive corrosion of their pipes. They can't sell their homes. They are afraid to raise their children, but they can't afford to move.

It seems to me these are exactly the sorts of things that we are trying to provide funds for in DWWIA to assist. I want us to find a way to help these communities out. Thank you.

Senator CAPITO. Without objection, we will submit those into the record.

[The referenced information follows:]

OPB SEPT. 22, 2023

Crook County residents fear mining company polluted their water. Here's how Oregon investigated

By Emily Cureton Cook (OPB)
June 13, 2023 9 a.m.

Federal lawmakers are pushing back on the way a state agency handled complaints about a mining giant.

Don Porfily sits in the dining room of his Crook County farmhouse with a sample of his tap water on May 1, 2023.
Emily Cureton Cook / OPB

Don Porfily first noticed the change in his tap water last March. Out of nowhere, it tasted bad, "like mud," said the 84-year-old feed store owner.

He stopped drinking it. Then, the plumbing in his Central Oregon farmhouse went haywire. Spigots lost pressure. The washing machine broke and so did the fridge and the water heater. When Porfily lifted the lid of a toilet tank, he found a layer of thick black sludge.

He's lived in the house for 26 years and has never seen anything like this.

His neighbors also grappled with mysterious calamities. Down the road at Ashley McCormick's house, they went through three dishwashers in a year. At Billie Johnson's dairy, a record number of calves had been born dead. Same story at Bryan Zednik's place.

Now, at least a dozen residents in this agricultural valley near Prineville are worried about the safety of their only drinking water supply, which is pumped from the ground.

"A neighbor will tell a neighbor, and they'll call and say, 'You better come look: black in the toilet, taste in the water," Porfily said.

He and others lay blame on a multi-billion-dollar construction materials company.

A view of the rock washing machine at Knife River's Woodward pit on April 12, 2023.
Emily Cureton Cook / OPB

In 2016, Knife River Corporation leased 100 acres in the valley and started digging for rocks.

The company denies its sand and gravel pit is hurting the groundwater. It's a titan in developing the West, with tens of millions in state contracts to build roads and bridges. Near McCormick and Byrd's houses, it harvests materials used to make concrete. Knife River is nearly finished at the site but has plans to open a new mine nearby.

Neighbors are galvanized against this. Some say they've already witnessed broken promises from the company, all while state regulators have balked at groundwater complaints and ignored possible permit violations.

Neighbors feel the lack of oversight has effectively shifted the burden of proof from a huge corporation to a gaggle of local residents, a troubling dynamic that is now getting the attention of federal lawmakers.

Here and Now

A giant washing machine

People living near the mining operation, known as the Woodward pit, launched their own investigation last fall.

Porfily and others paid to have tap water samples analyzed at a lab. Results from a dozen homes near the mine show varying levels of manganese.

Depending on the concentration, this metal can cause a range of problems, from stained laundry to liver issues and neurological dysfunction.

In some wells, like Porfily's and McCormick's, the manganese levels were well above federal health advisory limits.

Knife River and state officials have said the element was there all along, a common geologic side effect of the volcanic eruptions that shaped the region. But residents and their advocates argue mining released previously undisturbed contaminants.

On a recent site tour, a leader from Knife River compared its operation to a giant washing machine.

Knife River VP South Central Division Chris Doan tours the Woodward pit on April 12, 2023.
Emily Cureton Cook / OPB

"We mine material from the field, and then we introduce it into this wash plant," said South Central Division Vice President Chris Doan.

The wash plant scours dirt from the rocks so they can be sorted and shipped out to the company's concrete mix plants, Doan explained.

"It goes into home foundations, slabs for buildings," he said, "It goes into building roads and highways."

The wastewater from the mining process ends up in a series of settling ponds. From there it evaporates, infiltrates back into the ground, or gets pumped back through the washing machine.

The Woodward pit is one of the company's 51 mining permits in Oregon. Over the last decade, the company has been awarded nearly

Here and Now

reported $2.2 billion in annual revenue.

'A mine in the middle'

Oregon regulators are now considering whether Knife River can expand in Crook County, population of 26,000.

If it's permitted, the new pit would share ground with a determined opponent.

Dick Zimmerlee is a farmer who leases land inside the expansion area. He can see the existing mine from his house, and for the last two years has spent a lot of time and money trying to stop it from growing.

Farmer Dick Zimmerlee drives around the valley in Crook County, Oregon where he grew up. He decided to retire there and share ground with a Knife River sand and gravel mine, but now he's staunchly opposed to the company, and believes its processes tainted the groundwater. April 6, 2023.
Emily Cureton Cook / OPB

"It just chapped my backside that the Goliath could get away with running over everybody else," Zimmerlee said.

At first, he was worried about the amount of water the company was allowed to take to run its rock washing machine.

"Now, that's really the least of our problems," Zimmerlee said.

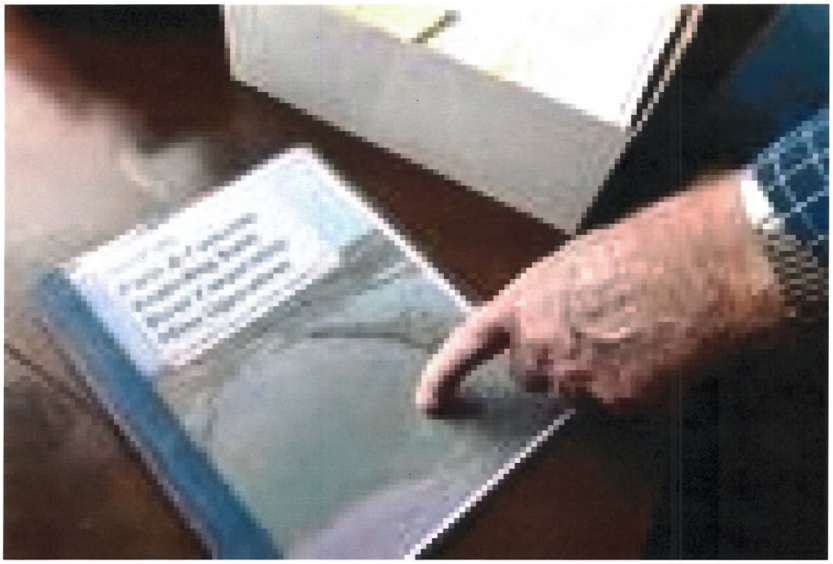
He believes the land Knife River has already mined isn't fertile for farming anymore, even though the company said it replaces any topsoil it removes. He accuses the company of digging deeper than its permit allows and burying things that disrupt the flow of water underground. Zimmerlee contends this caused drainage problems in his fields. He began to file numerous complaints with state regulators in 2021. Knife River has denied his allegations. In 2022, Zimmerlee too, found a black toilet tank.

Jim Newton runs an engineering consulting firm out of Bend. He said until this site he's always worked for mining companies, not opposing them.

"I've never worked for NIMBYs, to put it bluntly," Newton said.

This year, he drove to find 30 domestic wells in the immediate area of the Woodward pit, noting their GPS coordinates. He reviewed about a dozen available water test results. Then, Newton laid the data out on a map. He found a pattern in which homes have higher manganese concentrations.

"What's different from one side of the map to the other side of the map? There's a mine in the middle," he said.



Farmer and retired agricultural business consultant Dick Zimmerlee points to a dossier he created in opposition to Knife River's plans for an expansion near Zimmerlee's home in Crook County, Oregon. April 6, 2023.
Emily Cureton Cook / OPB

Newton theorizes that miners removed the earth's filtration system: the sand and gravel beneath the topsoil. Pre-mining, anything on the surface would have to percolate through that natural filter. If you take out those layers, Newton said, the groundwater becomes more vulnerable.

"All of a sudden that layer above the aquifer is very thin and more permeable, you don't have that advantage of additional material to filter out things like fertilizers, or really anything that hits the surface of the ground," according to Newton.

State permits limited the mining depth at the Woodward pit to 20 feet below the surface, and according to Knife River's planning documents, groundwater flooded the pit well above that, in some places at just 7 feet below ground. At its proposed expansion, the company expects to hit even more water.

Digging in the water table agitated manganese that had long been suspended as a solid in the ground, Newton said. The mining allowed it to dissolve in the aquifer. Picture dropping a lump of sugar into a glass of water, he said.

Here and Now

Debate over manganese risks

Manganese is one of the most abundant elements on Earth, and an essential nutrient in food. But, too much of it can be toxic.

In 2011 and 2014, studies found exposure to manganese in drinking water was associated with poorer memory, attention and motor skills in children. In 2020, researchers drew a link between exposure during childhood and attention-deficit hyperactivity disorder.

The studies documented neurobehavioral differences when manganese concentrations ranged from 120 micrograms per liter to more than 400 micrograms per liter.

Farmer Dick Zimmerlee collected two bottles of water from his toilet tank in Crook County, Oregon on May 1, 2023. Water in his toilet bowl looks perfectly clear, as does what runs from his taps. Only after the water stands and is exposed to air do fine black particles reveal themselves.
Emily Cureton Cook / OPB

Ten of the 13 wells residents had tested near the mine were at or above that threshold. All of them were above concentrations known to give water a bad taste and leave stains.

Despite the growing concern over manganese, federal clean water laws don't apply to it. In decades-old guidelines, the U.S. Environmental Protection Agency advises that at 50 micrograms per liter, manganese can cause aesthetic problems that could stop people from using it. The EPA says manganese is a health concern at or above 300 micrograms per liter.

Three of the 13 Crook County wells exceeded that benchmark.

Other countries and public health organizations have recently adopted much stricter health standards.

In 2019, Canada lowered its maximum acceptable concentration to 120 micrograms per liter. The World Health Organization is considering lowering its health-based guideline to just 80 micrograms per liter.

Oregon follows the EPA's 2004 guidelines. Oregon Health Authority public health toxicologist Dave Farrer said in an email exchange that other countries have added "very large safety buffers," based on studies that exposed animals to exponentially higher concentrations than any of the regulatory health limits for people.

Anyone who isn't an infant could safely drink water with up to 1,000 micrograms per liter for up to a year, Farrer said. Above that level, "It would be best for no one to drink it even for a day."

'Not a home'

Don Porfily said he drank from his kitchen tap for 25 years, until last fall.

The water recently contained 1,120 micrograms of manganese per liter, nearly four times the EPA's health advisory level. That's according to lab testing of a May sample collected by OPB, which also revealed arsenic above the federal maximum contamination limit.

On the northern edge of the Woodward pit a natural stream runs on April 6, 2023. The stream becomes an irrigation canal during summer months. After a neighbor complained in 2021, Knife River admitted it had discharged water from the mine into the canal without permit, resulting in a $20,822 penalty from the Oregon Department of Environmental Quality.
Emily Cureton Cook / OPB

In a sample from Porfily last year, a different lab found lower levels of manganese, at nearly 500 micrograms per liter. By then, he had already stopped using the water for anything except flushing the toilet. He said the sprinklers don't run anymore because the pipes are so clogged.

When his neighbor Ashley McCormick first sent her own tap water sample to a lab, it found 400 micrograms per liter of manganese. She's since spent thousands on a new well pump and a filtration system to make the water more usable for her family of five.

The costly system is online, but the smell and discoloration remain. Subsequent testing paid for by OPB showed tap water manganese concentrations still above the federal aesthetic contamination level, at 160 micrograms per liter.

Her family doesn't drink it anymore. She even stopped bathing her three kids in it. The water leaves stains, she said, and recently one of her boys came down with severe hives that doctors couldn't explain.

Experts say manganese isn't readily absorbed through the skin, but at this point, McCormick is freaked out.

"We just take super quick showers," she said.

She has considered selling. Though, as a real estate agent, she knows she'll have to disclose the water problems. It was once her dream home. Now, she wonders, "Who's going to want to buy it?"

Windy Acres Dairy owner Billie Johnson worries a spate of 9 stillborn calves in a year at her property near the mine site are related to water problems. May 1, 2023.
Emily Cureton Cook / OPB

Byran Zednik is also feeling done. He raises cattle in the valley. After having to cut a bloated, dead calf from its mother's womb piece by piece, killing both— he sent a blood sample from the mother to a lab. The blood showed manganese levels outside the normal range, according to a text from his veterinarian that Zednik shared. He wants to get out of the meat business and focus on raising crops.

"We're selling our cows because we're not going to pass that into the meat," he said.

The problem for homeowners around the Woodward pit mining site is that there is no data on manganese levels before the mine opened. Real estate transactions in Oregon don't require such tests, and without that information, it's difficult to say if all the broken appliances, dead cattle and hives are attributable to Knife River.

State regulators have relied on this lack of data to dismiss complaints against the mining company, too. To independently assess the complaints, OPB reviewed hundreds of public records detailing the state response and spoke to key officials, geologists, Knife River representatives, eight residents living near the mine, and an independent expert on manganese.

Private wells in Oregon are not regulated. It's a homeowner's responsibility to know what's in their drinking water, said Oregon Department of Environmental Quality spokesperson Laura Gleim.

Trucks haul aggregates out of the Woodward pit on April 12, 2023.
Emily Cureton Cook / OPB

Still, per DEQ rules, mining sites are not allowed to degrade groundwater. The agency can bring enforcement actions against polluters. Since 2015, DEQ has issued more than $330,000 in penalties against Knife River and one of its subsidiaries for water quality violations, including a $20,822 fine last year related to the Woodward pit.

But when it comes to investigating complaints about water pollution by mining operations, DEQ passes responsibility to a different state agency, one that has much closer ties to the mining industry.

The Oregon Department of Geology and Mineral Industries employed geologist Bob Houston for more than 20 years before he became an environmental manager for Knife River in November 2021.

The hire wasn't unusual, Houston said.

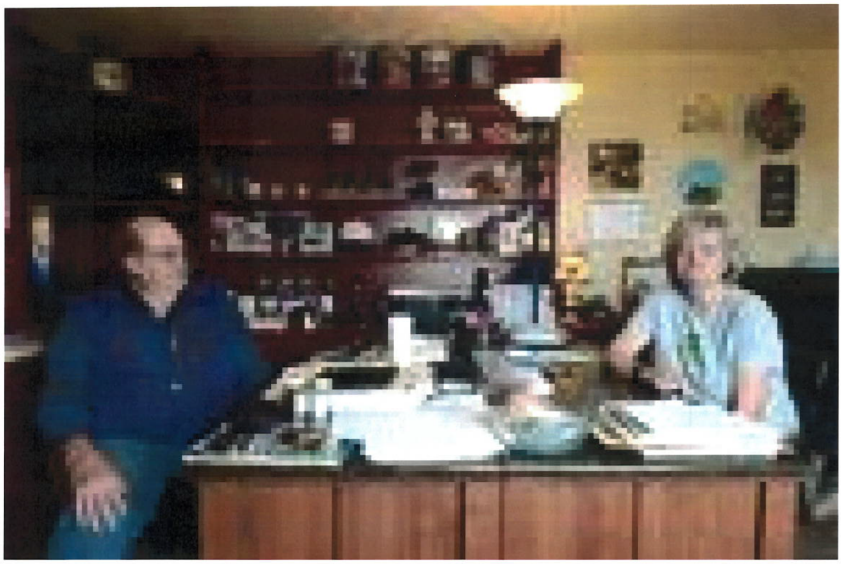
"When I was in the [DOGAMI] role, we did have some staff that retired and then went back to private consulting," he said. "There's a boundary there that our integrity and our professionalism won't cross."

This year, DOGAMI officially concluded that the Knife River's Woodward pit is not responsible for contaminating groundwater.

State records show DEQ staff didn't initially agree with DOGAMI's assessment.

"We lack critical evidence to prove/disprove contamination from the mining activities," DEQ Water Quality Permitting Manager Mike Hiatt wrote in a Jan. 25 email to a supervisor.

By then, key DOGAMI staff had already made up their minds. They'd been aware of various grievances about the mine for a year before allegations of groundwater contamination surfaced.



Farmer Dick Zimmerlee shares an office with his partner Debbie Magard on April 6, 2023. The couple has taken the lead in shouldering expenses to oppose Knife River's expansion in Crook County, Oregon. "David slew Goliath," Zimmerlee said.
Emily Cureton Cook / OPB

Since December 2021, neighbor Zimmerlee filed complaints on a variety of issues and repeatedly pressed DOGAMI for a site inspection, to no avail. Instead, the agency asked Knife River to respond.

DOGAMI shelved that complaint without drafting a formal response to Zimmerlee, according to records reviewed by OPB.

Feeling ignored and frustrated, Zimmerlee bypassed DOGAMI last October and went directly to DEQ with water quality concerns. But, the environmental agency kicked the complaint back to DOGAMI.

Its staff was immediately dismissive, their emails show. They did not want to investigate at all, saying Zimmerlee did not include enough new information or evidence that Knife River was to blame. They said the metals turning up in local water test results – manganese and in some cases aluminum — aren't associated with sand and gravel mining.

A history of complaints

Zimmerlee wasn't the only neighbor to contact state regulators about the Woodward pit.

Karen Mikulski lives across the street, and she wrote to officials in November 2021 to allege Knife River dumped "hundreds of truckloads of concrete and asphalt" into the mine as filler. Mikulski also said she saw a hose pumping water from a pit into a nearby stream.

At that online meeting, the company reportedly said a few neighbors were organizing to oppose the expansion, and "their objective is to portray [Knife River Corporation] as bad operators," according to notes DOGAMI staff took.

The company's environmental manager Jeff Steyaert admitted water from a pit had flowed to a creek, though only for a fraction of the time Mikulski said she witnessed it. The admission would lead to a $20,822 DEQ fine.

On the northern edge of the Woodward pit, a natural stream runs on April 6, 2023. The stream becomes an irrigation canal during the summer months. After a neighbor complained in 2021, Knife River admitted it had discharged water from the mine into the canal without a permit, resulting in a $20,822 penalty from the Oregon Department of Environmental Quality.
Emily Cureton Cook / OPB

Knife River also acknowledged burying concrete debris in the mined farmland, a possible violation of its permit.

In an interview this month, Knife River Northwest Technical Services Manager Matt Ropp initially denied the company had buried construction materials in the mine until confronted with DOGAMI records obtained through a public records request.

"I was not aware of that," Ropp said.

In a subsequent email, he confirmed that staff buried 8,000 cubic yards of concrete — roughly 31 million pounds — in the Woodward pit between June and August of 2019.

DOGAMI spokesperson Alex Lopez acknowledged that burying the debris was "clearly inconsistent" with Knife River's operating permit, but said any regulatory action would be DEQ's responsibility, not his agency's.

The agency's hydrogeologist Bob Brinkmann said that, generally, it's on mining operators to make sure they follow the rules.

"It's like you have a driver's license. You're supposed to know what the law is and not speed excessively," Brinkmann said.

Knife River responds

Here and Now

Knife River said it began quarterly monitoring of two residential wells near the Woodward pit before it opened in 2016. Those tests have shown the water is safe, according to Knife River, but neighbors and their experts say the wells aren't actually located in areas where groundwater would flow from the mining site.

Last year, the company hired a water quality consultant, Amber Hudspeth, to summarize its data in a memo to DOGAMI. Hudspeth found the monitored wells hadn't changed much in seven years.

She concluded that the manganese and aluminum turning up in other water tests was naturally occurring and the result of volcanic geology, or possibly related to historical land uses.

A field at the Woodward site on April 12, 2023. Knife River's permit for sand and gravel mining requires it to return the land to a farmable condition.
Emily Cureton Cook / OPB

There has been gravel mining in this area before, and the Woodward pit is partially located on the site of a defunct lumber mill. Hudspeth also pointed to the presence of manganese in the city of Redmond's well water supply, 20 miles away.

DOGAMI geologist Brinkmann agreed with the company's conclusions. He said in an interview that the data show a pattern linking metals in groundwater to certain well depths.

Knife River geologist Bob Houston added another theory to the mix in a recent email to OPB. Houston said there are wells throughout Crooked River Basin with warm temperatures, according to DOGAMI data, and that geothermal activity could cause dissolved minerals to appear in water tests.

Knife River and state officials have also pointed out that Zimmerlee's house isn't in the path of the groundwater's flow, yet he reports manganese detections and a black toilet tank.

Here and Now

"I don't know that Knife River, as a private business, is the correct party to go beyond our operations in order to try to figure out why a person's toilet is stained," said Knife River's Matt Ropp.

He encouraged people with concerns to bring them directly to the company, instead of regulators.

"We do our best to try to manage our operations and, and to communicate with our neighbors in order to minimize impacts to them," Ropp said.

OPB asked Ropp if, as a way to restore goodwill with the neighbors opposing the expansion, the company would consider paying for residential water filtration systems without admitting fault.

Ropp said no: "I am not fond of the idea of buying people off."

The price of non-disclosure

Adam Mikulski came to Knife River with concerns about its Woodward pit before it opened in 2016.

State records suggest those negotiations led the company to pay for a new well at Mikulski's house, across the street from the pit. The driller initially listed Knife River as the owner of the well. The company's name was later crossed out of the paperwork and replaced with Mikulski's.

Knife River monitors that well now, and its data was used to support dismissing the recent groundwater complaints.

Mikulski won't discuss the deal, he said, because of a non-disclosure agreement.

That didn't stop his wife Karen from contacting DOGAMI in 2021 to report the company for illegal dumping, resulting in the DEQ penalty.

The agencies' response left Adam Mikulski feeling cynical.

"They just take [Knife River's] word for it and, and they don't come out and check," he said of the regulators.

Heavy machinery mingles with irrigation equipment on the edge Knife River's Woodward pit in Crook County, Oregon. April 12, 2023
Emily Cureton Cook / OPB

DOGAMI has not sent an inspector to the site since June 2021, before the complaints began.

Mikulski said he regrets initially going directly to the company because there is no public record of his concerns, nor the promises made to smooth them over.

Lately, DOGAMI appears to be rethinking its conclusions.

On June 5, the geologist working for local residents, Jim Newton, got an email from the DOGAMI's Executive Director and State Geologist Ruarri J. Day-Stirrat. It asked Newton to come to a closed-door meeting in Portland at the end of June.

The purpose is to discuss the manganese in Crook County's water. Knife River and Hudspeth are also invited.

"There will be no other participants," Day-Stirrat wrote to Newton. "I expect a series of slides laying out your data, your hypotheses, and a discussion of solutions based on your hypotheses."

Meanwhile, two U.S. Senators want to shift the responsibility and expense of providing answers away from the local residents and their paid consultant.

On June 7, Democratic Sens. Ron Wyden and Jeff Merkley sent a letter to the EPA's top Administrator Michael Regan, saying they "have a particular concern about a mine in Oregon that is currently seeking an expansion," and calling on the agency to examine the groundwater allegations as soon as possible.

In an interview, Merkley, a former state lawmaker, questioned the thoroughness of DOGAMI's conclusions, and the state agency's objectivity in investigating the industry.

"I know from my time in the state legislature that DOGAMI is basically often an advocate for mining," Merkley said.

OPB SEPT. 22, 2023

POLITICS

Oregon Sen. Jeff Merkley tour reveals Morrow County residents' frustration with groundwater inaction

By Antonio Sierra (OPB)
Jan. 21, 2023 9 a.m.

Residents want government to ensure water deliveries and take action against polluters.

U.S. Sen. Jeff Merkley speaks with rural Boardman residents Mike Pearson and Ana Maria Rodriguez in Boardman, Ore., Jan. 15, 2023.
Antonio Sierra / OPB

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As U.S. Sen. Jeff Merkley peered underneath a sink belonging to Mike Pearson, the Morrow County local told him that the reverse osmosis filter provided by the county still wasn't getting enough nitrates out of his drinking water to make it safe.

"I had one in, we tested it," Pearson said. "And if I remember right, the best we could get is 12. And then when I put this new one in, it's 26.1."

The U.S. Environmental Protection Agency maintains that any nitrate concentration above 10 parts per million is unsafe to drink.

For decades, fertilizer runoff and wastewater from farms and industrial operations have seeped into the groundwater of the Lower Umatilla Basin, an area that covers northern Morrow County and western Umatilla County. For many residents who draw their water from private wells rather than city water systems, this has meant dangerously high concentrations of nitrates, a chemical that can cause respiratory infections, thyroid dysfunctions and bladder cancer.

Merkley was in Morrow County ahead of his annual town hall in Irrigon on Jan. 15, but also to tout $1.7 million in federal funding to study groundwater solutions, like

The people Merkley encountered on the tour were happy he was there but implored him to help them further.

Less than a mile away was the home of Ana Maria Rodriguez, who showed the senator where the nitrates had corroded her bathroom faucet. The filters worked for Rodriguez, but it still came at a cost: The filters could not produce enough water to cover all of her family's needs, meaning she still needed to venture into town to buy water.

The faucet in Ana Maria Rodriguez's bathroom sink shows signs of corrosion, possibly due to nitrate pollution in Boardman, Ore., Jan. 15, 2023.
Antonio Sierra / OPB

The visit with Rodriguez was significant not only because she is a Morrow County resident affected by nitrate pollution, but also because she is a community organizer with the nonprofit Oregon Rural Action.

She helped gather about 20 people in her garage to talk about their concerns. They held up pieces of paper with their nitrate levels measured in parts per million: 40.9, 43, 54. Oregon Rural Action staffer Zaira Sanchez provided translation for the senator as the many Latino audience members asked questions.

the crisis. Confusion and frustration with local government, state agencies and elected officials charged with solving the problem became a running theme throughout the day.

Holding her 3-year-old daughter, Ruth Lopez said she didn't want to expose her child to nitrates.

"I hope that this doesn't affect this younger generation as well," she said. "So I asked with all my heart that you continue to support us with this issue."

The residents also shared a Jan. 10 letter sent to Gov. Tina Kotek, signed by more than 100 people. The letter said that many of the 4,500 private wells serving 14,000 people in the Lower Umatilla Basin hadn't been tested, but 70% of the ones that had been tested showed unsafe nitrate levels.

"State agencies have failed to protect our groundwater and are unresponsive in meeting our basic need for safe drinking water," they wrote. "We need your immediate attention to address this rural environmental injustice."

STREAMING NOW
Here and Now

A group of rural Boardman residents assemble in a garage to speak with U.S. Sen. Jeff Merkley about nitrates in Boardman, Ore., Jan. 20, 2023.
Antonio Sierra / OPB

Responding to nitrate contamination has long been the domain of state and local government rather than the federal government. The state's responsibility is divided between the Oregon Department of Environmental Quality, the Oregon Department of Agriculture and the Oregon Health Authority.

The Morrow County government was also involved last year when it declared an emergency last summer and began distributing water and filters. But the emergency expired at the end of the year and the county is passing off water delivery to a fourth state agency — the Oregon Department of Human Services. The department is set to end water distribution at the end of June at the latest.

Meanwhile, OHA has yet to start testing wells in the Lower Umatilla Basin.

The thicket of state and local agencies in charge of responding to the crisis has left people in the dark about who they should turn to with their issues. When Merkley asked the group if they knew that the state was taking over water delivery, they said they didn't.

The federal government has indicated that it may not stay on the sideline forever. In July, the EPA wrote a letter to state agencies encouraging them to take more enforcement action against polluters and other measures to help Lower Umatilla Basin residents, or the state could risk federal intervention.

The two legislators who represent the Lower Umatilla Basin — state Sen. Bill Hansell and state Rep. Greg Smith — were not on the tour and have not proposed legislation to address the issue either.

But in an interview, Hansell said addressing it is a priority for him. He said he previously reached out to Morrow County commissioners and a representative from the governor's

"I just haven't heard anything," he said.

Hansell said he was waiting to receive Kotek's budget proposal to see if money would be allocated for water deliveries. He also said he deferred to Smith on the issue since the Heppner representative lives in Morrow County.

Smith did not respond to a request for comment.

Rural Boardman resident Raymond Akers speaks at a town hall hosted by U.S. Sen. Jeff Merkley at the Irrigon library in Irrigon, Ore., Jan. 15, 2022.
Antonio Sierra / OPB

Some residents didn't just want to see their drinking water cleaned and restored, but also accountability from the individuals and companies that contributed to the pollution in the first place.

At the Merkley town hall in Irrigon, Kathleen Mendoza said her well tests above 50 parts per million and critiqued a "piddly-ass fine" the Oregon DEQ issued to the Port of Morrow for over-applying nitrogen-rich wastewater on agricultural fields in the Lower

After the town hall ended, Mendoza said in an interview that she's developed a rheumatic disease and needs to take thyroid medication since moving to Morrow County in 2000. She wanted to see more action.

"I really feel like the federal government needs to step in and tell the state of Oregon to get on a stick and do something about this," she said.

Back in Rodriguez's garage, Merkley described himself more as a facilitator than a regulator. Merkley's office could work to connect residents with the proper state authority, he said, but it was the state rather than the federal government that would help them solve the problem.

"In my role, I'll have to advocate since I'm representing us in the national government," he said. "I'm not the governor, but I can certainly raise it with the state department of health and with the governor to say, 'How's this transition happening and let's make sure there's not a gap here.'"

It was an explanation that was received politely but not without some pushback. Back at Rodriguez's garage, resident Paulo Lopez urged Merkley to help him and his neighbors retain water deliveries to their home.

When Merkley pointed to state authorities, Lopez gave his response in Spanish before pausing while he waited for Sanchez to translate.

"We know you have power as well."

U.S. Sen. Jeff Merkley and rural Boardman resident Ana Maria Rodriguez go over a letter from Boardman residents to Gov. Tina Kotek in Boardman, Ore., Jan. 20, 2023.
Antonio Sierra / OPB

Senator CAPITO. Senator Cramer.

Senator CRAMER. Thank you, Madam Chair.

Again, thanks to all our witnesses for being here.

Eric, thank you for your expertise.

I am going to get to one of the process issues. In some respects, Senator Merkley's questions are about the program in general and how States can use the various stacks in the appropriate ways.

One of the areas, and we talk a lot about the State Revolving Loan Fund, obviously, but one of the areas with regard to the State Revolving Loan Fund and the bigger system and the area for rural people like me, and by the way, this applies not just to water, but certainly to the highway piece of it is well, and that is to have a formula that consistently recognizes rural States and the unique needs of rural States and that we don't have a formula that simply sends all the money to large population centers.

Obviously, we are talking about a multiple use system that connects. I appreciated your illustration to Jeff with regard to the regional systems in North Dakota that work together.

Could you speak a little bit to the importance of the formula piece of this? Because the formula is often challenged when it is time to reevaluate and reauthorize the programs. Speak to that.

And you said something in your opening statement, too, that I'd like you to speak a little more to, and that is the technical assistance piece. In all my years in Congress, whenever this came up, the thing I hear the most from the rural systems it the value of technical assistance, how if you even know how to apply for a grant, it helps perhaps get the grant.

Maybe speak to those two things, the formula, and then the technical assistance piece of it.

Mr. VOLK. Thanks, Senator Cramer. Definitely on the formula and coming from a small State, we would love any changes or anything that wouldn't harm small States with limited population. Just because we don't have the residents doesn't mean we don't have problems. We have our unique problems whether it is miles of pipe between rural customer, an extremely short construction season. I am looking forward to getting back to our cool temperatures in North Dakota. It has been extremely warm here in DC.

But definitely, normally as a small State, we get minimally funded, and we are OK with that just as long as we are not adversely affected by any formula change based on a population alone.

Then with the technical assistance, that is the heart of our association. We have been around since 1974, helping when they were first starting rural systems in the State and morphed into training, technical, managerial, and financial assistance to all the water and wastewater systems in the State. My staff is going in there day in and day out helping with finding leaks, fixing things, helping them fill out loan applications, helping them connect to the funding sources, helping them hire an engineer if they don't have that. Some of these very small systems even have part time staff or volunteers.

So the technical assistance, to us it is the boots on the ground. They know us. We live in their communities, we live in the State, and we are not there one day and never to be seen again. We are there for the long haul.

Senator CRAMER. I might even just follow that up then with the next point. So the technical assistance, it seems to me, I still sort of marvel, 11 professionals with over 300 systems. What you have just described is the way that you maximize those resources.

But that doesn't change the fact that there is a pretty significant work force challenge. There is in every industry. I don't know one yet. Space Force is doing well, I guess.

[Laughter.]

Senator CRAMER. But beyond that, there is a serious work force problem in this country. In your testimony, you said you expect something like 50 percent of the work force in your industry will be leaving within 10 years.

What do you all do? I will start with you, then each of you can answer shortly. What is the plan? How do we deal with this, or do we just recruit more humans?

Mr. VOLK. Senator, part of that problem we are trying to address is with our apprenticeship program. With National Rural Water's help, we have the standards set up. As I said in my testimony, there are 36 States, and North Dakota is one of them. We are relatively new in the process of apprenticeship. We have a work force development coordinator; he has hired on. He helps with systems, helps navigate through all the rules and regulations of the apprenticeship program, just trying to change the narrative in our business.

In small town North Dakota it is usually, if your operator leaves, who is the next person up? You bring somebody in, they don't have the experience, and it is a vicious circle. We are trying to change the narrative, change the culture where it is a true profession, it is a great, noble profession. They do great work every day. So we are working hard to use the apprenticeship program to get the next generation of workers.

Senator CARPER [presiding]. Thank you, sir.

Senator Whitehouse, you are next. Right now it looks like Senator Mullin will succeed you, and then Senator Padilla, and then Senator Ricketts. Please proceed.

Senator WHITEHOUSE. Thank you, Chairman.

Mr. Volk, the law provides 49 percent for additional subsidization. Is that customarily treated as a cap?

Mr. VOLK. Senator, the 49 percent is the cap, I believe. I know we have had some discussions with, is that enough.

Senator WHITEHOUSE. Yes. So, assuming that it is a cap, what effect does it have on communities that don't have the ability to go forward to match in terms of being able to access these IIJA funds?

Mr. VOLK. That is a great question. We are struggling with that in North Dakota with getting the lead funding out, where 49 percent subsidization, 51 percent would go on to the customer, and most of that lead is going to be in your older neighborhoods, your disadvantaged communities.

So we are really struggling with getting that and finding a balance with the affordability.

Senator WHITEHOUSE. Thanks.

Ms. Powell, in Rhode Island, we are seeing a lot of damage to our water treatment infrastructure related to climate change. We have very, very powerful, unprecedented rain events that have flooded

out, for instance, a major city of ours, the city of Cranston's sewage treatment facility. It is really unpleasant to be downstream when a sewage treatment facility floods out.

Narragansett has had to build a dike, a berm around its ocean-side sewage treatment facility, Warren, another town, is having to plan a very expensive move with intermediate protection of its water treatment facility.

How well does the IIJA fund the need that communities are facing to deal with these unprecedented flooding events driven by climate change and our relentless pollution by the fossil fuel industry?

Ms. POWELL. Thank you, Senator Whitehouse, for the question. We ourselves are dealing with the impacts of drought conditions. Earlier this week, we had a meeting to talk about moving to a drought watch. So it really is impacting every community, East Coast, West Coast, north, south.

I think the structure is there in IIJA, the authorization is there, the appropriations need to be there.

Senator WHITEHOUSE. That is what is missing. I agree. Thank you.

Let me also ask you about microplastics. We are starting to see that turn up more and more in drinking water. We see it appear in mothers' breast milk. We see it appear in the end result in a baby's diaper that has obviously gone through the infant. We see it falling in the rain in Colorado, and we don't really understand what the dangers are of microplastics are when consumed by humans.

The bill provides $10 billion for what it calls emerging contaminants. Is it true that microplastics are only one of several emerging contaminants that would have to share that $10 billion if it were to be treated that way? And given the kinds of upgrades that are necessary to deal with microplastics, is $10 billion a sufficient number?

Ms. POWELL. The short answer, Senator, is no. It is not sufficient. We have focused a lot of PFAS.

Senator WHITEHOUSE. Which would be an emerging contaminant?

Ms. POWELL. Which is an emerging contaminant. And our projections to deal with that in drinking water are upwards of $1 billion.

Senator WHITEHOUSE. When you say, "our projections," you mean your——

Ms. POWELL. WSSC Water, yes, sir.

So we need to have regulatory certainty. We need to have a comprehensive road map to deal with emerging contaminants that are on the horizon holistically, so that we are making our investments in infrastructure upgrades make sense.

Senator WHITEHOUSE. I would wrap up by suggesting some flexibility around the 49 percent for communities that don't have a lot of resources, and additional funding for infrastructure that faces climate related damage, flooding, drought drying out conditions, whatever they are, and an expansion of the $10 billion which now has to cover both PFAS and microplastics in addition to whatever other emerging contaminants are out there would all be helpful to you.

Ms. POWELL. Yes, sir.

Senator WHITEHOUSE. Is that a yes, also, I saw your head nod, Mr. Volk?

Mr. VOLK. Yes.

Senator WHITEHOUSE. And Ms. Biser is also nodding. Thank you.

Senator CARPER. Head nods are important.

Next, Senator Mullin.

Senator MULLIN. Thank you, Chairman. You know, we all face unique challenges, being from the Midwest and rural States like Oklahoma, North Dakota. Even major metropolitan areas, such as Boston and New York, San Francisco, Los Angeles, we all have issues facing us when it comes to clean water. Sometimes it is policy related, sometimes it is neglect. Sometimes it is a lack of funding.

But what we do know is one size does not fit all. We need to give municipalities, States flexibility to allow them to make decisions for their unique areas. And a lot of times, when Congress, we may have good intentions, sometimes it is politically driven, sometimes it is actually policy driven. I think that is what we are trying to do here, Chairman, is have good, sound policy.

But one size never fits all. And when we throw a tremendous amount of money, I mean, $55 billion is a lot of money, still, for anybody, I don't care who you are, it is a lot money, and then we put restrictions on it, I think we hear from all of our witnesses is hey, we know where it needs to go, we need the flexibility to do so. And if we are going to be funding these projects, then we need to make sure that we get those dollars as close to the State, as close to the individuals providing the service as possible, and give them the tools to do it without having the restrictions, which happens so often with Federal funding, is that every dollar has so many stinking strings on it that they can't even access it.

That is what I believe Mr. Volk, you were saying a while ago, what Senator Cramer was trying to say, is just to get through the bureaucracy to get to the funding is a miracle sometimes in itself. So my question to you, Mr. Volk, is what tools do you need for rural parts of the country, which is most of the Midwest, what would be most helpful? If the money is there, what tools do you need to access it?

Mr. VOLK. Yes, Senator, great question, things we talk about all the time. Flexibility would be immensely grateful, I know visiting with our State folks, they would love that. The technical assistance——

Senator MULLIN. Flexibility in what? Begin able to use the dollars for certain projects without having restrictions on the projects? Being able to use flexibility on navigating the bureaucracy?

Mr. VOLK. Especially with this funding, with the lead component on our water side, we run the risk in our State of maybe not spending down our first tranche of money as quickly as we can, and we can't apply for the next set of money until we spend that down. And we run the risk, if we don't apply for that I believe before September 2024, we could lose that money. That would be reallocated to a State.

So some timing flexibility for our State to navigate, let's say, the lead, like where the lead service inventories are not due to the

State until October 16th, 2024, but they have to apply for this new funding, the next year's funding of the lead, in September 2024. So the funding is kind of ahead at this point of the true problem. The State does not fully know the magnitude of the total lead replacement. We have an idea. But some flexibility on that would be great so they wouldn't run the risk of losing that.

Senator MULLIN. The timing.

Mr. VOLK. It could maybe have a little more time or could use that at another point.

Senator MULLIN. Would it be helpful, instead of us, you know, at each municipality or each rural district, trying to apply for the grants themselves or the funding themselves, would it be helpful that if we were to allow, if Congress were through the EPA were to just simply give the money to the States that have, like in Oklahoma, DEQ, Department of Environmental Quality, in North Dakota I am sure you have got an environmental agency that could help manage it, too, give it to them and allow them to help disburse the dollars in areas and set the timing that you need that is more designed to actually be practical for you guys to achieve what you are trying to get done?

Mr. VOLK. Yes, Senator, normally that is how it would work with their base funding through the SRF program. They have an intended use plan that they would go off, and it is on a ranking system with their, if there is health issues or things like that. So they have that flexibility, it is just some of the tightness on some of this new——

Senator MULLIN. The timing. So the timing is the thing you need the most help with.

Mr. VOLK. Sure.

Senator MULLIN. OK.

Mr. Chairman, I yield back.

Senator CARPER. Thank you, sir.

Senator Padilla, please. Welcome.

Senator PADILLA. Thank you, Mr. Chair.

Let me begin, Mr. Chair, by just reminding you how proud I am of the work this Committee has done to address water affordability for underserved communities, while also working to expand access to water reuse and recycling and reduced lead in drinking water in terms of the foundation for the Bipartisan Infrastructure Investment and Jobs Act, as I know you are proud of.

This last June I chaired a Subcommittee hearing examining the challenges facing water systems across the country and the impacts of aging water infrastructure, as we have been talking about in this hearing already and the effect that aging infrastructure is having on the ability of families to pay their water bills.

The cost of water is rising. Household water and wastewater bills have increased 160 percent since 1998. Just to put it in context, that is a greater rate of growth than the rise in cost for electricity, for rent, or even medical bills.

In 2021, Congress created the temporary Low Income Household Water Assistance Program in response to the COVID-19 pandemic. We also authorized a new EPA pilot program to help water systems address low income water affordability. The authorization for LIHWAP, however, expires at the end of the month.

So I know Senator Cardin talked to you, Ms. Powell, earlier about your experience in taking advantage of the resources available and what it meant for customers that were able to receive aid. Can you emphasize for me and the Committee what the program expires at the end of the month, but you might be able to ensure that low income customers are able to continue to afford their water and sewer bills?

Ms. POWELL. Thank you, Senator Padilla, for the question. At WSSC Water, we are also looking to develop new customer assistance programs and enhance the customer assistance program that we already have. We found that by having LIHWAP in place we were able to assist more than 4,000 customers with the cost of their water and sewer bills. And that helped them get their accounts back in good standing. It also helped the utility to be able to move forward with our critical mission of investing in infrastructure and our people.

One of the things we are planning to do, and we have been working with water and wastewater utilities across the country, is to advocate for a permanent program. We need the authorization, and then we need the appropriations.

Senator PADILLA. You anticipated my follow up question, which was exactly that. I know it has been a temporary program. But it sounds like you believe a permanent program should be part of a Federal safety net.

Ms. POWELL. Absolutely. Because there are some States and communities that don't have the enabling legislation for individual utilities to have their own customer assistance programs. So having a Federal low income household water assistance program akin to LIHEAP which helps with energy costs is appropriate for this critical resource.

Senator PADILLA. Thank you for that.

I won't raise the subject of PFAS. Several of us have talked about it. I do want to associate myself with the comments, questions, and concerns raised earlier.

I will ask instead about another issue which is not unique to California, but California seems to be Exhibit A, the need to emphasize disaster resiliency. We have seen no shortage of both challenges and opportunities ensuring access to clean drinking water and safe wastewater, especially when it comes to natural disasters.

Just last week, communities in and around San Diego faced a boil water advisory after the first tropical storm hit southern California in 84 years. It was an anticipated hurricane, tropical depression by the time it made landfall. This comes after a winter where we saw more than 30 atmospheric river storms flooding communities throughout the State.

Yet, we are still emerging from a mega-drought that has stressed water supplies, not just in California, but throughout the west, and even here in the DC region, low flows have triggered drought operations.

So another question for you, Ms. Powell, how has the DC drought impacted your operations?

Ms. POWELL. Right now, we have normal operations. As I shared, we did have a call earlier this week to talk about how we will deal with the drought conditions. At WSSC Water, because we are mak-

ing upgrades to our Potomac plant, and we are also working to recover capacity in the reservoir that serves our Patuxent plant, we have specific limitations. So the drought conditions are exacerbating the limitations that we have to provide treatment.

So it is really critical that we plan for not only the future where water supply is concerned, but we plan for resiliency, which is why we have been working in the region to advance the water supply resiliency project that was in WRDA 2022.

Senator PADILLA. Thank you, and thank you, Mr. Volk. I know you have spoken about the unique challenges facing rural communities. Anything else you would like to add on how do you prepare for flooding, droughts, wildfires, any other natural disaster challenges?

Mr. VOLK. Yes, Senator. In North Dakota we do a lot of planning with winter storms, ice storms are very big, and making sure that if the power is interrupted that all our small communities can still keep enough water, whether it is for citizens or if there would be a fire. So it is a concern that we have in our northern climate. We all have our uniqueness on climate resiliency.

Senator PADILLA. Thank you very much.

Thank you, Mr. Chair.

Senator CARPER. I think Senator Kelly and Senator Sullivan are en route to join us.

Senator Padilla, before we leave, I just want to say thank you for your leadership on these issues and your leadership on the Subcommittee you chair. Thank you.

Senator PADILLA. And I should mention, the Subcommittee hearing, very bipartisan in spirit. Senator Lummis is my partner on the Subcommittee as Ranking Member of that Subcommittee. So we work in very bipartisan fashion, which I know you try to do at every opportunity.

Senator CARPER. You are a good team. Thanks very much.

Until we are joined by Senator Sullivan, I am going to ask a question, maybe another question of Secretary Biser. Would you please take a moment to discuss the disparity between the amount of money that companies spend to manufacture PFAS and the financial burdens on communities that must handle the cleanup of these chemicals?

Ms. BISER. Thank you, Senator.

My colleague in Minnesota and her agency recently did some studies on this very topic. What they found is that it costs to buy PFAS about $50 to $100 per pound. The cost to remove and destroy PFAS is around $2.7 million to $18 million per pound. So there is quite a disparity between those two figures.

Senator CARPER. That is quite a disparity.

One other question for all of our witnesses. Cybersecurity attacks on drinking water systems in the United States are of increasing concern, as you know, for utilities and the communities that they serve, as documented by a recent report by the American Water Works Association.

What additional resources are necessary for utilities to both invest in resiliency of their systems to cyberattacks as well as to respond to attacks as they occur?

Mr. Volk, would you lead us off?

Mr. VOLK. Mr. Chairman, another great question.

For an association, we strive to provide that technical onsite assistance to our small and rural communities with the cybersecurity. Even as rural and small a State as North Dakota, we are very hooked up to the world, which can be great and which can also be a curse to when the bad actors find us.

We have had some recent instances in some very small systems, there have been people that have got on there. They don't know exactly what they are looking at. Luckily, we were able to stop that. And our State is very active, we have some very intelligent experts working on that, and we are working hand in hand with our rural systems with them.

Senator CARPER. Good. Thanks for that.

Ms. Powell, same question.

Ms. POWELL. Yes, sir, our cyber infrastructure is just as important as the pipes in the ground. We have systems that are connected that have to be protected. We are under attack; there are bad actors that are trying to access our systems, every water system, all the time. I think the water sector is increasingly becoming a prime target for bad actors.

So the long and short of it is that funding needs to be there to support those efforts for cyber resilience as well.

Senator CARPER. All right, thanks.

Secretary Biser.

Secretary BISER. It is certainly a new challenge that is being presented to systems, and a clear and present danger to those systems. But I think having funding for training and technical assistance and any necessary upgrades, but again, the focus should always be on public health and how we are keeping that top of mind. Thank you.

Senator CARPER. Thank you.

We have been joined by Senator Sullivan.

How are you doing?

Senator SULLIVAN. Thank you, Mr. Chairman, I am doing great.

Senator CARPER. It is nice to see you. Ready to go?

Senator SULLIVAN. Ready to go, as always.

Senator CARPER. You are recognized.

Senator SULLIVAN. For the witnesses, thank you. Just real quick on the CERCLA question, I know it is an important one, I have a bunch of questions on some other topics, but is it safe to say that all three of you agree that there should be some element of limitation on liability, particularly in the PFAS-CERCLA related issue?

Was that your testimony, Ms. Biser?

Ms. BISER. Senator, I think it is a good conversion to have to look at any unintended consequences. We want to make sure that polluters are on the hook to pay and that we are not overburdening ratepayers, for example. So I think it is a topic that is worthy of careful consideration.

Senator SULLIVAN. OK.

How about you, Ms. Powell?

Ms. POWELL. I do think it is important for water utilities, as passive receivers, to have those protections, and that the focus be on the polluters bearing the costs.

Senator SULLIVAN. Yes. It is like airports and other entities, too, all of a sudden they are seeing, like in my State a lot of these entities will go bankrupt, and they weren't the reason for it.

What about you, Mr. Volk?

Mr. VOLK. Yes, those small and rural systems would totally agree they should not be held responsible for that, and the polluters should pay.

Senator SULLIVAN. OK, good.

Ms. Powell, and this is really for everybody, this Administration talks about environmental justice, environmental equity. I saw that in your bio. I have no issue with that. The problem, and I have said it in this Committee a million times before, the Biden administration has environmental justice and equity with a big asterisk, if you are an Alaska Native or indigenous person from Alaska, you don't get any environmental justice or equity. You get attacked by this Administration.

So yesterday we had another outrage, a legal outrage, the Administration canceled leases in the ANWR despite Congress saying you had to do it, and then they restricted the National Petroleum Reserve of Alaska, which was set aside by Congress, like 70 years ago, for oil and gas development.

Mr. Chairman, I want to submit the joint Alaska delegation press release on this for the record.

Senator CARPER. Without objection.

[The referenced information was not received at time of print.]

Senator SULLIVAN. The vast majority of the people in this press release are Alaska Natives, elected Alaska Natives, screaming, screaming, what are you doing, Deb Haaland? Why are you taking away our jobs? Why are you taking away our revenues?

This is environmental injustice for indigenous people in my State, and it happens every damned day with this Administration. I have said it 50 million times in this Committee.

But why do they get so outraged? I want to show this chart, I have also shown it a million times in this Committee. That is an American Medical Association chart from 1980 to 2014, what places in America had life expectancy increases. Unfortunately, some places in America actually had life expectancy decreases, mostly because of the opioid epidemic.

The place in our country that increased life expectancy the most by far was Alaska, up to 13 years. It was in our rural communities, our indigenous communities. Why? A, because it started really low. Life expectancy for Native Alaskans was the lowest in the country by far. But B, from 1989, we had responsible resource development, jobs, clinics, hospitals, very important to this panel, water and sewer.

So my constituents' life expectancy in a lot of these places, North Slope, Aleutian Island chain, up to 13 years. Thirteen years. What is more important, I have asked this many times, policy indicator of success more important than are the people you representing living longer? I don't know, and I don't think there is anything more important.

So yesterday this Administration took a whack at that. They are trying to make my constituents live less longer. Deb Haaland, iron-

ically, it is just shocking, she is a Native American, she attacks Alaska Natives every time she opens her mouth.

But anyway, what does this have to do with this hearing? Because a lot of the revenues that come from this kind of resource development go into water and sewer. My State has over 30 communities that don't have any running water or flush toilets. I think that is the most of any State in the country. It is all indigenous people.

So do you think that is environmental justice or racial equity? By the way, they are the most patriotic Americans in the country, because they all serve at higher rates in the military, Alaska Natives, than any other ethnic group.

So my question for the panel is, in terms of formulas, by the way, the EPA Administrator was in Alaska just over August. We did a meeting with Alaska Natives on these issues. I showed him that chart, I have shown him that chart many times. So in terms of the formula for water and sewer, don't you think it should prioritize, just for fairness, call it racial justice, racial equity, just call it good old American fairness, the communities that don't have anything first? There is a lot of talk about aging infrastructure on water and sewer. But I think sometimes we miss like no infrastructure.

So can I get the witnesses' response, just on a formula, shouldn't we be prioritizing communities in America that don't have anything, flush, no running water, no flush toilets, American citizens? It is not right in my view. But I would welcome any views on that.

Ms. Powell, maybe you can start.

Ms. POWELL. I will be happy to start, Senator Sullivan. And thank you for the question and the awareness.

I will say from a personal standpoint, and I have said it many times, I believe that equity is about communities having that they need so that all communities can thrive on equal footing.

Senator SULLIVAN. Like running water.

Ms. POWELL. Having been in the water sector for some time, I am not here to speak on behalf of the water sector, but I can tell you, I don't know anyone who believes that we should trade the needs of the underserved for the needs of the unserved. I think every community needs to have what it needs.

I think this historic investment in water and wastewater infrastructure or being able to provide water and wastewater infrastructure needs to be fully funded. It needs to be sustainable and long term, so that every community can thrive on equal footing.

Senator SULLIVAN. Thank you.

Anyone else?

Ms. BISER. Sir, we your concern with making sure that we are getting funding to those who need it the most. We actually change a lot of our processes to ensure that we are reaching, we have a lot of communities who were bypassed over the years for water and wastewater services. So we, in getting our funding, canvassed all the county public health departments to find out which communities did not have service, or did not have access to reliable service. Then we did outreach to utilities to encourage them to do projects to connect those folks.

So far, we are slated to connect over 2,000 homes to potable water for the first time. We are still working on that. It did require

us changing our process. Also, we do give extra points on our criteria to make sure that we are meeting those needs of our residents in all parts of our State, especially our rural parts of our State.

Senator SULLIVAN. Great.

Mr. Volk, do you have a final thought on this?

Mr. VOLK. In North Dakota, we have worked hard with various State partners, Federal partners, to meet the gap of those underserved, we do have four tribal nations to meet those needs. There are other places in the State where just like you described, there is limited water, limited sewage, even in this day and age. It is crazy, and yes, those should go close to the top.

Senator SULLIVAN. Thank you.

Thank you, Mr. Chairman.

Senator CARPER. You are welcome. Thank you, Senator. Glad you could join us.

Senator Capito, and then I will have a question or two, then we will wrap it up.

Senator CAPITO. Thank you, Mr. Chairman, and thank all of you for being here today. It is very interesting to see rural, urban, big States, small States, we all have some similarities and some different concerns.

My last question is around risk communications. We had an incident in East Palestine, Ohio, where there was a train derailment and great concern expressed by me and many others about the impacts on the water systems of the chemicals that were being carried, the hazardous materials that were being carried in the train and how it was handled.

We had a hearing on it, and one of the things that came out of the hearing was the risk communication, not just EPA, but I will use EPA in this case, because you all deal with EPA, in this case was not as good as it could be. So if you are in a community that is at risk because of an accident, a weather event, whatever, I am sure you have all dealt with this, I have had this in my own community, to have appropriate risk communication is absolutely essential. In other words, don't say something and take it back, or don't say something then expand on it 24 hours later. React immediately, use science, all these things.

I am going to ask you, Secretary Biser, what experience do you have in this, and how do failures in risk communications put additional burdens on your State? You have your State entities reacting, your Governor reacting, and I am interested in the Federal level risk communication.

Senator BISER. Thank you, Senator Capito. This is a very important issue and one we spend a lot of time thinking about at the department.

Certainly, when accidents happen, or one area we deal with a lot and actually work with EPA on a lot is with PFAS. As residents get testing on their drinking water wells and find out that they have high levels of PFAS, you want to make sure you are providing folks with actionable science based information, giving them what their options are and making sure you are consistent, as you pointed out.

We try to spend a lot of time in advance thinking through what questions residents will have. Sometimes you don't have as much time, as you pointed out with East Palestine. But we maintain web pages, we answer calls every day from residents who are concerned about these issues. We certainly work with our fellow States, local partners, and our Federal partners in EPA to make sure that we have a comprehensive and whole of government approach to ensure that no matter where they call, they get the same answer. We want to make sure there is consistency across agencies.

Senator CAPITO. Right. I think that is really important, particularly with PFAS. You see it in the media all the time, different types of reports. And EPA has not set the drinking level, which I have been pressing them for for probably now 3 years to do this. But they did set a level that is untestable.

So if they come back with a drinking level that is higher than the level they put out last year that could have some risk to it, here you have confused messages to people who find this in their water systems. So we have to get this right.

I appreciate what you all do every day, because I know you are dealing with it with all different kinds of maybe possible contaminants and other things that happen. But the general public relies on you to make sure that the information that they're getting is not just accurate but timely, and you are relying on other people to give you information. So I think that is an area we really need to stay on and be as vigilant as possible.

Thank you all very much. Thanks for being here.

Senator CARPER. Thank you, Senator Capito.

I have one last question, then we will wrap it up.

Ms. Powell, this is for you. The Bipartisan Infrastructure Law included, as you recall, some $15 billion in funding for lead service replacements. Many districts across our country have been busy this year creating service lines, line inventories and assessing what kinds of problems exist in their respective areas.

Has your water district been able to access Bipartisan Infrastructure Law funding to meet your obligations to replace lead service lines? What are the challenges you are experiencing as you work to address this challenge?

Ms. POWELL. Thank you for the question, Senator Carper.

As I shared in my testimony, I am happy that part of our progress is receiving some projected funding for our lead service line inventory and replacement work. Our lead service line inventory work is underway. And we are developing a comprehensive program, so that when we have that data, we will be able to help those that have lead service lines remove those lead service lines.

We believe that most are on private property, as we have been going through this process. So there will need to be policies to make sure that it encourages the removal of lead service lines on private property that we don't have access to. There also needs to be the funding in place to help those customers with that cost as well.

So I am happy to report progress. We are receiving, projected to receive funding, and we will look forward to applying for more as we know more.

Senator CARPER. All right, thank you for that. As we prepare to close, I am going to give each of you maybe 30 seconds for a closing thought you would like to leave us with. Then we are going to get ready to go start voting.

Mr. Volk, closing thought, please.

Mr. VOLK. Chairman Carper, Ranking Member Capito, thank you very much for letting me speak here on behalf of small and rural systems. These systems, and I can speak on North Dakota, they do a great job day in and day out, a lot of them on, like we talked about, shoestring budgets and limited staff. But they do a great job.

I want to just put a shout out to all those that work with the systems. Because sometimes in the water business when you make the news, it is not for good things. And that is a shame. They do great things every single day for the residents not only of our State but the Nation. That profession should be elevated to the highest levels. That is what I want to end with, recognizing those folks in the trenches.

Senator CARPER. Thank you; good. Most appropriate.

Ms. Powell.

Ms. POWELL. Thank you, sir, thank you again, Senator Carper and Ranking Member Capito, for having me here again. I always learn something when I come.

Senator CARPER. We do too.

Ms. POWELL. What I would also leave the Committee with is the need to focus on work force as well. We can talk about all of the funding we need for the infrastructure. But without having the people in place to maintain that infrastructure, to protect those millions of dollars of investment, we will be putting money into and not being able to maintain those investments.

So thank you, Senator Capito, for your focus on work force as well. And I just want to say thank you to Team H_2O.

Senator CARPER. All right, great, thank you.

I would say before we turn to Ms. Biser, I mentioned this to Senator Capito in an earlier conversation, during the month of August we were in recess, which is unusual for us to be out for a month. I spent part of that time just covering my little State, visiting a lot of businesses large and small, non-profits and other entities.

I always ask three questions of them. I would say, how are you doing, I would say, how are we doing, our congressional delegation, Federal Government, State government, and what can we do to help. I can't tell you how many times people said, what we need is folks who will come to work. We need people who are trainable, who have a good work ethic, who will come to work to learn how to do jobs. We have the lowest unemployment rate I think we have had in years, it is about 3.5 percent. Last time I checked that, I think we have about 8 million, almost 9 million jobs open right now that we are trying to fill, about 5 million people that are allegedly looking for work.

One of the challenges for us at the State level, local level, Federal level, is work force jelling and making sure we have the work force with the skills that are needed in all kinds of jobs, including some of the ones we are talking about here today. It is critically important.

Ms. Biser, please.

Ms. BISER. First of all, thank you for having me here today to talk about this historic investment. Thank you for your leadership in making that possible.

I want to continue the theme with a slightly different take, which is the work force development as it relates to State capacity to handle our job. The grants that we are giving out boomerang back to us in the form of permits. And we are facing an unprecedented level of retirement. To give you an example, a third of my department can retire in the next 5 years. We have a 24 percent vacancy rate for engineers.

Senator CARPER. Say that again, how much?

Ms. BISER. Twenty-four percent. You can ask any colleague of mine throughout the country, they are going to give you similar numbers. This is a major focus across the country.

Categorical grants from Congress make up 25 percent of my entire operating and staffing budget. And they remain stagnant. So while I know this is a policy Committee and not funding, I will just put a plug in that there is a nexus there, that as we are seeing stagnant rates of funding that our responsibilities are growing, that in order for us to make sure these programs are successful, we are going to need to make sure we have the resources to recruit and maintain highly qualified staff.

Thank you.

Senator CARPER. All right, thank you.

We have been joined by Senator Kelly.

We stretched this out as long as we could, and you are just in time. We are about to close this down. Go right ahead, we are glad to see you.

Senator KELLY. I am the last one, Mr. Chairman?

Senator CARPER. Yes, you are worth waiting for.

Senator KELLY. All right. Thank you. Thank you for waiting, and thank you, all of you, for being here today. It has been an important hearing.

Secretary Biser, I want to begin by talking about PFAS contamination in drinking water. I imagine that may have come up already.

As a member of the group of 11 Republicans and 11 Democrats that worked to negotiate the Bipartisan Infrastructure Law, one of the top priorities, my top priorities here was dedicated funding for drinking water systems to respond to PFAS contamination. It is a problem in Arizona, but it is also a problem across the country.

Thanks to our bipartisan law, more than $10 billion is being allocated to drinking water systems across the country to address this contamination. And in the State of Arizona, this funding has already been put to work helping drinking water systems specifically in the southern part of the State to install systems to remediate this growing PFAS plume that we see in the groundwater aquifer under where I live and where my wife lives, my granddaughter, who is 2, it is under Tucson.

Since the Infrastructure Law was passed, the EPA has developed new drinking water standards for PFAS. And the new proposed maximum containment level would be 4 parts per trillion, instead of the current guidance, which is 70, so much lower.

Secretary Biser, while the EPA has not yet finalized its drinking water standards, if the proposed levels were finalized, how would that impact our drinking water systems, and how many additional systems in the State of Arizona, as an example, would be required to do this PFAS cleanup?

Ms. BISER. Senator Kelly, first of all, thank you for your question, and thank you for your leadership on this very, very important topic.

I can speak to North Carolina's experience with that, and we have 43 of our large municipal and county systems that would not meet the 4 parts per trillion number that you cited as the proposed MCL.

I will say, though, broadly speaking, what is needed is, North Carolina got a head start because we had an industrial facility that kind of forced us to be a leader in this area and learn a lot quickly. So we have had a number of years to do assessments. Nationwide, States need funding to do assessments, to get a handle on where PFAS is.

The most cost effective way to treat it is actually to prevent it from happening in the first place. So we need funding to see where it is coming from, because the first step is to put down the shovel and stop digging, stop putting it into the environment and look at how we can better control that piece of it. We also need to get a handle on where we are finding it.

North Carolina has done extensive testing, both in large water systems but also in small. We are in the process right now of testing over 650 of our small water systems which serve mobile home communities, churches, day cares, other sensitive population centers.

Having the funding, having the ability to do that comprehensively is going to help us get our arms around it overall, and also ultimately decrease the amount of treatment costs that we are going to have associated with making sure that our drinking water is safe for public health.

Senator KELLY. Do you have a sense in North Carolina, then, how you would have to scale the removal system to get from 70 to 4? How many more systems would you have to add, and what do you think that cost would be?

Ms. BISER. Since there is not currently a drinking water standards, there had not been a lot of systems that were currently put into place. We do have two water systems that are larger that because of PFAS contamination, there were higher levels of PFAS contamination coming from the Cape Fear River, they had both put in place, one a reverse osmosis system and another a granular activated carbon system.

So those are out two examples that we are looking to right now. Based on their experience and the costs associated with implementation of those systems, we are estimating between $661 million and $1.3 billion for those 43 large water systems to come into compliance to be able to meet the 4 parts per trillion number. That does not include the small water systems that are going to need to put filtration in place.

So we don't have a number there yet, because results from those tests are starting to roll in, but we don't have a complete picture.

Senator KELLY. Are there any future methods to remove PFAS, anything that is being developed or any innovation out there that could get us to 4 parts per trillion at potentially a lower cost?

Ms. BISER. The reverse osmosis systems and the granular activated carbon systems are the two most common and very efficient measures that we have available to us today. I know there is a lot of research and development that is ongoing. I know within our university system they are looking at potential opportunities. But there are none that are scalable that I am aware of that are commercially available in a widespread fashion yet.

But I am encouraged that we have a lot of research and development going. I think we need more research and development, not only on the treatment systems themselves, but also how to assess and treat the spent media associated with those, so we have the ability to destroy the PFAS and not just perpetuate it within the environment.

Senator KELLY. Thank you.

Senator CARPER. Thanks for making the extra effort to join us.

I want to really close where we began, and that is to thank you not just for showing up today, not just for preparing for today, and not just for your thoughtful responses to the questions and the issues that we have raised. Members of this Committee are very proud of the work that we have done on infrastructure for our country. It is not something we do just at the Federal level, as you know, it is the State and local and private sector and non-profits and so forth. So it is very much a team effort.

Matthew 25, when I was thirsty, did you give me to drink. It doesn't get any more important than that, knowing when we turn on the spigots that what we are going to drink is safe for us and our families.

We usually have good attendance at our hearings, but this has been exceptional. It is reflective of how important our colleagues, Democrat and Republican, regard these issues and the need to continue to make progress. Everything we do, we know we can do better. You have given us some good input as to how we might be guided missiles as opposed to unguided missiles.

The Bipartisan Infrastructure Act made historic investments, as we said earlier, in drinking water infrastructure across our Nation. There is still a lot of work to do, as Robert Frost would say, miles to go before we sleep. Miles to go before we sleep.

So plenty of work to do. In Congress, we have every intention of remaining active. It is not just enough to write legislation and introduce legislation, vote on legislation in committees and on the floor, we have do our job of oversight. This is an important part of our job, and this is a serious part of that oversight.

We want to stay active to work with our State and our local partners to ensure that reliable, safe drinking water remains available to everyone in this country who has it, and for those who don't have it, that they get it.

Before we adjourn, just a couple of final items. I typically say to our staffs, we have some wonderful members of this Committee, both sides of the aisle, but we also are blessed with great staff. These hearings don't just occur. The staff collaborates, they work together, they pull together. There is a thoughtful panel of wit-

nesses week after week, month after month, and today is no exception.

But this is one of my favorite parts of the hearing. I get to ask unanimous consent to enter into the record materials related to today's hearing.

[The referenced information was not received at time of print.]

Senator CARPER. And I would add that Senators will be allowed to submit written questions for the record through the close of business on Thursday, September 21st, 2023. The thing I like about this is when I ask unanimous consent there is nobody here to object.

[Laughter.]

Senator CARPER. I know I will get my way.

So hearing no objection, we will compile those questions, we are going to send them to all of you. We would ask that you respond to us by tomorrow—no, no, by Thursday, October 5th. Thursday, October 5th.

I think with that, I would say one last thing to our friend from North Dakota, I know you didn't go to North Dakota State, but I used to tell your friends out there, take it easy on the Blue Hens. We are easily bruised and battered, especially with guys as big as you. It is not a fair fight.

All right, thanks everybody. It is great to be with all of you today. Take care, and God bless.

[Whereupon, at 11:59 p.m., the hearing was adjourned.]