S. HRG. 117–134

IDENTIFYING UNIQUE CHALLENGES FOR SMALL, RURAL, AND DISADVANTAGED COMMUNITIES IN ACCESSING AND MAINTAINING DRINKING WATER AND WASTEWATER TREATMENT INFRASTRUCTURE SERVICES (PARTS I AND II)

FIELD HEARINGS

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

OCTOBER 14, 2021—BECKLEY, WV; OCTOBER 15, 2021—DOVER, DE

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COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

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C O N T E N T S

IDENTIFYING UNIQUE CHALLENGES FOR SMALL, RURAL, AND DISADVANTAGED COMMUNITIES IN ACCESSING AND MAINTAINING DRINKING WATER AND WASTEWATER TREATMENT INFRASTRUCTURE SERVICES (PART I)

THURSDAY, OCTOBER 14, 2021

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Beckley, WV.

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The following hearing was taken at the Raleigh County Courthouse, Courtroom Number 3, 222 Main Street, Beckley, West Virginia, commencing at 10:00 a.m., before Teresa L. Harvey, a Notary Public, Registered Diplomate Reporter, and Certified Realtime Reporter within and for the State of West Virginia.

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P R O C E E D I N G S

CHAIRMAN CARPER: Good morning. I'm Tom Carper, United States Senator from Delaware and former governor of Delaware and a native of West Virginia, Beckley, as it turns out. So this is very much a home game for me and just a thrill. I said to Senator Capito and Senator Manchin coming in, it's just a thrill to be here.

And I want to thank Senator Capito, who is the lead Republican presiding -- who presides with me over the committee on -- Senate Committee on Environment and Public Works. And we have a great partnership. And one of the things we've worked on for quite a while is infrastructure, and along with Senator Manchin, who chairs the Energy and Natural Resources Committee. But it's a shared responsibility and it's something that we're delighted and honored to be able to work on together.

I -- this is -- you've heard in baseball a day-night doubleheader, a night doubleheader. This is a West Virginia/Delaware doubleheader. And the day game is right now here in West Virginia and the night game -- actually, it will be in the daytime, but tomorrow will be in Dover, Delaware, capitol, and we'll have the opportunity to hear from folks in the greater Delaware

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area about wastewater infrastructure, and we're going to start off right here.

Just a personal note. My -- my parents were born in Beckley, actually, Eccles. My great-, great-, great-, great-, great-, great-grandfather, I think, was one of the cofounders of Raleigh County. And there's a cemetery not too far from Beckley called Mount Tabor, Mount Tabor Baptist Church, where my mom and grandparents were buried. And so we went out there earlier today. So this is just very special, very special to me, so thank you.

My parents -- my grandparents were hugely, really very spiritual people. My mother was a very spiritual person. She used to drag us to a little Bible church right in front of -- about a hundred yards from Shady Spring High School, when my sister and I were born and we were little kids. And one of the things that my mom was big on was Matthew 25.

What does Matthew 25 say? When I was hungry, did you feed me? When I was naked, did you clothe me? When I was thirsty, did you give me to drink? Did you give me to drink? It's right there in the first Gospel in the New Testament.

And if you look at the Declaration of Independence, it's right there, too. And it says a

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little bit different, but life, liberty and the pursuit of happiness, the words of Thomas Jefferson. Pretty hard to have life, liberty, and the pursuit of happiness if you don't have clean water to drink. It's actually where life begins. So this is I think a -- there is a moral imperative involved here. There's an imperative that's really consistent with our Constitution of our country and with our Declaration of Independence.

And we're thrilled. I'm thrilled to be here with Shelley and Joe and our witnesses and all of you. I have about a forty-minute statement I want to give. Not really. It may seem that long, but it will not be that long.

I will say this. Yesterday when Joe was -- where's John? John Kane is right here. John and I flew in from Philly and landed in Charleston, and we met up with my first cousin, Bob Collier, who is associate bursar at Marshall. And we had dinner together. But he told me, he said when we're walking around the Capitol -- and what a beautiful Capitol. I don't know if you've been to your Capitol lately. My wife and I have been visiting this summer a lot of state capitols on a road trip, and but you have the most beautiful Capitol. God, is it a beautiful Capitol.

And there is a monument there -- Joe, as I'm

sure you know, there's a monument there that honors those who gave their lives in World War I, World War II, the Vietnam War, where I served, Korean War, other wars. And my -- while we were waiting for my cousin to arrive from Huntington to have dinner with us -- what was the name of that restaurant? Do you know the name of that restaurant in Charleston?

SENATOR MANCHIN: Chop House?

SENATOR CAPITO: Ten Ten?

CHAIRMAN CARPER: Ten Ten. Yeah, a place called Ten Ten.

Anyway, while we were waiting for him, he said walk around and find this monument. And we did. And, you know, World War I, World War II, Korean and everything. He said look -- get in there and look at the World War II section. And he said look about 8 feet high and then follow the alphabetical and find Patton. And sure enough, there it was, Robert Kidd Patton, who was my uncle, who died in a kamikaze attack in World War II. And he's buried -- he's not buried anywhere because he was lost at sea, but there is a tombstone in his honor at Mount Tabor.

So that's probably more than you wanted to know, but people say why would I want to come to West Virginia? That's why. That's why. Thrilled to be here.

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Well, good morning again, everybody. My thanks to Shelley and to Joe. Shelley does a terrific job on our committee and I want to mention this later. Joe Biden asked us, Shelley and myself, two other -- a Democrat and a Republican, literally two or three days after he was sworn in, he said, "We need for your committee to lead the way on infrastructure, roads, highways, bridges, drinking water, wastewater, sanitation. We need for you guys to set an example for the rest of the Senate."

And about two months later we reported unanimously out of our committee, unanimously, water -- cleaner drinking water legislation, wastewater sanitation, service transportation, roads, highways, bridges, climate. Unanimously, I think by the end of March. And later on that water bill passed by 89-to-2 in the Senate.

Joe knows, we don't pass a lot of bills by 89-to-2 in the United States Senate, but we sure did in this case.

So this is the stuff that we worked on. And later on Shelley led the effort, Joe led the effort, to try to find common ground on infrastructure, and our legislation out of our committee became the foundation on which the infrastructure package that's in the House,

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awaiting adoption, I hope. And so we have been heavily involved in this stuff for the better part of this year, and before that in previous Congresses.

Today we're joined by an excellent panel of witnesses. Mr. Roberts, Jason; right? Is it Jason?

MR. ROBERTS: Correct.

CHAIRMAN CARPER: Jason, I see. Where are you from?

MR. ROBERTS: Mercer County, sir.

CHAIRMAN CARPER: Mercer County.

MR. ROBERTS: Right outside of Princeton.

CHAIRMAN CARPER: Very good. Nice to see you.

Mr. Morgan, Wayne Morgan. Where are you from, Wayne?

MR. MORGAN: I was born in Fairmont and now live in Charleston.

CHAIRMAN CARPER: Do you know anybody else who is from Fairmont who turned out okay?

I think you do.

And Alan -- I was a freshman congressman with a bunch of guys from here in West Virginia. One of them was Congressman Alan -- I can't -- his last name --

SENATOR CAPITO: Mollohan.

SENATOR MANCHIN: Mollohan.

CHAIRMAN CARPER: Alan Mollohan. I think

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Alan was from Fairmont.

SENATOR MANCHIN: Fairmont.

CHAIRMAN CARPER: There you go.

And Mr. Grinstead. Mr. Grinstead, is it Todd?

MR. GRINSTEAD: Yes.

CHAIRMAN CARPER: Hey, Todd. Where are you from, Todd?

MR. GRINSTEAD: Mason County.

CHAIRMAN CARPER: Mason County. Well, that's great. You're great to come today.

Thank you all for being here to discuss the challenges that are facing our country and our state, this state and my state, and we thank the witnesses especially for being here to discuss those challenges facing wastewater infrastructure, particularly those that are not in urban areas or areas that have plenty of money, but small areas, rural areas, disadvantaged areas and disadvantaged communities where it's consistent with Matthew 25, where you find the least of these who needs all kinds of help. And one of those ways they need help is having clean water to drink.

But again, it's great to be back in Beckley. And my sister and I used to -- we lived up for a while in Beaver, right on Beaver Creek. And I don't know if you guys ever lived close to a creek. Anybody here live

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close to a creek or river? We also lived by the New River, too. We used to go and play down by Beaver Creek every day. Every day. And we'd fish there. We'd try to catch frogs and stuff there. My parents would never let us eat the fish. We would never eat the fish. The reason why is because it wasn't safe to do that. And some of the nearby septic tanks that residents relied upon were not well maintained, and as a result, we had raw sewage and other pollution slipping into the Beaver Creek and making it really poison.

A lot has changed since then. A lot has changed since then. Congress passed the Clean Water Act and the Safe Drinking Water Act decades ago, and then the nearly fifty years since then we've made significant progress in cleaning up our nation's waterways and improving our treatment systems to prevent wastewater from ending up in our rivers and our streams.

Despite this progress, far too many communities around our country continue to struggle. They struggle with outdated wastewater systems. They struggle with 20th century infrastructure that can't keep up with 21st century threats like climate-related extreme weather, incredible floods, incredible winds, droughts, you name it.

These challenges are well documented and every

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four years these -- an outfit called the American Society of Civil Engineers, they put out a report card. Just think about the end of school. They put out a report card every year. And they're assessing the infrastructure, what kind of job we're doing with respect to our infrastructure.

I'd like to say the grades are getter better. They're not. In fact, the grades have not been great lately. The 2021 report this year, report card, said our wastewater treatment facilities received a grade of D-plus. D-plus as a nation underscoring -- if I brought a D-plus back home on my grade card when I was a little kid in grade school here, I would have been -- I would have been hiding under a bed before showing that to my dad. But we are receiving a grade of D-plus as a nation, underscoring a need to upgrade these services across our country, and particularly in states like West Virginia and states like Delaware.

I don't think any of us take much pride in that grade, and we can do better. And we've got to do better. I like to say everything I do, I can do better. We can do better at this as well. We need to.

But every household, be it a family in Appalachia, one in rural Georgia, should have the peace of mind that when they flush the toilet their waste

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won't end up polluting the community in which they call home. Yet far too many towns and municipalities struggle to attain the resources and capital needed to modernize the wastewater system. We must find a better way, and that's where Congress comes into the equation.

I talk to Joe and, excuse me, Senator Capito and Senator Manchin, who've heard me talk a lot about shared responsibilities and joining our former governors -- and states have responsibilities for this. Counties have responsibilities. The private sector has responsibilities. We as taxpayers have a responsibility, and the federal government has a responsibility. We want to make sure all of us, including the federal government, are meeting their responsibilities.

But earlier this year, Senator Capito and I got to work, as I said earlier, drafting the Drinking Water and Wastewater Infrastructure Act. Now, that's the name. And after leading Senate passage of the bill, this bill we passed unanimously out of committee -- out of the Senate Committee on Water and Infrastructure, we passed it by an 89-to-2 vote, and it became the foundational piece, as I said earlier, this bipartisan infrastructure bill, that Senator Capito and Senator Manchin helped to lead.

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Now we're working with our colleagues over in the House. We passed the bill by a huge margin. Mitch McConnell voted for it. A bunch of Republicans joined us and we passed it by a big margin. We're working with our House colleagues to send this massive bipartisan compromise to the President's desk.

There is a whole lot more than just drinking water, wastewater and water sanitation. There's a lot more than roads, highways, bridges, climate. It does a lot more than that, our ports, our railroads, and broadband, which we need infrastructure hugely here and in my state as well. It does a whole lot. And we desperately need for the House to pass that bill and send it on to the President and get it signed and getting our economy up into high gear.

But our bipartisan bill invests more than $35 billion in water resource development projects across the country, $35 billion across the country.

Say compared to what? Well, compared to a whole lot less. It's a very, very significant increase. And a lot of it's coming directly to communities in which the need is the greatest. To put it simply, our bill -- our bill is good for this country. It's especially good for West Virginia. It's especially good for West Virginia.

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And here's how:

First, our bill provides something like almost $15 billion for something called the Clean Water State Revolving Loan Fund, for every state has a clean -- it has two revolving loan funds. One of them is for clean drinking water, the other is for just essentially wastewater. And it's a resolving loan fund that the federal government feeds into to maintain. States feed into it. And jurisdictions can borrow money out of either revolving loan funds. They got to pay it back. They got to pay it back. That's the catch. They got to pay it back with interest.

But the revolving loan funds will help West Virginia finance a variety of community and statewide water infrastructure projects.

Next, our legislation will also improve sanitation in rural areas. It provides something like $780 million, it's about three-quarters of a billion dollars, for connecting low-income households to wastewater services and provides up to a third of a billion dollars for sewer overflow and sewer and water reuse programs in rural and financially distressed communities.

Finally, our bill includes $125 million for water infrastructure resiliency programs in underserved

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communities that most of our vulnerable population can adapt to and prepare for the impacts of growing threats like extreme weather.

This legislation has earned praise across the political spectrum and from industry leaders as well. And why is that? It's because investing in water infrastructure not only pays for itself, it also fosters economic growth. And as recovering governors and as a United States senator who helps lead this committee, we know governors don't create jobs; senators don't create jobs; presidents don't create jobs. We help create a nurturing environment for job creation.

And as a guy who spent half my life on economic development and job creation in Delaware, I can assure you, businesses don't want to be in a state where the water systems are bad, where the water is unsafe. They just don't want to be there. They'll find another place. And that's why this legislation is especially important for states like West Virginia. It's really struggling to get it to regain its footing on economic development.

So how's this for the deal: The Commerce Department says that every dollar spent on water and wastewater services leads to about $2.60 in revenue for the rest of our economy. Let me say that again. For

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every dollar we spend on water and wastewater services, we get a payback of almost $3 in revenue for the rest of our economy. And adding one job in water and wastewater industry creates nearly four additional jobs for the economy overall.

So we have an opportunity to invest in cleaner, safer water for our communities and get our economy moving at the same time. And in my book, that's a win-win, maybe a win-win-win situation.

Let me close by saying this: Clean water is an essential part of our healthy lives, healthy economies, and a healthy environment. Again I say -- I'll reiterate for you, we have a moral responsibility here, a moral responsibility to ensure that our water is clean and safe to drink for everybody. And we can do so in a way that empowers our economy and creates good-paying American jobs.

I look forward to getting -- working with Senator Capito and Senator Manchin, our colleagues in the House and Senate, Democrats and Republicans, and the President. And the President gets the goal across the finish line in helping communities from Beckley, West Virginia, and Ellendale, Delaware, which would remind a lot of you of the towns and communities in West Virginia.

With that, I want to turn to our committee's

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ranking member, Senator Capito, for her opening remarks and introduction of today's witnesses. I could not have a better partner in the United States Senate to serve on this committee with, somebody who is just interested in getting things done, looking out for people, doing the right thing. And she has wonderful staff as well. None of them are here today.

No, they're here. I'm going to ask Shelley's staff to raise your hands, please. And our staff as well on my team. John. Okay. And they work together. If we're in a room together -- Shelley and I meet every Thursday and just talk things over. If we're not together, then we're on the phone. And if you walk through that room, that meeting, if you didn't know whose side was on whose side, you wouldn't know. It's just that kind of collaboration, which I think is what the American people want.

I'm thrilled to be here. Thank you, Shelley. This is your show --

SENATOR CAPITO: Thank you.

CHAIRMAN CARPER: -- so thanks for inviting me to come.

SENATOR CAPITO: Well, it's a real honor for me to be here with my chairman, Senator Tom Carper of Delaware, and also to be with my fellow senator from

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West Virginia, Senator Joe Manchin. I think the fact that Senator Manchin joined us as a partner here today shows not just how well Senator Manchin and I work together as representing West Virginia in terms of that, but how our two committees -- Senator Manchin is the Chairman of the Energy and Natural Resources Committee. Senator Carper and I are over on EPW, and there's a lot of crossover between different areas and different areas of interest, so I thank -- I thank him for coming today.

So welcome home to Senator Carper. I think that -- I think that you can tell that the good, solid upbringing that Raleigh County brought to Senator Carper still holds dear to his heart, and also the values that he embraces. I think probably his entire life were rooted here among the great folks of West Virginia. So we're very proud of that.

And we do know that Carper is a good West Virginia name as well, so I'm sure he has more relatives around here than he really knows about.

I also want to thank Judge Poling for arranging for us to use his courtroom today, and all the people that work for him. I want to thank the sheriff and the deputies for providing the securities that we need and that we've asked for, so I appreciate that.

I want to thank my staff and also Senator

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Carper's staff, and I want to thank the press for coming and covering this. I think it's important for our state, and we have some good witnesses here today.

I'm not going to go back through a lot of what Senator Carper said about specifics of the bill that we passed, but I do have an opening statement, and I want to also again talk about where my area of interest has been is when you're looking at small and disadvantaged and rural communities, when you're trying to look at funding mechanisms and the ways to deliver something that we all take for granted in some sources, but some people wake up in the morning and can't, and that's safe and clean drinking water.

So, we did pass that legislation. We voted it off the floor 89-to-2. He remarked that it's rare that we send anything out 89-to-2, and that is very, very very true.

One of the questions I get all the time is, "Do you-all ever do anything together?" And the sad note about that is we do a lot together, but it doesn't get the kind of, I guess, publicity or good -- good feeling -- we don't get -- we don't talk enough about the things that we do. We talk too much about the things that we don't agree on than more about the things that we do agree on. And in this area, where we're

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looking at water infrastructure or roads and bridges and broadband, we have great consensus.

So we're waiting with bated breath, the three of us, for the House to pass the bipartisan infrastructure package of which this water bill is fully a part of this, but also a lot of other really good things that will be great, not just for West Virginia, but for Delaware.

And I would say that I think one of the reasons that Senator Carper and I get along as well as we do, and we do, and I think a lot of it is because of his efforts to include me in all the decision making, and our staffs work very well together, is the fact that we're from small states. And he knows that we know each other. And he knows that we have -- and in the course of our businesses, or doing our business, we run into each other in all kinds of different ways, and sometimes that's in personal ways.

I would make note that I am the only person on the dais here that has not been the governor of a state, so bear with me here. These governors can be pretty tough guys, I can tell you that. They're used to getting things done, that's for sure.

So there are many critical water infrastructure needs that the Environment and Public

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Works Committee have heard about, and we need to address these right now.

I look forward to hearing the perspectives from our witnesses and I thank them for coming. I know that we had originally had another date planned and they reworked into their schedules for them to attend with us today.

But every day Americans rely on the infrastructure that supports our wastewater systems. They are systems that this nation prides itself on. When I was reading Mr. Morgan's statements, I was actually educated to the fact that many of these systems were built in the '70s to last for 50 years. Well, we're right there. And, you know, I think some of these systems were built probably in the '10s and '20s, and so they're edging onto 80, 90, 100 years.

We are facing critical challenges in the resiliency of these systems, with many small and rural counties being disproportionately affected by the wide array of water infrastructure challenges. Small and rural communities are particularly strained and need additional support to ensure protection and availability of this resource.

As I said, many of our systems are very old, and some of our systems don't even know where their

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piping is. We did address that in our water bill, because the Macon records really were created post the delivery of the infrastructure systems.

These are not unique to West Virginia or Delaware. They're all over the country. So I'm committed to addressing these challenges by facing our infrastructure problems in the water area expeditiously and bipartisan with a holistic approach.

We need a reliable, modern water infrastructure. It's a fundamental responsibility of our government, and that's why the Drinking Water and Wastewater Infrastructure package that -- I'll call it DWWIA for short -- provides some of this. It ranges solutions to ensuring that systems have pipes that don't leak. There have been article after article in West Virginia about the loss of water in our pipes. When we look at, you know, losing 50 percent of the water after it's been treated going out to different homes and businesses, and then you look at our friends in California who have huge water shortages, you know, we can't -- water is that precious resource that we need to really make sure that we take care of.

But we also ensure that there is sustainable water workforce in place, and I'm sure we'll address this, to maintain and operate these systems and to

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ensure that there is tailored funding for the resilience and sustainability for small and rural systems.

So we provided a robust bipartisan solution in DWWIA and we'll hopefully, as it's included in the larger bipartisan infrastructure package entirely and verbatim -- they didn't change anything, which is rare -- we are hopeful that our colleagues will all address this in the House and we can get it to the President's desk.

So again, I'm very pleased that you are here, honored that you are here, and happy that you've had a great experience as we move into -- as you've had your visit and your coming home visit, your homecoming.

So do you want me to introduce the witnesses and then we'll go on?

CHAIRMAN CARPER: Would you, please.

SENATOR CAPITO: I will.

Our first witness, starting left to right, is Todd Grinstead. Todd is the Executive Director of the West Virginia Water -- Rural Water Association. He has a career 40 years in the public water and wastewater industry. He served on the Board of the West Virginia Rural Water Association in various positions.

Welcome, Todd. We're happy to have you here.

MR. GRINSTEAD: Thank you.

SENATOR CAPITO: Our second witness is Wayne

Morgan. Wayne graduated from West Virginia University. He has a Bachelor's in Civil Engineering and a Master's in Business Administration. He was at American Water systems for 25 years. I guess 11 of those in West Virginia; is that correct?

MR. MORGAN: Correct.

SENATOR CAPITO: Because it says 14 in New Jersey.

And he was in charge of my water and Joe's water, so we're grateful to you, Wayne, for that.

He has a certified drinking water operator's license. And welcome to you, and I'm glad that you're here today.

He is the Executive Director of the West Virginia Infrastructure and Jobs Development Council.

Our final witness today there is Jason Roberts. He's the Executive Director of the Region 1 Planning and Development Council. Jason graduated from Concord and has a degree in geography.

Gosh, I don't even know if I've met somebody who has a degree in geography.

CHAIRMAN CARPER: Not just one, two.

SENATOR CAPITO: Oh, two. Yeah. Oh, he's got a master's. Now I know I've never met somebody who has a master's in geography.

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CHAIRMAN CARPER: He's probably doubling down.

SENATOR CAPITO: Doubling down.

Jason and I have worked a lot on the broadband issue with my office. He's been a real innovator, I think, in his area to try to recreate jobs in an economic development system in southern West Virginia, which has had particular challenges over the last several years.

So welcome, Jason.

I'm glad that you all are here, and I'll turn it back to the Chair.

MR. ROBERTS: Thank you.

CHAIRMAN CARPER: Thanks for the introductions. Thanks even more for pulling this panel together. This is a great panel, and we're looking forward to what they have to share with us and maybe answer a question or two.

Let me yield to Senator Manchin for a couple comments and then we'll turn it over to our witnesses.

Joe.

SENATOR MANCHIN: Well, first of all, thank you. Thank you, Senator Carper, and thank you, Senator Capito, for allowing me to be here today to observe and work with you-all. Our committees do have an awful lot of overlap with energy, natural resources, and also with

EPW, and we work very closely together.

Tom always told me -- I get to tell you about Tom. Before I knew Tom, I was governor. And governors have kind of a bond. And Shelley has not been removed from the governorship. Her father was governor three times.

SENATOR CAPITO: So I know what they're like. I know what they're like.

SENATOR MANCHIN: She knows how difficult we can be.

Anyway, with that, when I first met Tom he said, "Question for you. Quiz. Name the only senator sitting in the Senate today that was born in West Virginia."

Well, by that time, we had Senator Byrd and Senator Rockefeller, and I knew neither one of them was born in West Virginia. I said, "I'm not sure."

He says, "I am. I'm the only one that was born and representing West Virginia that was born in West Virginia."

So we have three of us here on the most important committees for West Virginia and that speaks volumes, I think, for our state. We do work well together. Contrary to what you hear and what you read in the paper and what you see on TV, everything is so

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toxic and disjointed. It's not. The hardest thing we have is the leadership working together. We're fine. Sometimes the leadership has a different agenda than what we have, which is basically to represent the people that we do.

When we look at West Virginia, we have been identified as $1.5 billion of need in water and wastewater, $1.5 billion. That's a tremendous amount. And I always wondered, how did that go so unattended. And I think it's basically we take that for granted. We assume that everyone should have clean drinking water and everyone should have basically potable water to where you can dispose of your waste and do it sanitary. But it's not the case.

So there was $678 million in the American Rescue Plan that came directly to the cities and counties, and hopefully the three categories was water, sewer, and internet. And I'm anxious to hear about how that's going toward working with the State of West Virginia on the $1.5 billion.

In the infrastructure bill, which we all worked on very, very closely to get the bipartisan infrastructure bill passed with 69 votes, there was $5.75 billion that will directly benefit and affect the State of West Virginia, 5.75 on top of what we already

have. Now, if we can't fix internet and if we can't fix water and sewer, God help us.

So we've got a golden opportunity if we can just get this bill sitting over in the House passed. Tom has been pushing it and those two have worked great. They pushed out some pieces of legislation. We used that as the model for the bipartisan bill, passed it, and now we've got something ready to go that all the country is going to benefit by.

So I'm anxious to hear today how we can all work together even further and what we can do to assist you-all, so I'm here to back them up and help them any way I can.

Thank you, Senators.

CHAIRMAN CARPER: Thank you so much. Thanks for those comments, and with that --

SENATOR MANCHIN: And I will say this: My wife is from Beckley, so I spent a lot of time in Beckley. And Gayle couldn't be here today. She wanted me to tell you, Tom and Shelley, that she is on the path on the ARC, Appalachian Regional Commission, and that's another focus for West Virginia.

CHAIRMAN CARPER: It turned out Gayle -- it's a small world. Delaware is a small world. There you go. Gayle graduated from Woodrow Wilson High School.

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Dan Patton, my first cousin, graduated from Woodrow Wilson High School, Patton's Market on Harper Road. And they were in the same graduating class. It's just amazing to me.

All right. Who should we go with first?

SENATOR CAPITO: Start with Todd.

CHAIRMAN CARPER: Todd. Todd, you're on, my friend. You've got two hours.

MR. GRINSTEAD: I need a little more than that, but all right.

CHAIRMAN CARPER: That's enough in the Senate -- that's enough to clear our throats.

MR. GRINSTEAD: Good morning, Senator Capito, Mr. Chairman, and members of the Committee, and Senator Manchin. It's an honor to appear before you today and have the U.S. Senate Committee on Environment and Public Works to hold its field hearing here in Beckley to talk about West Virginia and national water issues.

I'm Todd Grinstead, the Executive Director of the West Virginia Rural Water Association, where I have worked for the past two years. I formerly worked for the Claywood Park Public Service District for 23 years in western West Virginia, outside of Parkersburg.

Our member communities have a very important public responsibility of complying with all applicable

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regulations and supplying the public with safe water and sanitation.

The Environment and Public Works Committee is very important to rural and small town America. We are grateful for the numerous ways the Committee has included rural America in crafting federal water and environment policy. Over the last 50 years, this country has made great advances in the standards of living in rural America and rural West Virginia. Millions of rural Americans now have access to public -- safe public drinking water that their parents did not have.

A crucial part of our mission as the Rural Water Association is to travel directly to all small, rural communities and assist them with operating, governing, financing, upgrading, and maintaining their water and wastewater infrastructure.

West Virginia has 835 public water systems, which 431 are community water systems. I have included an entire database of West Virginia public water systems in my written statement.

On behalf of all small, rural communities in all the states, thank you, Senators Capito and Carper, for crafting and passing the Drinking Water and Wastewater Infrastructure Act. We are counting on

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Congress to pass this bill later this year and see it signed into law by the President.

We are grateful for your legislation that includes numerous beneficial provisions, such as the expansion of technical assistance, subsidized funding initiatives within the State Revolving Funds targeted the communities with the greatest need.

We also appreciate your legislation does not include federal unfunded mandates on local governments.

Moreover, we are grateful for your attention to enhancing the technical assistance authorizations under the Safe Drinking Water Act and the Clean Water Act.

In addition to funding assistance through the State Revolving Funds, small rural communities need help with technical assistance and training with funding applications, understanding all the complicated EPA rules, including the new lead and copper rule, and training of new operators.

Small rural communities have relied on local on-site technical assistance and training to comply with the myriad of federal EPA regulations. The EPA needs to recognize that small local water supplies are operated and governed by people whose family drink the water every day and are locally serving their communities.

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The most successful approach to technical assistance is the circuit runner concept created by Congress, which provides an expert experienced in water utility operations and compliance. This expert can travel directly to small rural communities as needed to assist the rule compliance and operational issues.

Circuit riders work free of charge to small communities, which offer savings in community of thousands of dollars by aborting consulting fees.

Small municipalities in West Virginia would like to sincerely thank Congress for the funding received for the over $1.9 trillion COVID-19 stimulus package, otherwise known as the American Rescue Plan Act.

A large concern of many of West Virginia's small and disadvantaged communities are aging water infrastructure, future EPA compliance, and the need to expand our existing water utilities to serve and maintain West Virginians who still don't have adequate water or sewer service.

We still have more ridges and hollers that need water. It's a sad reality that, in 2021, there are rural communities and families that still do not have access to safe, clean drinking water or proper sanitation, due to the lack of population density or

Testimony of
Todd Grinstead
of the
West Virginia Rural Water Association
before the
U.S. Committee on Environment and Public Works
Subject: Drinking Water and Wastewater Infrastructure
October 14, 2021 (Beckley, West Virginia)

Introduction

Good morning, Senator Capito, Mr. Chairman, and members of the committee. It is an honor to appear before you today and have the U.S. Senate Committee on Environment and Public Works hold its field hearing here in Beckley to talk about West Virginia and national water issues.

I am Todd Grinstead, the Executive Director of the West Virginia Rural Water Association, where I have worked for the past 2 years. I formerly worked for the Claywood Park Public Service District (PSD) for 23 years in western West Virginia outside of Parkersburg. Our member communities have the very important public responsibility of complying with all applicable regulations and supplying the public with safe drinking water and sanitation every second of every day.

The Environment and Public Works Committee is very important to rural and small-town America. Every federal dollar that has been granted to the many thousands of small towns to build, expand, and maintain their drinking water and wastewater infrastructure through the State Revolving Funds was authorized by this committee. We are grateful for the numerous ways this committee has included rural America in crafting federal water and environmental policy.

Over the last 50 years, this country has made great advancements in the standard of living in rural American and rural West Virginia through the combined financial assistance of the state revolving funds and the U.S. Department of Agriculture's rural water grant and loan initiative that has exceeded 100 billion dollars. Millions of rural Americans now have access to safe public or "piped" drinking water that their parents did not have. In addition, thousands of rural communities now have public sewer or wastewater systems that have eliminated millions of questionable septic tanks, cesspools, straight pipes, or worse. This rural water infrastructure development has been the engine of economic development and agricultural technology advances in rural communities. It has also provided for dramatic improvements to the environment and public health.

A crucial part of our mission at the rural water association is to travel directly to all small and rural communities and assist them with operating, governing, financing, upgrading, and maintaining their water and wastewater infrastructure. This includes compliance with a myriad of 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.

When thinking about national water infrastructure proposals, please remember that most water utilities are small and have more difficulty affording public water service due to a lack of population density and economies of scale. Most water supplies in the U.S. are small; 94% of the country's approximately 50,000 drinking water supplies serve communities with fewer than 10,000 persons, and 80% of the country's approximately 16,000 wastewater supplies serve fewer than 10,000 persons.

West Virginia has 835 public water systems, of which 431 are community water systems. Only one of these water utilities serves populations of over 100,000 persons, and only 25 serve a population with more than 10,000 persons. That means 810 of 835 total public water systems serve fewer than 10,000 persons. I have included the entire database of West Virginia public water systems with my written statement. My former water utility, Claywood Park PSD, has approximately 4,000 service connections.

West Virginia Public Water Systems' Demographics (EPA) SDWIS Database (2021)

GPRA Inventory Summary Report

Population Size Category	<=500		501-3,300		3,301-10,000		10,001-100,000		>100,000		# of Systems	Population Served Count
	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count		
PWS Type Code												
CWS	122	23,252	219	349,151	65	343,994	24	612,777	1	200,679	**431**	**1,529,853**
NTNCWS	59	9,349	11	15,479	3	12,624					**73**	**37,452**
TNCWS	328	20,653	2	1,837	1	3,974					**331**	**26,464**
Grand Total	**509**	**53,254**	**232**	**366,467**	**69**	**360,592**	**24**	**612,777**	**1**	**200,679**	**835**	**1,593,769**

SUBMISSIONYEARQUARTER is equal to **2021Q3**
and PRIMACY_AGENCY_CODE is equal to **WV**
and NPM_CANDIDATE is equal to / is in **Y**

The Rural and Small Community Dilemma

Small and rural communities have more difficulty affording public drinking water and wastewater service due to lack of population density and economies of scale. This challenge is compounded by the fact that rural communities have lower average median household incomes and often have higher poverty rates. Likewise, we have a much more challenging time complying with our federal Clean Water Act permits and Safe Drinking Water Act (SDWA) regulations and operating complex 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 - and often operate similarly complex treatment systems that are smaller in scale but no less sophisticated to operate and troubleshoot. Many small communities have only one operator with multiple duties - not just water treatment - while a large community may have a team of technical experts including engineers, chemists, and highly trained operators - all serving as part of their community's full-time staff.

Thank You for Authoring the Drinking Water Infrastructure Act of 2020 (DWIA)

On behalf of all small and rural communities in all the states, thank you, Senators Capito and Carper, for crafting and passing (in the Senate) the "Drinking Water and Wastewater Infrastructure Act." We enthusiastically support the enactment of the bill and appreciate the many helpful and beneficial provisions for rural America in your water legislation. We are counting on Congress to pass the bill later this year and see it signed into law by the President. Your legislation includes numerous beneficial provisions such as the expansion of technical assistance, subsidized funding initiatives

within the state revolving funds targeted to the communities with the greatest need, newly targeted funding assistance to disadvantaged communities, etc. We also appreciate that your legislation does not include any new federal unfunded mandates on local governments.

Moreover, we are grateful for your attention to enhancing the technical assistance authorizations under the SDWA and CWA. We look forward to working with you on the following water policy issues of mutual concern:

- Enhanced technical assistance including rural environmental justice, sustainability of water infrastructure;
- Resilience to extreme weather;
- Protecting the public and environment from per- and polyfluoroalkyl substances (PFAS)
- Contamination;
- Compliance with the new Lead and Copper Rule revisions;
- Reducing nutrient concentrations into source waters and sources of drinking water, improving the country's water workforce;
- Defending against cyberattacks on the water supply;
- Supporting regionalization of small water systems when appropriate;
- Limiting water service disconnections on vulnerable customers; and
- Other issues.

The circuit rider approach presents the most successful model for advancing our shared priority water initiatives.

Thank You for the American Rescue Plan Act

Small municipalities in West Virginia would like to sincerely thank Congress for the funding we received under the $1.9 trillion (of which $19.5 is reserved for communities with fewer than 50,000 persons) COVID-19 Stimulus Package, otherwise known as the American Rescue Plan Act (ARPA). West Virginia. Congress made drinking water and wastewater infrastructure projects eligible for the funding and we are grateful for that. Most of the local governments in West Virginia are looking at water infrastructure as a priority use of the funding - it is desperately needed in many communities and very much appreciated. Our state government received $677,774,994 from the American Rescue Plan Act from the total West Virginia allocation of $1.355 billion. We are urging the state legislature to use a large portion of the state's allocation for water and sewer needs in our state.

Current Water and Wastewater Infrastructure Trends in West Virginia

The main concerns of many of West Virginia's small and disadvantaged communities are aging water infrastructure, future EPA compliance, and the need to expand our existing water utilities to serve the remaining West Virginians who still don't have adequate water or sewer service. We still have more ridges and hollers that need water. In 2021, there are rural communities and families that still do not have access to safe drinking water or sanitation due to the lack of population density or funding. In my former water utility, we were consistently working on numerous extensions and projects to extend water and sewer services. This would relieve families from having to drive their pick-up trucks with large plastic storage containers to "haul" the water back to their remote and isolated homes. Complicating our immediate water challenges, we are witnessing dramatic increases in the cost of materials like pipes, hydrants, meters, fixtures, and treatment chemicals. Moreover, the current global supply chain shortages and price inflation are having a very adverse impact on the water community.

My experience in Claywood Park PSD is similar to many small and rural communities in the state. Unfortunately, many are smaller where due to their limited economies of scale, there is no ability to solve their water infrastructure challenges without grant-rich subsidies. Expansions funded by the state recovering funds and the USDA rural water program have dramatically improved the lives of thousands of rural West Virginians. In the last 25 years, the district has doubled in size from about

2000 connections to now over 4,000 connections thanks to the federal funding. We developed new sewer systems, including one in Wirt County in 2017 that provides sewer service to 300 homes in an unincorporated community called Newark. Before 2017, these 300 families were relying on failing septic tanks and failed packaged plants for sanitation. Before the expansion, there were numerous families in the region hauling water in the trucks back to their homes. We extended piped or public drinking water in Riser Ridge, Progress Ridge, and other ridges and hollers in Wood and Wirt Counties for the first time. We have been able to fund expansions to provide wholesale water to our neighboring communities of the Town of Elizabeth and the Mineral Well public service district. We developed a surface water treatment plant in the early 1980s, which allowed us the ability to treat and pump more water from the local river. All of these areas where we provide drinking water or sewer service are low to moderate income, and can only afford the drinking water and sewer service with the federal water subsidies for projects. Because we have had to develop the district over many years with numerous projects in various jurisdictions of local governments, we have (three) different rates for the various parts of our service area.

Moreover, we have had challenges in compliance with new and complex EPA rules, including the disinfection byproducts rule which regulates chemical compounds formed due to the chlorine disinfection process which makes the water safe to drink. In order to comply with this rule, we had to be flushing our water more frequently about ten years ago to reduce the age of the water in our lines, change the process we had been using to disinfect the water, and add a chemical sequestering agency to the treatment process to reduce the formation of the regulated compounds.

Successful Intergovernmental Coordination

Intergovernmental coordination can be very challenging with the various federal funding agencies, the state government, final end-user, and all the local districts and governments in the state. Our state has a very unique and successful process and a distinct agency for addressing state water needs with various funding sources. In West Virginia, the agency is the Infrastructure and Jobs Development Council (IJDC), which includes representation from USDA, both our water and wastewater state revolving funds, the Appalachian Regional Commission (ARC), the Community Development Block Grant (CDBG) small entities program, our state's Abandoned Mine Lands and Reclamation's (AML) programs and the state public utility commission. This agency manages our comprehensive intergovernmental funding process to identify the best funding source for water projects, including multiple funding sources for one project. The process allows for more effective development of funding applications, permitting, and design of the projects. The aforementioned process and agency that are unique to West Virginia provide a very workable and efficient intergovernmental process.

Appropriate Partnerships

I note that Claywood Park's intergovernmental partnerships make the point that regionalization and consolidation of small communities' water systems are occurring, and there is no current legal or structural impediment for these things to occur. We support the concept of intergovernmental partnerships and encourage these partnerships when it makes local economic sense. Growing economies of scale result in lower cost to the consumer than operating independent water utilities. The key ingredient in any successful consolidation is local support for the consolidation – and local control of when and how they choose consolidation. Rural Water has led or assisted in more communities consolidating their water supplies than any program, policy or organization. Again, when communities believe consolidation will benefit them, they eagerly agree with these partnerships. However, if communities are coerced to consolidate, one can almost guarantee future controversy. We urge you to allow local governments the authority to choose when to merge, consolidate, or enter into a partnership. If a community is out of compliance with the Safe Drinking Water Act, civil enforcement can drive a community to a compliance solution. However, they should be able to

choose their preferred compliance solution, whether it be new treatment, regionalization, technical assistance, governmental changes, etc. We would be very concerned if the federal government expanded its regulatory reach into this traditionally local governmental authority. We appreciate that the DWIA bill addresses this issue in the appropriate and preferred manner for local governments.

Technical Assistance and New Operator Training

In addition to funding assistance through the state revolving funds, small and rural communities need help with technical assistance and training with funding applications, understanding all the complicated EPA rules, including the new Lead and Copper Rule, and training of new operators.

Small and rural communities have relied on local/on-site technical assistance and training to comply with the myriad of federal EPA regulations, avoid EPA fines, and operate drinking water and wastewater supplies. Small communities want to ensure quality water and stay in compliance — rural water provides them the shared technical resources to do it. EPA needs to recognize that small local water supplies are operated and governed by people whose families drink the water every day and are locally elected. Some of the smallest communities rely on volunteers to operate their local drinking water supplies. Enhancing drinking water and wastewater quality in small communities is more a resource challenge than a regulatory problem.

The most successful approach for technical assistance is the “Circuit Rider" concept, created by Congress, which provides an expert with experience in water utility operations and compliance. This expert can travel directly to small and rural communities, as needed, to assist with rule compliance and generally eliminate the need for civil enforcement. Additionally, it is essential that the assistance provider only represents the community’s interest to identify the most economical solution and provide the best advice for local decision-makers. Small and rural communities want and need to know how to comply, simply and affordably – and similarly, how to operate and maintain their water utilities. With additional resources, it would be possible to provide such on-site assistance and assessment to every small community out of compliance, correct the situation, or develop a workable plan to return to compliance shortly.

A Circuit Rider is an expert in waste treatment operation, maintenance, governance, and compliance who constantly travels the state to be available on-site to any community needing assistance. For these Circuit Riders to be effective and helpful, they must be available to travel directly to any given community to work specifically with a community’s unique treatment and personally educate that operator, mayor, or other local officials on how to solve their particular problem. Additionally, they have to be available when the community needs help, such as nights, winters, after natural disasters, weekends, etc. Also, they must be non-regulatory to gain the trust of the local communities. Every small community wants to provide quality wastewater to protect its citizens and the environment. Still, they need to know, often with hands-on demonstration, just how to operate their wastewater systems. Circuit Riders work free of charge to small communities, which often saves the community thousands of dollars by avoiding consultants' fees or opening themselves to civil penalties under the CWA and SDWA. But, again, they only work in the interest of the small community they are assisting.

Cybersecurity in Water Utilities

The cybersecurity systems of large cities are fundamentally different from the systems of small communities that are typical of over 90 percent of the U.S. water public water supplies. Large cities have very complex cybersecurity and SCADA systems to operate and protect their utilities. Because of their complexity, they also present more potential targets for hostile actors and cyberattacks. Their size and economies of scale provide them far greater financial and technical resources, however, to protect their complex systems - and they are doing an outstanding job of protecting their own water supplies. Small communities are also vulnerable to attack for different reasons. Any successful cyberattack on a small community that results in drinking water contamination would result in causing

psychological panic on a national scale as communities fear for the safety of their own drinking water supply could be threatened. This is why small communities believe that protecting our water supplies from any cyberattack is just as crucial as safeguarding water supplies of large communities.

Large and small communities have a shared mission to protect and enhance the health and safety of our citizens. Therefore, we believe that any federal government policy for water cybersecurity must treat small and large communities very differently while recognizing the fundamental differences in the complexity of the water systems, financial resources, and technical capability. The reality is that small towns have limited financial resources, which must be targeted to meet our greatest needs. We would not want to see any new federal cybersecurity initiative or regulation reprioritize these limited resources to comply with a new federal cyber program. And small communities simply can't merely increase water rates to cover the cost of new federal requirements. Increasing water rates on our low-income residents can have the unintended consequence of forcing them to go without something they desperately need.

The Bipartisan Infrastructure Framework Legislation

We are grateful for the $55 billion in water funding in the Bipartisan Infrastructure Framework legislation (H.R. 3684), which is more EPA water infrastructure funding than anyone could imagine. We are committed to working with the state agencies in moving the funding out to the necessary projects and helping all the communities in West Virginia apply and secure the funding. It will be quite a welcomed challenge to move this funding from program dollars to approved projects. We foresee a great demand for technical assistance in the application process, project design, and education of the new funding for all our state's small and rural communities.

Privatization

Rural water is not opposed to water supply privatization in principle. However, corporate water (Profit-generating companies or companies paying profits to shareholders/investors) should not be eligible for federal taxpayer subsidies. Private companies argue that they have to comply with the same regulations. However, we should consider the distinction in the core mission between public and private entities. Public water utilities were and are created to provide for public welfare (the reason why public water continues to expand to underserved and nonprofitable populations). Any federal subsidy provided to a corporate water utility should be restricted from subsidizing that company's profits. The decision for any local government to privatize, including incremental privatization, should be determined at the discretion of local citizens. There is nothing inherently more efficient or more economical in operating a private water utility versus a public-governmental water utility. As the Government Accountability Office concluded in 2008, "There is no 'free' money in public-private partnerships."

Closing

Thank you, Mr. Chairman and Members of the Committee, for the honor of testifying on behalf of rural America, and we are grateful that you have included a voice for rural interests at this hearing. In addition, we deeply appreciate the numerous opportunities this committee has provided rural America in the crafting of federal water and environmental legislation and policy.

EPA SDWIS Inventory Data - West Virginia

State	PWS Name	PWS Type	Population
WV	WVAWC-KANAWHA VALLEY DIST	CWS	200679
WV	WVAWC - HUNTINGTON DIST	CWS	97,242
WV	MORGANTOWN UTILITY BOARD	CWS	60,364
WV	BECKLEY WATER COMPANY	CWS	49,058
WV	PARKERSBURG UTILITY BOARD	CWS	34,251
WV	BERKELEY CO P S W D-BUNKER HILL	CWS	31,185
WV	FAIRMONT CITY OF	CWS	30,586
WV	WHEELING WATER	CWS	29,899
WV	BERKELEY COUNTY PSWD-POTOMAC RIVER	CWS	27,335
WV	WVAWC BLUESTONE PLANT	CWS	26,874
WV	WVAWC NEW RIVER REGIONAL WTR TRTMT PLT	CWS	24,295
WV	PUTNAM P S D	CWS	22,859
WV	WEIRTON AREA WATER BOARD	CWS	22,694
WV	CLARKSBURG WATER BOARD	CWS	17,686
WV	LOGAN COUNTY PSD - NORTHERN REGIONAL	CWS	16,949
WV	MARTINSBURG CITY OF	CWS	15,652
WV	CHARLES TOWN UTILITIES	CWS	14,488
WV	ST ALBANS WATER	CWS	13,619
WV	VIENNA	CWS	12,507
WV	WVAWC BLUEFIELD DISTRICT	CWS	12,174
WV	WVAW - WESTON	CWS	12,097
WV	LUBECK PSD	CWS	10,377
WV	BRIDGEPORT CITY OF	CWS	10,309
WV	OHIO COUNTY PSD	CWS	10,220
WV	LEWISBURG	CWS	10,057
WV	MOUNDSVILLE	CWS	9,911
WV	ELKINS CITY OF	CWS	9,473
WV	CHEAT VIEW PSD	CWS	9,201
WV	KENOVA MUNICIPAL WATER	CWS	9,134
WV	PRESTON COUNTY PSD 4	CWS	8,728

WV	BUCKHANNON WATER BOARD	CWS	8,631
WV	HURRICANE CITY OF	CWS	8,248
WV	CLAYWOOD PARK PSD	CWS	8,141
WV	UNION WILLIAMS P S D	CWS	7,252
WV	WALNUT GROVE UTILITIES	CWS	7,250
WV	RALEIGH COUNTY PSD ARNETT	CWS	7,180
WV	FRANKFORT PSD	CWS	6,747
WV	LAVALETTE PSD	CWS	6,725
WV	KINGWOOD WATER BOARD	CWS	6,656
WV	GRAFTON CITY OF	CWS	6,577
WV	MINGO COUNTY PSD - NAUGATUCK	CWS	6,324
WV	BLUEWELL PSD	CWS	6,216
WV	GREEN VALLEY GLENWOOD PSD GLENWOOD	CWS	5,775
WV	MOUNTAINEER PARK INC	NTNCWS	5,760
WV	SOUTHERN JACKSON COUNTY P S D	CWS	5,701
WV	MINERAL WELLS PSD	CWS	5,674
WV	CLINTON WATER ASSOC - ROUTE 119	CWS	5,580
WV	SUMMERSVILLE MUNICIPAL WATER	CWS	5,574
WV	MILTON WATER	CWS	5,520
WV	RED SULPHUR PSD	CWS	5,352
WV	SOUTHWESTERN WATER DISTRICT	CWS	5,344
WV	ADRIAN P S D	CWS	5,295
WV	POINT PLEASANT WATER WORKS	CWS	5,290
WV	NEW MARTINSVILLE	CWS	5,272
WV	WAYNE WATER TOWN OF	CWS	5,265
WV	RIPLEY CITY OF	CWS	5,255
WV	KEYSER CITY OF	CWS	5,202
WV	FOLLANSBEE HOOVERSON HEIGHTS	CWS	4,970
WV	SHINNSTON CITY OF	CWS	4,867
WV	HUTTONSVILLE PSD	CWS	4,863
WV	ATHENS TOWN OF	CWS	4,802
WV	RALEIGH COUNTY MEM AIRPORT	CWS	4,656
WV	LOGAN CO PSD-GREENVILLE SYSTEM	CWS	4,652

WV	CRAIGSVILLE PSD	CWS	4,591
WV	WILDERNESS PSD	CWS	4,475
WV	SPENCER WATER DEPT	CWS	4,393
WV	CORPORATION OF SHEPHERDSTOWN	CWS	4,300
WV	GRANT CO PSD-NORTHFORK-MAYSVILLE	CWS	4,269
WV	RAVENSWOOD MUNICIPAL WATER WORKS	CWS	4,245
WV	GAULEY RIVER PSD	CWS	4,168
WV	COOL RIDGE FLAT TOP PSD	CWS	4,151
WV	MARSHALL COUNTY PSD 4	CWS	4,063
WV	VALLEY FALLS PSD	CWS	3,991
WV	MILEPOST 69 REST AREA	TNCWS	3974
WV	WHITE SULPHUR SPRINGS WATER	CWS	3,845
WV	LOGAN WATER BOARD CITY OF	CWS	3,788
WV	FLATWOODS CANOE RUN PSD	CWS	3,775
WV	LINCOLN PSD	CWS	3,772
WV	MASON CO PSD - ASHTON	CWS	3,768
WV	CLAY BATTELLE PSD	CWS	3,717
WV	WASHINGTON PIKE PSD	CWS	3,571
WV	EASTERN WYOMING PSD STEPHENSON WTP	CWS	3,561
WV	PRESTON COUNTY PSD 1	CWS	3,528
WV	BERKELEY SPRINGS CITY OF	CWS	3,526
WV	FBI CENTER CLARKSBURG	NTNCWS	3,500
WV	WELLSBURG, CITY OF	CWS	3,468
WV	BUFFALO CREEK PSD	CWS	3,464
WV	MARSHALL COUNTY PSD 1	CWS	3,463
WV	GREATER HARRISON PSD LOST CREEK MT CLARE	CWS	3,415
WV	COWEN PSD	CWS	3,372
WV	MORTON PLAZA-WV PARKWAYS	NTNCWS	3,364
WV	WILLIAMSTOWN WATER DEPT	CWS	3,363
WV	MIDLAND PSD	CWS	3,326
WV	MASON CO PSD-LAKIN DIST	CWS	3,323
WV	GREENBRIER HOTEL CORPORATION	CWS	3,280
WV	BRANCHLAND MIDKIFF PSD	CWS	3,278

WV	PHILIPPI CITY OF	CWS	3,269
WV	WILLIAMSON UTILITY BOARD	CWS	3,249
WV	NETTIE LEIVASY PSD	CWS	3,239
WV	CLINTON WATER ASSOC - KINGWOOD PIKE	CWS	3,208
WV	RAVENCLIFF MCGRAWS SAULSVILLE PSD	CWS	3,186
WV	MASON CO PSD-LETART	CWS	3,182
WV	MONONGAH TOWN OF	CWS	3,145
WV	CHESTER WATER DEPT.	CWS	3,119
WV	CRUM PSD	CWS	3,092
WV	COTTAGEVILLE PSD	CWS	3,072
WV	NEW CREEK WATER ASSOCIATION	CWS	3,043
WV	PADEN CITY, CITY OF	CWS	2,985
WV	PINEVILLE MUNICIPAL WATER	CWS	2,945
WV	WELCH CITY OF	CWS	2,907
WV	RALEIGH COUNTY PSD COAL CITY	CWS	2,905
WV	ELKINS ROAD PSD	CWS	2,848
WV	PETERSBURG TOWN OF	CWS	2,841
WV	CHESTNUT RIDGE PSD	CWS	2,831
WV	MOUNT HOPE WATER ASSOC	CWS	2,825
WV	SAINT MARYS	CWS	2,711
WV	MARSHALL COUNTY PSD 3	CWS	2,694
WV	SHORTLINE PSD	CWS	2,681
WV	OCEANA COMMUNITY OF	CWS	2,672
WV	BETHLEHEM	CWS	2,667
WV	SUN VALLEY PSD	CWS	2,657
WV	FOLLANSBEE MUNICIPAL	CWS	2,628
WV	GREATER HARRISON PSD VALLEY OF GOOD HOPE	CWS	2,558
WV	BEVERLY TOWN OF	CWS	2,555
WV	NORTHERN JACKSON COUNTY PSD	CWS	2,506
WV	CENTRAL BARBOUR PSD	CWS	2,502
WV	RIVER BEND MEMBERSHIP CORPORATION	NTNCWS	2,500
WV	CHEMOURS COMPANY-WASHINGTON WORKS	NTNCWS	2,500
WV	GLEN DALE WATER WORKS	CWS	2,495

WV	CENTURY VOLGA PSD	CWS	2,492
WV	ALDERSON WATER	CWS	2,458
WV	GILMER COUNTY PSD - FEDERAL PRISON	CWS	2,400
WV	RICHWOOD WATER DEPT	CWS	2,389
WV	MASONTOWN WATER WORKS	CWS	2,369
WV	PLEASANTS CO PSD	CWS	2,357
WV	MOOREFIELD MUNICIPAL WATER	CWS	2,328
WV	PLEASANT VALLEY PSD	CWS	2,308
WV	HODGESVILLE PSD RT 20	CWS	2,306
WV	WEST HAMLIN, CITY OF	CWS	2,285
WV	KANAWHA FALLS PSD	CWS	2,273
WV	MOUNTAIN VIEW WATER ASSOC	CWS	2,263
WV	HARRISVILLE	CWS	2,246
WV	MATEWAN WATER WORKS	CWS	2,237
WV	STONEWOOD CITY OF	CWS	2,236
WV	MCMECHEN MUNICIPAL WATER	CWS	2,212
WV	DANESE PSD	CWS	2,210
WV	ARMSTRONG PSD	CWS	2,208
WV	MINGO COUNTY PSD PIGEON CREEK	CWS	2,208
WV	GLENVILLE UTILITY	CWS	2,196
WV	HAMMOND PSD	CWS	2,186
WV	MASON CO PSD-CRAB CREEK	CWS	2,183
WV	VA MEDICAL CENTER	CWS	2,175
WV	GREATER HARRISON PSD - QUIET DELL	CWS	2,159
WV	TYLER COUNTY PSD	CWS	2,146
WV	CENTRAL HAMPSHIRE PSD	CWS	2,123
WV	CORPORATION OF HARPERS FERRY	CWS	2,122
WV	RONCEVERTE WATER	CWS	2,100
WV	BELINGTON TOWN OF	CWS	2,095
WV	LINCOLN PSD - ROUTE 3	CWS	2,087
WV	GRANT PSD	CWS	2,086
WV	MOUNTAIN TOP PSD	CWS	2,072
WV	ELIZABETH WATER DEPT	CWS	2,072

WV	STAR CITY TOWN OF	CWS	2,062
WV	LITTLE CREEK PSD	CWS	2,033
WV	TOMLINSON PSD	CWS	2,012
WV	WALTON PSD	CWS	1,986
WV	CLAY-ROANE PSD (PROCIOUS DISTRICT)	CWS	1,978
WV	WVAW- GASSAWAY	CWS	1,970
WV	WVAW - WEBSTER SPRINGS	CWS	1,952
WV	MANNINGTON CITY OF	CWS	1,946
WV	GRANDVIEW - DOOLIN PSD	CWS	1,942
WV	MONUMENTAL PSD	CWS	1,924
WV	WEST UNION, TOWN OF	CWS	1,895
WV	SISTERSVILLE MUNICIPAL WATER	CWS	1,892
WV	GREEN VALLEY GLENWOOD PSD BULLTAIL	CWS	1,869
WV	POCAHONTAS CO PSD - CHEAT MOUNTAIN WATER	CWS	1,867
WV	TERRA ALTA WATER WORKS	CWS	1,856
WV	OAKLAND PSD	CWS	1,846
WV	NUTTER FORT TOWN OF	CWS	1,832
WV	ROMNEY WATER DEPT	CWS	1,825
WV	ENLARGED HEPZIBAH PSD	CWS	1,802
WV	TRI-COUNTY WATER ASSOC - FAIRMONT	CWS	1,770
WV	GRANT CO PSD-US 220 S	CWS	1,767
WV	VAMC - HUNTINGTON	NTNCWS	1,759
WV	HAMRICK PSD	CWS	1,739
WV	WOODS HOME OWNERS ASSOCIATION 2	CWS	1,723
WV	GILBERT WATER WORKS	CWS	1,687
WV	NORTON HARDING JIMTOWN PSD	CWS	1,684
WV	CANAAN VALLEY STATE PARK	NTNCWS	1,656
WV	MASON WATER DEPT	CWS	1,651
WV	GARY CITY OF	CWS	1,633
WV	MCDOWELL COUNTY PSD BARTLEY	CWS	1,632
WV	PLEASANT HILL P S D RT 16 DISTRICT	CWS	1,619
WV	SALEM WATER BOARD	CWS	1,617
WV	FORT GAY WATER WORKS	CWS	1,617

WV	NEW HAVEN WATER DEPT	CWS	1,610
WV	LEADSVILLE PSD	CWS	1,606
WV	MARSHALL COUNTY PSD 2	CWS	1,601
WV	NORTHRUP GRUMMAN INNOVATION SYSTEMS, INC	NTNCWS	1,600
WV	PAGE KINCAID PSD	CWS	1,590
WV	PARSONS CITY OF	CWS	1,554
WV	WOODS HOA, THE	CWS	1,550
WV	BENWOOD WATER DEPARTMENT	CWS	1,510
WV	CEREDO WATER WORKS	CWS	1,480
WV	HARDY COUNTY PSD 220 SOUTH	CWS	1,463
WV	LUMBERPORT TOWN OF	CWS	1,457
WV	CHAPMANVILLE, TOWN OF	CWS	1,454
WV	LOGAN CO P S D - CRAWLEY CREEK	CWS	1,444
WV	RIVESVILLE TOWN OF	CWS	1,443
WV	KERMIT WATER WORKS	CWS	1,441
WV	MOUNT HOPE WATER	CWS	1,431
WV	CENTRAL BOAZ PSD	CWS	1,418
WV	RALEIGH COUNTY PSD CLEAR CREEK	CWS	1,407
WV	FRANKLIN, MUNICIPALITY OF	CWS	1,402
WV	HARDY COUNTY PSD 220 N	CWS	1,388
WV	RAINELLE WATER DEPT	CWS	1,381
WV	WETZEL CO PSD 1	CWS	1,378
WV	SUGAR CREEK PSD	CWS	1,377
WV	NEWELL COMPANY	CWS	1,377
WV	MARLINTON TOWN OF	CWS	1,362
WV	ALPINE LAKE PUBLIC UTILITIES	CWS	1,360
WV	WVAWC GLADE SPRINGS DISTRICT	CWS	1,340
WV	BIG BEND PSD	CWS	1,338
WV	NEW CUMBERLAND, CITY OF	CWS	1,326
WV	HAYMOND PSD	CWS	1,325
WV	JANE LEW PSD	CWS	1,324
WV	TAYLOR COUNTY PSD	CWS	1,292
WV	PENNSBORO	CWS	1,291

WV	MIDDLEBOURNE WATER WORKS	CWS	1,267
WV	PAW PAW ROUTE 19 PSD	CWS	1,254
WV	MASON CO. PSD - J2Y35	CWS	1,250
WV	BINGAMON PSD	CWS	1,247
WV	GRANT TOWN, TOWN OF	CWS	1,240
WV	TRIADELPHIA WATER DEPT	CWS	1,215
WV	BLACKWATER FALLS STATE PARK	NTNCWS	1,189
WV	LOGAN CO PSD - STOLLINGS	CWS	1,183
WV	LAVALETTE PSD - EASTERN DISTRICT	CWS	1,171
WV	RUPERT WATER	CWS	1,170
WV	GREENBRIER COUNTY PSD 2	CWS	1,164
WV	BURNSVILLE PUBLIC UTILITY	CWS	1,140
WV	ICES RUN PSD	CWS	1,130
WV	TUNNELTON TOWN OF	CWS	1,115
WV	BIRCH RIVER PSD	CWS	1,103
WV	BERKELEY CO PSWD-GLENWOOD FOREST	CWS	1,102
WV	KOPPERSTON PSD	CWS	1,095
WV	CLAY WATER DEPT	CWS	1,084
WV	FAIRVIEW TOWN OF	CWS	1,083
WV	FRANKFORT PSD WILEY FORD	CWS	1,062
WV	GALLIPOLIS FERRY	CWS	1,056
WV	CAMERON WATER	CWS	1,052
WV	BELMONT, CITY OF	CWS	1,048
WV	CENTRAL HAMPSHIRE PSD GREEN SPRING	CWS	1,046
WV	CONSTELLIUM ROLLED PRODUCTS LLC	NTNCWS	1,036
WV	DOWNS PSD	CWS	1,024
WV	MOUNT ZION P S D	CWS	1,009
WV	MCDOWELL COUNTY PSD COALWOOD	CWS	1,008
WV	FOUNTAIN PSD	CWS	1,001
WV	CLEVELAND-CLIFFS WEIRTON LLC	NTNCWS	1,000
WV	I HEART CHURCH	NTNCWS	1,000
WV	USACOE UPPER KANAWHA RUN	TNCWS	1000
WV	CLAY CO PSD-HARTLAND	CWS	995

WV	THE MOUNTAIN WATER SYSTEM	CWS	976
WV	LAVALETTE PSD-ROUTE 52 NORTH DISTRICT	CWS	965
WV	CEDAR GROVE, COMMUNITY OF	CWS	960
WV	JUNIOR TOWN OF	CWS	956
WV	ANMOORE TOWN OF	CWS	951
WV	WAR WATER WORKS CITY REALTY	CWS	942
WV	NEWBURG TOWN OF	CWS	939
WV	DAVIS WATER WORKS	CWS	938
WV	CARPENDALE, TOWN OF	CWS	937
WV	COONS RUN PSD	CWS	927
WV	CLOVER PSD	CWS	926
WV	WEST LOGAN WATER CO	CWS	915
WV	TRI COUNTY CLARKSBURG	CWS	893
WV	MCDOWELL COUNTY PSD MAYBEURY	CWS	871
WV	MCDOWELL COUNTY PSD BERWIND	CWS	863
WV	ROCKY GLEN MANUFACTURED HOUSING COMMUNIT	CWS	861
WV	LOGAN CO PSD-RUM CREEK	CWS	861
WV	PIEDMONT MUNICIPAL WTR WKS	CWS	847
WV	MANNINGTON PSD	CWS	844
WV	MILL CREEK WATER DEPT	CWS	841
WV	COOPERS ROCK STATE FOREST	TNCWS	837
WV	SUMMIT PARK PSD	CWS	835
WV	HARDY COUNTY PSD-ROUTE 55	CWS	802
WV	FOUNTAIN PSD BURLINGTON	CWS	793
WV	RALEIGH COUNTY PSD SLAB FORK	CWS	789
WV	WARDENSVILLE, TOWN OF	CWS	788
WV	GILMER CO PSD	CWS	774
WV	GILMER CO PSD - ROUTE 33/119	CWS	774
WV	ROWLESBURG WATER WORKS	CWS	767
WV	PAX WATER COMPANY	CWS	762
WV	UNION TOWN OF	CWS	758
WV	THOMAS CITY OF	CWS	753
WV	LESTER MUNICIPAL WATER WORKS	CWS	750

WV	HARTFORD TOWN OF	CWS	745
WV	RIDGELEY, TOWN OF	CWS	737
WV	FARMINGTON TOWN OF	CWS	713
WV	TOWN OF CAPON BRIDGE INC	CWS	700
WV	PENDLETON CO PSD-UPPER TRACT	CWS	695
WV	CLAY CO P S D - IVYDALE	CWS	693
WV	PENDLETON CO PSD(BRANDYWINE)	CWS	692
WV	VALLEY GROVE WATER DEPT	CWS	686
WV	WORTHINGTON TOWN OF	CWS	680
WV	RALEIGH COUNTY PSD ODD	CWS	675
WV	BENS RUN INDUSTRIAL PARK WATER SYSTEM	CWS	673
WV	MINGO CO PSD-RAGLAND DISTRICT	CWS	651
WV	STONEWALL JACKSON STATE PARK	NTNCWS	639
WV	HUNDRED LITTLETON PSD	CWS	638
WV	WEST MILFORD WATER WORKS	CWS	614
WV	BEECH BOTTOM WATER DEPT	CWS	610
WV	MCDOWELL COUNTY PSD KIMBALL	CWS	605
WV	REYNOLDS MEMORIAL HOSPITAL	NTNCWS	600
WV	CENTRAL BARBOUR PSD - BELINGTON	CWS	597
WV	PINE GROVE WATER	CWS	593
WV	JUSTICE PSD	CWS	583
WV	GRANTSVILLE MUNICIPAL	CWS	571
WV	CASS SCENIC RAILROAD	CWS	555
WV	FENWICK MOUNTAIN PSD	CWS	554
WV	DAVY MUNICIPAL WATER WORKS	CWS	552
WV	HARMAN TOWN OF	CWS	552
WV	MEADOW BRIDGE TOWN OF	CWS	551
WV	GILMER COUNTY PSD - NORMANTOWN STUMPTOWN	CWS	547
WV	TIMBERLINE-CV PSD	CWS	544
WV	NORTHFORK WATER WORKS	CWS	542
WV	POCAHONTAS COUNTY PSD	CWS	515
WV	OAKLAND PSD GOLDEN KEY ACRES	CWS	506
WV	ROANE-JACKSON TECHNICAL CENTER	NTNCWS	500

WV	USACOE BAKERS RUN	TNCWS	500
WV	USACOE MIDDLE KANAWHA RUN	TNCWS	500
WV	LAKE SHERWOOD PICNIC AREA 61	TNCWS	500
WV	LAKE SHERWOOD 062 HP	TNCWS	500
WV	MASON COUNTY PSD-CAMP CONLEY	CWS	497
WV	PAW PAW WATER WORKS	CWS	488
WV	BAILEYSVILLE ELEMENTARY AND MIDDLE	NTNCWS	460
WV	ELLENBORO-LAMBERTON PSD	CWS	456
WV	PAGE JACKSON SOLAR ELEM	NTNCWS	450
WV	SANDY RIVER MIDDLE SCHOOL	NTNCWS	450
WV	KEYSTONE MUNICIPAL WATER	CWS	448
WV	WESTLAKE CHEMICAL	NTNCWS	435
WV	EAST VIEW PSD 194	CWS	424
WV	SOUTH JEFFERSON ELEMENTARY	NTNCWS	424
WV	CAIRO WATER DEPARTMENT	CWS	406
WV	HATFIELD AND MCCOY QUICK STOP	TNCWS	400
WV	CANAAN VILLAGE INN	TNCWS	400
WV	MINGO COUNTY PSD - LICK CREEK	CWS	393
WV	GAP MILLS PSD	CWS	392
WV	CENTRAL HAMPSHIRE PSD - RT 28	CWS	388
WV	MANNINGTON PSD - LOGANSPORT	CWS	384
WV	RALEIGH COUNTY PSD PLUTO BRAGG	CWS	374
WV	POCAHONTAS MEMORIAL AND MARLINTON M S	NTNCWS	374
WV	MCDOWELL COUNTY PSD HAVACO	CWS	370
WV	HUTCHINSON COMMUNITY WATER ASSOC	CWS	370
WV	DENVER WATER ASSOC	CWS	364
WV	MCDOWELL COUNTY PSD BIG FOUR	CWS	363
WV	FOUR STATES PSD	CWS	363
WV	BRENTON PSD	CWS	363
WV	REEDY WATER SERVICE TOWN OF	CWS	356
WV	MINISTERS RUN WATER ASSOC	CWS	337
WV	FLATWOODS CANOE RUN PSD PURCHASER	CWS	336
WV	POCAHONTAS COUNTY HIGH SCHOOL	NTNCWS	326

WV	ALBRIGHT TOWN OF	CWS	325
WV	MCDOWELL COUNTY PSD HEMPHILL	CWS	322
WV	CRUMPLER COMMUNITY WATER	CWS	318
WV	MINGO COUNTY PSD - MARROWBONE	CWS	313
WV	BLUE RIDGE ELEMENTARY	NTNCWS	310
WV	CAMDEN ON GAULEY - CRAIGSVILLE	CWS	304
WV	COVESTRO	NTNCWS	300
WV	BLUEBEND HANDPUMP 0614 HP	TNCWS	300
WV	CAMP WAPOCOMA	TNCWS	300
WV	MOUNTAIN CREEK LODGE	TNCWS	300
WV	BEAVER RIDGE RESORT	TNCWS	300
WV	ARTHURDALE WATER ASSOC.	CWS	299
WV	DENMAR CORRECTIONAL CENTER	CWS	297
WV	GREEN BANK SCHOOL	NTNCWS	293
WV	RAINELLE WATER TREATMENT PLANT 2	CWS	290
WV	DELBARTON TOWN OF	CWS	286
WV	FAITH CHRISTIAN ACADEMY	NTNCWS	285
WV	GLEN ROGERS PSD	CWS	283
WV	BLACK BEAR WOODS	TNCWS	283
WV	HUFF CONSOLIDATED ELEMENTARY AND MIDDLE	NTNCWS	275
WV	PRESTON CO PSD 1 PURCHASER	CWS	270
WV	HODGESVILLE PSD - SAULS RUN	CWS	265
WV	COALTON WATER SYSTEM	CWS	264
WV	HILLSBORO TOWN OF	CWS	262
WV	HODGESVILLE PSD LORENTZ SYSTEM	CWS	260
WV	PHILIPPI CITY OF - WELLINGTON HEIGHTS	CWS	256
WV	SLANESVILLE ELEMENTARY SCHOOL	NTNCWS	250
WV	MITCHELL PLANT	NTNCWS	250
WV	BROWNS WATER SYSTEM	TNCWS	250
WV	CAMP ALLEGHANY	TNCWS	250
WV	RAINBOW ROAD CLUB	TNCWS	250
WV	INDIAN MEADOWS TOWER	TNCWS	250
WV	BLUE RIDGE PRIMARY SCHOOL	NTNCWS	248

WV	MANNINGTON PSD - METZ	CWS	246
WV	WHITMER PUBLIC WATER SYSTEM	CWS	246
WV	HARDY COUNTY PSD-TROUT RUN	CWS	245
WV	HARDY COUNTY PSD-SOUTH FORK	CWS	244
WV	MINGO COUNTY PSD CHATTAROY	CWS	241
WV	BROOKE COUNTY PSD	CWS	240
WV	RHODELL WATER WORKS	CWS	238
WV	G AND E MHP	CWS	235
WV	BRADSHAW WATER WORKS	CWS	233
WV	VALLEY WATER AND SEWER-DEERWOOD	CWS	219
WV	SUGAR LANE WATER ASSOC	CWS	218
WV	GRANT COUNTY PSD WELTON ORCHARD	CWS	213
WV	RALEIGH COUNTY PSD FITZPATRICK	CWS	201
WV	CALEDONIA HEIGHTS SUBDIVISION	CWS	200
WV	RALEIGH COUNTY PSD EGERIA	CWS	200
WV	F MINE BATHHOUSE	NTNCWS	200
WV	BUFFALO GAP CAMP	TNCWS	200
WV	E Z MART	TNCWS	200
WV	PANTHER WILDLIFE MANAGEMENT AREA 1	TNCWS	200
WV	CAMP HIDDEN MEADOWS	TNCWS	200
WV	BLUESTONE CAMP AND RETREAT	TNCWS	200
WV	SHINNSTON - SALTWELL ROAD	CWS	196
WV	HUTTONSVILLE TOWN OF	CWS	196
WV	CHARLES TOWN UTL-GLEN HAVEN UTILITIES	CWS	195
WV	AURORA ELEMENTARY AND JR HIGH	NTNCWS	192
WV	MCDOWELL COUNTY PSD TIDEWATER	CWS	188
WV	PENDLETON COUNTY PSD RIVERTON	CWS	188
WV	ISKCON - NEW VRINDABAN	CWS	184
WV	HARDY COUNTY PSD BAKER	CWS	182
WV	CAMP TWIN CREEKS	TNCWS	180
WV	FAIR OAKS SUBDIVISION	CWS	178
WV	LAND OF CANAAN VACATION RESORT	TNCWS	177
WV	MCDOWELL COUNTY PSD GREENBRIER	CWS	165

WV	SMOOT ELEMENTARY	NTNCWS	165
WV	OAK HILL MOBILE HOME COMMUNITY LLC	CWS	163
WV	KINGSTON MINING 2 BATHHOUSE	NTNCWS	161
WV	EAST VIEW PSD 172	CWS	160
WV	BIG CACAPON BUBBLING SPRING CAMP, LLC	TNCWS	160
WV	UPPER MUD RIVER (W M A)	TNCWS	159
WV	ALLENS WONDERLAND	TNCWS	157
WV	SOUTHERN JACKSON COUNTY PSD ROUTE 33	CWS	154
WV	SPRINGER RUN PARK LLC	CWS	150
WV	BACK CREEK VALLEY ELEMENTARY	NTNCWS	150
WV	EASTERN ASSOC COAL HARRIS PREP PLANT	NTNCWS	150
WV	US FISH & WILDLIFE-NCTC	NTNCWS	150
WV	FIRESIDE INN	TNCWS	150
WV	BERKELEY SPRINGS BOWL	TNCWS	150
WV	BEMIS CAMPGROUND	TNCWS	150
WV	CHESTNUT RIDGE PSD - BERRYBURG	CWS	144
WV	PENDLETON CO PSD-US 220 NORTH	CWS	144
WV	COOLFONT MOUNTAINSIDE NORTH	TNCWS	143
WV	STONERISE BERKELEY SPRINGS - UPPER	CWS	140
WV	STONERISE BERKELEY SPRINGS - LOWER	CWS	140
WV	TRI LAKE HOLDINGS, INC.	CWS	139
WV	JOHN J CORNWELL SCHOOL	NTNCWS	135
WV	PLEASANT VIEW ELEMENTARY	NTNCWS	135
WV	DEERFIELD VILLAGE SUBDIVISION	CWS	132
WV	MOUNTAIN VIEW WATER SYSTEM	CWS	132
WV	CARTER ROAG MORGAN CAMP MINE	NTNCWS	130
WV	CAVE QUARTER UTILITY	CWS	126
WV	SUMMIT POINT TACTICAL TRAINING CENTER	NTNCWS	125
WV	COOL SPRINGS	TNCWS	125
WV	MCDOWELL COUNTY PSD PREMIER	CWS	122
WV	SKY LINE VILLAGE MHP	CWS	120
WV	ROCK SPRING CHURCH	NTNCWS	120
WV	CAPERTON FURNITURE WORKS	NTNCWS	120

WV	MCDOWELL COUNTY PSD ECKMAN	CWS	118
WV	COAL MOUNTAIN WATER	CWS	118
WV	PLEASANT VALLEY PSD - NORTH CASSVILLE	CWS	114
WV	BRUCETON MILLS WATER DEPT	CWS	114
WV	BELLWOOD COMMUNITY FACIL IMP	CWS	113
WV	NATIONAL RADIO ASTRONOMY OBSERVATORY	NTNCWS	110
WV	SAND SPRINGS CAMPGROUND	TNCWS	110
WV	CHARLES TOWN UTL-CAVALAND SUBDIVISION	CWS	107
WV	CHESTNUT RIDGE WATER SYSTEM	CWS	105
WV	USGS LEETOWN SCIENCE CENTER	NTNCWS	105
WV	COOLFONT MOUNTAINSIDE ASSOCIATION-SALMON	TNCWS	103
WV	JK RICHMOND'S FAMILY CAMPGROUND	TNCWS	102
WV	CLAY CO P S D-TRIPLETT RIDGE	CWS	101
WV	DAVIS STUART INC	CWS	100
WV	MCDOWELL COUNTY PSD BISHOP	CWS	100
WV	SENECA TRAIL CHRISTIAN ACADEMY	NTNCWS	100
WV	CACAPON STATE PARK	NTNCWS	100
WV	SENECA COAL RESOURCES PINNACLE CREEK	NTNCWS	100
WV	CAMP TOMAHAWK	TNCWS	100
WV	LONG BRANCH SALOON AND GRILL	TNCWS	100
WV	BIG BEND CAMPGROUND 0510	TNCWS	100
WV	MILLESONS WALNUT GROVE CAMPGROUND INC	TNCWS	100
WV	CAMP PINNACLE	TNCWS	100
WV	USFS TROUT POND	TNCWS	100
WV	SUMMIT POINT RACEWAY	TNCWS	100
WV	POCAHONTAS 4 H CAMP	TNCWS	100
WV	OVERLOOK CONDOMINIUMS	TNCWS	100
WV	CAMP SUMMERS	TNCWS	100
WV	CHERRY RUN MHP	CWS	99
WV	MORGAN VILLAGE MHP	CWS	98
WV	GILMER COUNTY PSD - ROUTE 5 WEST	CWS	95
WV	MONUMENTAL PSD - CHESAPEAKE	CWS	95
WV	OX PAPERBOARD LLC	NTNCWS	95

WV	BERKELEY ESTATES	CWS	94
WV	JEFFERSON ACADEMY	NTNCWS	93
WV	WVAWC MONTGOMERY HEIGHTS DISTRICT	CWS	92
WV	TRI COUNTY WATER ASSOC - SHINNSTON	CWS	92
WV	APPLE ORCHARD ACRES	CWS	91
WV	HARDY COUNTY PSD MARVIN CHAPEL	CWS	90
WV	BROKEN WHEEL CAMPGROUND	TNCWS	90
WV	MASON CO PSD-FOGLESONG DIST	CWS	89
WV	CACAPON RIVER RECREATION AREA	TNCWS	88
WV	PINNACLE WATER ASSOCIATION	CWS	85
WV	K AND A KAMPGROUND (BATH HOUSE WELL)	TNCWS	85
WV	GLOBAL CAPITAL OF WORLD PEACE	CWS	80
WV	LEIGHTS MHP	CWS	78
WV	WVAWC 5 AND 20 MILE ROAD DISTRICT	CWS	78
WV	RUSSELLS MHP	CWS	75
WV	HIAWATHA WATER	CWS	75
WV	PENDLETON CO PSD-CIRCLEVILLE	CWS	75
WV	CAMP RIM ROCK	TNCWS	75
WV	GREEN BANK SENIOR CENTER	TNCWS	75
WV	RIDGEVIEW ESTATES PROP ASSOC	CWS	74
WV	HACKER VALLEY ELEMENTARY	NTNCWS	74
WV	WAUGHS COMMUNITY HOME PARK	CWS	72
WV	CAMDEN ON GAULEY - COWEN	CWS	72
WV	RAYFORD ACRES	CWS	71
WV	ASHLAND COMMUNITY	CWS	70
WV	USDA APPALACHIAN FRUIT RESEARCH STATION	NTNCWS	70
WV	SUGAR GROVE RESEARCH STATION	NTNCWS	70
WV	AM-VETS POST 38	TNCWS	70
WV	CAZ/HILLBROOK INN	TNCWS	70
WV	CAMP MINCO BATH HOUSES	TNCWS	70
WV	SUNNY VIEW ACRES WATER PROJECT	CWS	69
WV	ROCKY KNOLL ELEMENTARY	NTNCWS	68
WV	POTOMAC FARMS WATER CO	CWS	65

WV	MINGO COUNTY PSD - DELORME	CWS	65
WV	REAMER HILL WATER ASSOC	CWS	64
WV	SCHOOL DAYS CHILD CARE	NTNCWS	64
WV	BIG UGLY COMMUNITY CENTER	TNCWS	61
WV	GATEWAY EAGLE MINE	NTNCWS	60
WV	BLACKHAWK COAL BRANCH BATHHOUSE	NTNCWS	60
WV	BLACKHAWK EAGLE 3	NTNCWS	60
WV	BLACKHAWK FLYING EAGLE WATER SYSTEM	NTNCWS	60
WV	GREEN FROG, LLC.	TNCWS	60
WV	LOST RIVER STATE PARK	TNCWS	60
WV	ALPINE SHORES - UPPER CAMPGROUND	TNCWS	60
WV	BLACKWATER CENTER	TNCWS	60
WV	ALYESKA INC	CWS	57
WV	BIG SANDY MHP	CWS	55
WV	GARWOOD COMMUNITY WATER	CWS	55
WV	PICKAWAY TRAILER PARK	CWS	54
WV	JUDY LYNN MHP	CWS	53
WV	WVDHHR	NTNCWS	52
WV	KANAWHA EAGLE COAL COMPANIES	NTNCWS	50
WV	MURRAY AMERICAN ENERGY	NTNCWS	50
WV	CARTER ROAG BEECH MOUNTAIN	NTNCWS	50
WV	APPALACHIAN ORCHARD COMPANY	TNCWS	50
WV	USFS HAWK CAMPGROUND HP	TNCWS	50
WV	WOODVIEW GOLF COURSE	TNCWS	50
WV	BIG RIDGE CAMPGROUND	TNCWS	50
WV	LOST RIVER STATE PARK	TNCWS	50
WV	SUMMIT POINT - MAIN OFFICE	TNCWS	50
WV	NICKS LOUNGE	TNCWS	50
WV	CAMP CREEK STATE PARK	TNCWS	50
WV	CAMP CREEK STATE PARK BLUE JAY	TNCWS	50
WV	CAMP CREEK STATE PARK FARLEY BRANCH	TNCWS	50
WV	JENNINGS RANDOLPH LAKE	TNCWS	50
WV	USFS BIG ROCK CAMPGROUND WELL 028 HP	TNCWS	50

WV	US FOREST SERVICE BRANDYWINE	TNCWS	50
WV	SENECA ROCKS RV RESORT	TNCWS	50
WV	WATOGA STATE PARK ISLAND LICK	TNCWS	50
WV	WATOGA STATE PARK PINE RUN	TNCWS	50
WV	WATOGA STATE PARK BUSH PLACE	TNCWS	50
WV	WATOGA STATE PARK BEAVER CREEK CG	TNCWS	50
WV	WATOGA STATE PARK RIVERSIDE CG	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
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WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
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WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA INC	TNCWS	50
WV	ALYESKA - BIG BEAR LAKE STORE	TNCWS	50
WV	USFS STUART PARK WELL 15A	TNCWS	50
WV	WV RESORTS	TNCWS	50
WV	LINCOLN PSD - LOWER MUD RIVER	CWS	49
WV	DODDRIDGE COUNTY PSD	CWS	48
WV	TWIN HOLLOW CAMPGROUND	TNCWS	45

WV	GREEN CAMP PSD	CWS	44
WV	WEYANOKE GIATTO WATER SYSTEM	CWS	40
WV	MORGAN CO INDUSTRIAL PARK	NTNCWS	40
WV	PICKENS SCHOOL	NTNCWS	40
WV	STINSON GROCERY	TNCWS	40
WV	S O M E MAYA ANGELOU	TNCWS	40
WV	CHESTNUT RIDGE PARK	TNCWS	40
WV	BEARS DEN LLC	TNCWS	40
WV	SILVER LAKE PARK	TNCWS	40
WV	BASS LAKE PARK	TNCWS	40
WV	BERRYS CAMPGROUND	TNCWS	35
WV	WV BAPTIST CONFERENCE CENTER	TNCWS	32
WV	SPRING HEIGHTS ED AND CONF CENTER	TNCWS	31
WV	APPALACHIAN TEEN CHALLENGE MALE CENTER	CWS	30
WV	APPALACHIAN TEEN CHALLENGE FEMALE CENTER	CWS	30
WV	ROCKLICK PLANT	NTNCWS	30
WV	MORGAN COUNTY EARLY CHILDHOOD CENTER	NTNCWS	30
WV	LITTLE LEARNERS VILLAGE LLC	NTNCWS	30
WV	B AND G ORCHARDS LABOR CAMP	TNCWS	30
WV	MISTY VALLEY HARDWARE & GROCERY	TNCWS	30
WV	CAVE COUNTRY STORE	TNCWS	30
WV	USFS DAY RUN CAMPGROUND - HP	TNCWS	30
WV	SENECA STATE FOREST PICNIC SHELTER - HP	TNCWS	30
WV	SUGAR HOUSE RESTAURANT	TNCWS	30
WV	DEANS DEN	TNCWS	30
WV	KUMBRABOW STATE FOREST CAMPSITE 1 - HP	TNCWS	30
WV	KUMBRABOW STATE FOREST CABINS - HP	TNCWS	30
WV	KUMBRABOW STATE FOREST CABIN 4 - HP	TNCWS	30
WV	THE TRAIL KITCHEN	TNCWS	29
WV	KUMBRABOW STATE FOREST BATH HOUSE	TNCWS	26
WV	CAPON SPRINGS AND FARMS	NTNCWS	25
WV	MARFORK COAL COMPANY INC OFFICE	NTNCWS	25
WV	PANTHER EAGLE WATER PLANT	NTNCWS	25

WV	BLACK EAGLE MINE	NTNCWS	25
WV	WVDOT SUMMERS COUNTY	NTNCWS	25
WV	LORING HILL ORCHARDS	TNCWS	25
WV	SONIA'S BAR AND GRILL	TNCWS	25
WV	CAMP WASHINGTON CARVER	TNCWS	25
WV	NAT PK SER THURMOND DEPOT	TNCWS	25
WV	CHESTNUT CREEK CAMPGROUND	TNCWS	25
WV	NAT PK SER NEW RIVER GORGE DUN GLEN	TNCWS	25
WV	CEDAR CREEK STATE PARK	TNCWS	25
WV	K AND A KAMPGROUND (GRASSY RIDGE WELL)	TNCWS	25
WV	BLUEBEND REC CENTER WELL 066	TNCWS	25
WV	GREENBRIER CO YOUTH CAMP INC	TNCWS	25
WV	SECOND CREEK CAMPGROUND	TNCWS	25
WV	USFS SUMMIT LAKE CAMPGROUND 0215 HP	TNCWS	25
WV	ALFREDOS	TNCWS	25
WV	VALLEY VIEW COUNTRY CLUB	TNCWS	25
WV	END OF THE TRAIL 1	TNCWS	25
WV	ALTA STATION	TNCWS	25
WV	END OF THE TRAIL 2	TNCWS	25
WV	END OF THE TRAIL 3	TNCWS	25
WV	ACCESS HEALTH WILLIAMSBURG	TNCWS	25
WV	DEBS PARTY CLUB	TNCWS	25
WV	GREENBRIER RIVER CAMPGROUND	TNCWS	25
WV	STUARTS SMOKEHOUSE	TNCWS	25
WV	USFS SUMMIT LAKE SITES 1 THRU 9 HP	TNCWS	25
WV	GREENBRIER RIVER TRAIL NORTH HP	TNCWS	25
WV	DAWSON INN	TNCWS	25
WV	ORGAN CAVE DOLLAR GENERAL	TNCWS	25
WV	BURGUNDY WILDLIFE CENTER	TNCWS	25
WV	PETERKIN CONFERENCE CENTER	TNCWS	25
WV	CAMP RIM ROCK LLC	TNCWS	25
WV	CONCORD RETREAT HOOK MILL HOUSE	TNCWS	25
WV	AVALON RESORT LLC	TNCWS	25

WV	S O M E EXODUS	TNCWS	25
WV	XPRESS STOP INC	TNCWS	25
WV	SLANESVILLE GENERAL INC	TNCWS	25
WV	MIDDLE RIDGE CAMPGROUND	TNCWS	25
WV	CONCORD RETREAT ROMNEY HOUSE	TNCWS	25
WV	CONCORD RETREAT LODGE	TNCWS	25
WV	DOLLAR GENERAL SLANESVILLE	TNCWS	25
WV	HILLTOP DRIVE-IN	TNCWS	25
WV	LOST RIVER GRILL AND MOTEL LLC	TNCWS	25
WV	MATHIAS COMMUNITY CENTER	TNCWS	25
WV	THE HOME PLACE RESTAURANT	TNCWS	25
WV	LOST RIVER CAMPGROUND	TNCWS	25
WV	LOST RIVER GENERAL STORE	TNCWS	25
WV	RIO GENERAL STORE	TNCWS	25
WV	RIPPLING WATERS CAMPGROUND	TNCWS	25
WV	LEETOWN PARK	TNCWS	25
WV	MIDDLEWAY MARKET	TNCWS	25
WV	TJ'S PIT STOP	TNCWS	25
WV	IMAGES C AND A ENTERPRISES	TNCWS	25
WV	MORGAN GROVE PARK	TNCWS	25
WV	MOUNTAINEER MINI MART	TNCWS	25
WV	RAILSIDE MARKET	TNCWS	25
WV	SUMMIT POINT PARK	TNCWS	25
WV	F L O C (FOR LOVE OF CHILDREN)	TNCWS	25
WV	CLAYMONT SOCIETY	TNCWS	25
WV	RIVER COUNTRY STORE	TNCWS	25
WV	BAKERTON MARKET	TNCWS	25
WV	HARPERS FERRY CAMPGROUND	TNCWS	25
WV	HAWTHORNE INN	TNCWS	25
WV	DOLLAR GENERAL STORE MIDDLEWAY	TNCWS	25
WV	BLACK DOG COFFEE	TNCWS	25
WV	HENRYS CAMPING RETREAT	TNCWS	25
WV	KANAWHA RIVER CAMPGROUND	TNCWS	25

WV	PANTHER WILDLIFE MANAGEMENT AREA	TNCWS	25
WV	PENNYS KWIK STOP	TNCWS	25
WV	NEWBERRY FOOD AND FUEL INC	TNCWS	25
WV	ASHLAND SCENIC CAMPGROUND LLC	TNCWS	25
WV	PINNACLE ROCK STATE PARK	TNCWS	25
WV	KAIROS WILDERNESS RESORT	TNCWS	25
WV	ROBERT W CRAIG MEMORIAL CAMPGROUND	TNCWS	25
WV	KNOBLEY FARM	TNCWS	25
WV	HOOVERS BAR AND GRILL	TNCWS	25
WV	TWISTED GUN GOLF COURSE LLC	TNCWS	25
WV	ADVENTURE WEST VIRGINIA	TNCWS	25
WV	MONCOVE LAKE STATE PARK	TNCWS	25
WV	NEW PICKAWAY STORE	TNCWS	25
WV	PICKAWAY PICKINS RESTAURANT	TNCWS	25
WV	PANORAMA BAR AND GRILL	TNCWS	25
WV	VFW POST 4019	TNCWS	25
WV	HILLBILLY HEAVEN BAR AND GRILL	TNCWS	25
WV	CACAPON INVESTMENTS LLC	TNCWS	25
WV	TROUBADOUR RESTAURANT	TNCWS	25
WV	COUNTRY TRADITIONS EMPORIUM	TNCWS	25
WV	DOLLAR GENERAL STORE BERKELEY SPRINGS	TNCWS	25
WV	COOLFONT RESORT	TNCWS	25
WV	BERKELEY SPRINGS BREWING CO.	TNCWS	25
WV	USFS WOODBINE PICNIC LOWER 026 HP	TNCWS	25
WV	CHERRY HILL COUNTRY CLUB INC	TNCWS	25
WV	GATEWAY RESTAURANT	TNCWS	25
WV	EXPERIENCE LEARNING	TNCWS	25
WV	D AND K DAIRY BAR	TNCWS	25
WV	FRONT PORCH, THE	TNCWS	25
WV	RIVER MART	TNCWS	25
WV	SENECA CAVERNS RESTAURANT	TNCWS	25
WV	CAVE COUNTRY CAMPGROUND	TNCWS	25
WV	TC COUNTRY COOKIN	TNCWS	25

WV	NORTH FORK SENIOR CENTER	TNCWS	25
WV	HIGHLANDS GOLF CLUB	TNCWS	25
WV	USFS CRANBERRY MTN NATURE CTR	TNCWS	25
WV	USFS TEA CREEK CAMPGROUND 045 - HP	TNCWS	25
WV	POCAHONTAS CO PARKS REC BD	TNCWS	25
WV	GREENBRIER RIVER TRAIL - HP	TNCWS	25
WV	WVDNR GREENBRIER RIVER TRAIL - HP	TNCWS	25
WV	BOAT HOUSE, THE	TNCWS	25
WV	ARBUCKLES	TNCWS	25
WV	SENECA STATE FOREST - BATHHOUSE	TNCWS	25
WV	HENRYS QUICK STOP	TNCWS	25
WV	TRENTS	TNCWS	25
WV	CAMP HIDDEN MEADOWS (SWIM POOL)	TNCWS	25
WV	MIMS KITCHEN	TNCWS	25
WV	YEW MOUNTAIN CENTER	TNCWS	25
WV	THE BOUNTY	TNCWS	25
WV	CATHEDRAL STATE PARK	TNCWS	25
WV	MELANIES FAMILY RESTAURANT	TNCWS	25
WV	CAMP GALILEE	TNCWS	25
WV	PINEHILL CAMPGROUND	TNCWS	25
WV	KNOTTS LANDING	TNCWS	25
WV	FAST FREDDY'S LLC	TNCWS	25
WV	OLD TRAIL INN	TNCWS	25
WV	ALPINE SPRINGS LODGE	TNCWS	25
WV	USFS SPRUCE KNOB CAMPGROUND 053	TNCWS	25
WV	REVELLES RIVER RESORT	TNCWS	25
WV	ALPINE SHORE INC - CAMPGROUND	TNCWS	25
WV	USFS MIDDLE MOUNTAIN CABINS - HP	TNCWS	25
WV	ELK SPRINGS RESORT	TNCWS	25
WV	SHAVERS FORK CAMPGROUND	TNCWS	25
WV	HULLS STORE	TNCWS	25
WV	KUMBRABOW STATE FOREST PLAYGROUND - HP	TNCWS	25
WV	KUMBRABOW STATE FOREST CAMPSITE 9 - HP	TNCWS	25

WV	KUMBRABOW STATE FOREST CABIN 5 - HP	TNCWS	25
WV	KUMBRABOW STATE FOREST CABIN 6 -HP	TNCWS	25
WV	REVELLES RIVER RETREAT INC.	TNCWS	25
WV	ROANE COUNTY GOLF CLUB	TNCWS	25
WV	PIPESTEM RV PARK AND CAMPGROUND	TNCWS	25
WV	RIVER REST CAMPGROUND	TNCWS	25
WV	RED ROCK CAMPGROUND	TNCWS	25
WV	NEW RIVER CITGO	TNCWS	25
WV	VANDALLS	TNCWS	25
WV	ROCKY BOTTOM CAMPGROUND	TNCWS	25
WV	BLUESTONE CAMPGROUND	TNCWS	25
WV	NAT PK SER NEW RIVER GORGE VISITORS CTR	TNCWS	25
WV	BLUESTONE VIEW	TNCWS	25
WV	GENES	TNCWS	25
WV	CANAAN VALLEY NATIONAL WILDLIFE RESERVE	TNCWS	25
WV	CANAAN VALLEY STORES	TNCWS	25
WV	END OF THE TRAIL CENTRAL	TNCWS	18
WV	HUGHES RIVER WATER	CWS	1

funding.

We're very thankful for the $55 billion in water funding in the bipartisan infrastructure framework legislation, which is more EPA water infrastructure funding than anyone could ever imagine. We are committed to working with the state agencies and moving the funding out to the necessary projects and helping the communities in West Virginia apply for secure funding.

Thank you, Mr. Chairman and members of the Committee, for the honor of testifying on behalf of rural America, and we are grateful that you have included us as a voice in rural interests in the hearing today.

In addition, we deeply appreciate the numerous opportunities this committee has provided rural America in crafting federal water and environment legislation.

CHAIRMAN CARPER: Todd, thank you for those comments and for joining us today.

Senator Capito, thank you and your staff for finding him and dragging him in here to be a witness for us.

Wayne, you're next, please.

MR. MORGAN: Good morning, Chairman Carper, Ranking Member Capito, Senator Manchin. Thank you for

this opportunity to discuss our nation's water and wastewater utilities.

Senator Capito, you did a great job of giving my background so I'm not going to go back through that, but I will mention the West Virginia Infrastructure and Job Development Council was created in 1994 as a clearinghouse for the funding programs that provide water and wastewater service throughout the state of West Virginia. We also make up the 20 percent match through our state funding that allows us to utilize the SRF funding that makes up so many projects. We work with the U.S. Department of Agriculture, the U.S. Environmental Development Association; ARC contributes heavily to a lot of our projects. The State has the Community Development Block Program, and then, like I said, whether it's the drinking water or the Clean Water Safe Drinking Water Act, those are the backbone of trying to get water and sewer throughout the state of West Virginia, whether it's for repairs, replacement or just extending service.

I will mention, Chairman Carper, that West Virginia did complete it's ASCE score card recently.

CHAIRMAN CARPER: And, and?

MR. MORGAN: We were not last, which we're very proud of. We did get that done, and it actually

was a course at Fairmont State University, so I got to work with the drinking water group in putting together that score card, and I think it's full of valuable information.

I'm going to hit on four topics or challenges that we face here in West Virginia. Aging infrastructure isn't new. It's something that we're dealing with throughout the United States. But maybe something that's a little special about West Virginia is the fact that probably 30 percent of our state or our constituents are unserved related to water, and maybe as high as 40 percent unserved related to wastewater.

The Infrastructure Council prepares for the West Virginia State Legislature a Needs Assessment that I have in front of me. And that Needs Assessment documents the needs that we have. And I'll give some details on that as we go through that.

When I started my career at WVU, or started my education, the SRF funds provided 75 percent grant funding. I knew I wanted to be an engineer. I wasn't sure what field I was going to go into, but when I heard there was 75 percent grant funding for wastewater, that's where I went. And it's served me well over my 46 years working in this industry.

CHAIRMAN CARPER: How many years?

THE WITNESS: Forty-six.

CHAIRMAN CARPER: All right. If you say so. I'll ask to see your driver's license later.

MR. MORGAN: Just like roads in the state of West Virginia, we've got mountainous terrain, and that costs more. We have an abundance of water, which is a great thing, a great selling point for the state of West Virginia, particularly when you spend some time at national conferences and look what Arizona and California are going through and what engineers are able to spend associated with getting water to those areas, so having an abundance of water is a great thing.

That's kind of a summary of infrastructure. I will mention that we have about $400 million worth of applications associated with drinking water and about $400 million applications associated with wastewater. So every month we meet and we try to figure out the best way to fund these, with the other funding programs. And hopefully, with the new bill that comes through, that will free up more money to move these things forward.

CHAIRMAN CARPER: Wait. Wait. Would you just repeat those numbers again, please?

MR. MORGAN: The state of West Virginia has about 400 million in drinking water and about 400 million in wastewater in applications that are

pending. In other words, they're technically feasible, engineers have put together the applications, but they need funding to get them to construction. So, any type of additional funding will be very helpful in trying to make -- I won't call them shovel-ready but they're ready to start the design, and then they'll go on to construction, and they're needed to keep these systems functioning as we move forward.

And because we're concentrating on wastewater and combined sewer overflows, there's about a billion dollars' worth of needs associated with long-term control plans. Whether it's Huntington, or Charleston, or a small community, these combined sewers, dilution is the solution to pollution was an environmental engineer or sanitary engineer's term back in the '60s and '70s. I started school in the '70s. And, you know, putting in wastewater systems so the combined sewer systems can be converted to storm water systems is a big part of what we're trying to do to eliminate overflows that go into beautiful rivers and streams that we enjoy here in West Virginia.

Maybe even more important than the infrastructure itself is, even though they keep recycling, some of us, as we get older and we retire from one job and we start on a new job and we're working for

the State of West Virginia, and we love it, but we've got an aging workforce and we've got to address it. We've got to come up with more Class IV operators, whether it's drinking water or wastewater.

They've got to understand technology, because there's tremendous savings associated with technology, whether it's the mapping that Jason has done such a great job with -- Jason Roberts -- throughout the state of West Virginia, or supervisory control and data acquisition, or even just workforce management system, keeping track of your assets so that you can get those maintained and replaced.

If you paint a water storage tank every 25 years, it will last over a hundred years. I've been part of an organization where we prided ourselves on receiving a 100-year certificate for a steel water storage tank as it was well maintained.

I've also seen other instances where, if you don't paint that tank, at the end of 25 or 30 years, you got to replace that tank because it wasn't painted or well maintained. So there's tremendous savings out there associated with that.

The last thing I'll mention is rate affordability. There's an apprehension of increasing rates. And we need to get to rates that are equitable

across the United States. I like the way the SRF programs work where they're based on a median household income, and if you have high rates, which exist in a lot of rural locations, then you can receive more grant funds associated with the SRF programs or with the state programs we have here in West Virginia, so that when people get to 2 percent, which is considered the affordability level for drinking water or wastewater, you can qualify for a lot more grants and get that project started.

If you have very low rates, then you probably need to take out a loan to get that work done and probably need to increase your rates to maintain that.

All these have potential solutions. Regionalization. Sometimes it's called consolidation. But we have a Consolidation Committee at the Infrastructure and Job Development Council. If it works better by combining a couple of small utilities and making them a larger utility, it has some great benefits.

Gradual increases in rates so that you don't create rate shock. You can't increase everybody all at one time, but this can be worked into a cost of service pricing so that we stabilize rates across the United States.

Lastly, I'd just like to thank you for the time

Statement of Wayne Morgan Before the Senate Committee on Environmental and Public Works Hearing on "Identifying the Unique Challenges that Small, Disadvantaged, and Rural Communities Face in Accessing and Maintaining Drinking Water and Wastewater Treatment Services, Including Infrastructure Assistance, Through the Various Clean Water and Drinking Water Programs Administered by the U.S. Environmental Protection Agency"

October 14, 2021

Good morning Chairman Carper, Ranking Member Capito and members of the Committee. Thank you for the opportunity to discuss our nation's water and wastewater utilities.

My name is Wayne Morgan, and I am the Executive Director of the West Virginia (WV) Infrastructure and Jobs Development Council (IJDC). The IJDC was created in 1994 by the WV Legislature to be WV's funding clearinghouse for water and wastewater projects. My additional credentials include certifications as a professional engineer (WV 8884) and a class IV (highest) public water system operator (WVOP26374). In my 44 years of water and wastewater utility experience, I have spent 26 years in West Virginia, 4 years in Virginia and 14 years in New Jersey at a water and wastewater utility corporate office with operational responsibility for 12 separate state utilities, and during that period (5 years) the U.S. utility was part of the 2nd largest utility in the World.

Before beginning, I want to thank the ranking member of the Committee, WV's Senior Senator, Shelley Moore Capito, for your commitment to, and tremendous work for WV. Also, I would like to thank the Committee Members for your interest in this important topic. These challenges facing our water and wastewater utilities affect every American.

Listed below are the prioritized challenges I want to present/reinforce with the Committee.

1. Infrastructure - Aging Infrastructure is a challenge for most of the water and wastewater utilities in our nation. In many rural areas across our country, there are no current plans to add infrastructure to expand our network of water and wastewater services to citizens. Much of the wastewater infrastructure was constructed in the 1970s with the passage of Clean Water Act in 1972 (and the reason I decided to become a civil/environmental engineer when I went to college). When constructed with up to 75% US EPA grant funding, the lifespan of these systems was 40 to 50 years. Today we are at the end of that lifespan and systems are in need of upgrading. The WV IJDC compiles a Needs Assessment for water and wasterwater in WV every three (3) years, which provides details on system upgrades and extensions to customers needing public water/wastewater service. Here is a link to the December 2020 WV IJDC Needs Assessment.

http://www.wvinfrastructure.com/project-dashboard/pdf/policiesGuidelines/2020%20Needs%20Assessment%20Complete.pdf

Just like the higher cost of roads in mountainous terrain the cost of water and wastewater systems are higher in states like WV than areas which have rolling or level terrain. The recognition of this issue is needed related to funding projects. The world is facing unprecedented material cost fluctuations that will hopefully become stable again as logistics and demand needs are addressed.

Potential Solution(s) - Increased funding, cost of services pricing, training and regionalization/consolidation are all potential solutions that can be utilized individually or in combination to address the need for upgrading or extending water and wastewater infrastructure.

2. Lack of a workforce replenishment plan – This challenge may be even greater than the need for funding for infrastructure (listed above). Small, rural utilities are particularly impacted by the severe lack of licensed operators and workers, as their operators and workers will move to larger utilities for higher wages. Funding to establish a water and wastewater workforce replenishment plan, and for the on-going training of individuals are desperately needed.

   Potential Solution(s) - Increased funding and training are needed to educate the industry including customers, utility workforce and management to address the need for a workforce replenishment plan, and on-going education and training of the workforce at all utilities.

3. Lack of a technology utilization plan – Paired with the workforce utilization plan and integral to the success of both plans is the need for funding to establish a technology utilization plan, and for the on-going training of individuals are desperately needed. The technology utilization plan needs to provide for the consideration of the following.
   a. Telemetry and SCADA (supervisory control and data acquisition)
   b. Asset based enterprise customer and financial software system
   c. GIS (geographic information system) based mapping tied into the enterprise software system including workorder based dispatching to meet asset maintenance/repair and customer demands

   Potential Solution(s) - Increased funding and training are needed to educate the industry including customers, utility workforce and management to address the need for a technology utilization plan, and on-going education and training for the workforce at all utilities.

4. Rate affordability-based funding needs to continue so rates become more standard/equitable across the U.S. Challenges to rate affordability are listed below:

a. Declining population is a challenge for West Virginia and particularly southern WV where we are today. A growing customer base within a customer service area allows the utility to spread its cost over a growing customer base, and permits rate increases to be delayed due to growth.
b. Mountainous terrain, as previously stated/explained, and or other issues impacting cost of construction across the U.S.
c. Lack of technology utilization

Potential Solution(s) - Increased funding, gradual increases in rates to achieve cost of services pricing, training and regionalization/consolidation are all potential solutions that can be utilized individually or in combination to address the need for cost-of-service rates.

Thank you for your time and for addressing this important issue.

that I've been provided here and the ability to address some of these important issues, and I look forward to our discussion. Thank you.

CHAIRMAN CARPER: Wayne, thank you. You've given us a lot to think about. Thank you very, very much for joining us.

Jason.

MR. ROBERTS: Senators, thank you all for the opportunity to speak today. We really appreciate this. And I will say I'm not the one that does the work at Region 1. I'm just blessed to have a bunch of colleagues that really carry the weight.

Senate Capito, before I start, I want to say you probably have met other people with a geography degree; they just didn't admit it to you.

SENATOR CAPITO: That's okay; I have a zoology degree so ...

MR. ROBERTS: Okay. But it's going to sound like I'm going to mirror what Mr. Morgan said, and some of this probably is, but to put things in perspective, in calendar year 2021 to date, the staff at Region 1 has submitted over 80 applications totaling over $119 million in need. Most of those are for water and sewer infrastructure projects.

So far this year, we have received more than

15 for our communities, but obviously, the need far outweighs how much has been awarded.

A lot of what I'm going to focus on was geared specifically towards sanitary sewer, but it's perfectly applicable to potable water as well. And seven challenges are what I want to hit on here, and I'm going to paraphrase in the interests of time. But you-all mentioned a lot of these infrastructure systems are designed for 40 or 50 years.

And, Senator Carper, I think you said some of these are more than 100 years old, and exactly they are. A lot of -- a lot of these old systems in some of these coal communities in our region, the water and sewer systems are 100 years old. It's a miracle that they're still working. But the aging infrastructure is a tremendous problem in rural systems.

A declining population and customer base, that's another big issue. As we all know, the cost of doing business, the cost of electricity, the cost of chemicals, of workforce, of labor, that continues to rise. But as you lose customers from a utility, that cost has to be spread across fewer and fewer people. So it's really you have less people bearing more of a burden. So that's a big issue, especially in rural Appalachia.

Topography is an issue for us, especially in southern West Virginia. When you go to bury a waterline or a sewer line, if you have to go very far and you hit much rock, it's -- the price goes way up. Luckily, I'm not an engineer; I don't have to deal with that.

But you never know what you're going to get into as we start developing projects and we start going to IJDC, or ARC, or U.S. EDA for money, a lot of the time the project goes up just for the unforeseen circumstances of the terrain.

To reiterate what Mr. Morgan said, artificially low rates are a big issue in a lot of these rural utilities. And I realize a lot of operators, a lot of systems, their management really try to keep rates low to really help their constituents and the customers. But, in reality, it's doing more harm than it is good. If you don't have the money you need to make the improvements, to make the repairs, to make the expansions, you can't do that.

And, unfortunately, what happens is maintenance is deferred, and then there's a catastrophic failure. And, really, it's kind of unfair to you-all because it puts you in the limelight and you have to come up with a quick fix, or we have to go to IJDC for a quick fix. So the artificially low rates are a big

issue.

Going back to my geography background, I started at Region 1 doing GIS work and mapping water and sewer systems. And that lack of -- that lack of knowledge, that lack of information is a big issue. You don't really know what you have in the ground. It's really hard to manage and maintain something if you don't know where it is or the condition. So the lack of system mapping is a tremendous issue for these small systems.

Lack of incoming workforce is a problem. One of the big issues that these smaller utilities will face is they will get someone who is just newly certified as an operator, and then once that operator gains some experience and gets more and more certifications, they move on to a more financially lucrative position at a larger utility.

And then overall, the last thing I want to point out as a challenge is just the general lack of technology. We have a lot of utilities that want to continue to do things the way they've always been done. And believe it or not, I am a, you know, computer person or a GIS person, but in a lot of ways, I'm afraid of technology as well.

And that's really harmful to a lot of our

municipal systems and our PSDs, our public service districts, because you could really increase a lot of operational efficiency if you integrate technology.

A good example is if we have to have a meeting with a project team for a water project or sewer project, if we utilize, you know, virtual meetings like Zoom, we can get on, have the meeting, and there's no travel time, there's no mileage cost, none of that.

But if the PSD or the municipality, if they mandate that the meeting is in person, then you have to pay the hourly rates and the mileage for people like accountants, engineers, project administrators, legal counsel. And that's a pretty expensive meeting. And so I think just the general adoption of technology will help these systems operate much more efficiently.

Some of the solutions that I'd like to point out, again, regionalization or consolidation, as Mr. Morgan put it. If you consolidate, obviously, you will realize the benefits of the economies of scale, so regionalization is, I think, a very good solution.

Utilizing nontraditional systems, especially in sewer systems. Because of the low population base and a low customer count, it's not really efficient to have a traditional sewer plant or sewer system. However, if you could have a series of decentralized

sewer systems, that means it's much more affordable and much more technically feasible.

And then if you have outmigration, you can simply walk away from that decentralized system or maybe even take it and relocate it somewhere else.

I think the single most important thing to take away is the frequent minor rate adjustments to keep track of inflation. Again, if you -- for example, I'll just give you some perfect examples. We have some utilities in my region that have not had a water or sewer increase in 30 years on their rates.

CHAIRMAN CARPER: Wow.

MR. ROBERTS: And so when they get to the point of having to go for a project, it necessitates a rate increase. Percentage wise, it's a massive increase. In terms of dollars, it's not much, but percentage wise, it's a massive increase. And you hear a lot of outcry from the people that are paying the bill.

It's just like any other utility, like the electric utility or maybe the gas utility. If you have periodic small, incremental rate adjustments, you don't get the sticker shock that Mr. Morgan mentioned.

Another possible solution would be some sort of either mandate or incentive or assistance for these

utilities to keep their audits current. In order to apply for most grant programs, you have to have a current audit. A lot of these smaller systems really can't just -- they can't afford the professional services to have yearly audits current. So aside from not being able to apply for grant funds, they really don't know the figures -- the dollar figures associated with the financial health of their system.

The possible solution is to require the implementation of current technologies, just in general, the technologies, and lastly, system mapping. Having adequate, current system mapping will really increase the operational efficiency of these utilities.

For example, you-all mentioned the water loss. In order to really track down and locate water loss, you have to know what's in the ground. And if you don't know exactly what's in the ground, you really can't locate it.

So those are some challenges and potential -- potential solutions. And I do want to end this by saying I don't sound -- mean for this to sound as disparaging remarks to small utilities or small systems. In contrast, some of the most intelligent people I've ever met are the operators for small municipal systems or small PSD. And if it weren't for their ingenuity, a

lot of these systems would have went defunct years ago.

We have operators in our region that take equipment that is not meant to be serviceable, and they actually go to various locations, machine shops, and buy equipment from other suppliers and actually refurbish a lot of this equipment that was never designed to be refurbished. And if it wasn't for that, they would be in a world of hurt.

But, anyway, that's just the highlights of the challenges and the possible solutions. And again, thank you all so much for listening.

CHAIRMAN CARPER: Senator Capito, what a terrific panel. What a terrific panel. A lot of wisdom here and a lot of common sense. My dad used to say to my sister and me when we were kids and we would do some boneheaded stunt, Joe, my dad would say to my sister and me, "Just use some common sense." We must not have had much, because he said it a lot.

But a lot of wisdom here. A lot of common sense and a good healthy dose of technology.

All right. Senator Capito, do you want to lead us all?

SENATOR CAPITO: Yes. Thank you. And thank all the witnesses, and excellent.

I just wanted to start with a quick comment on

Statement to the Senate Committee on Environmental and Public Works Hearing on "Identifying the Unique Challenges that Small, Disadvantaged, and Rural Communities Face in Accessing and Maintaining Drinking Water and Wastewater Treatment Services, Including Infrastructure Assistance, Through the Various Clean Water and Drinking Water Programs Administered by the U.S. Environmental Protection Agency"

October 14, 2021

Jason Roberts, Executive Director
Region I Planning & Development Council
Princeton, WV

Dear Senators, on behalf of the Region I Planning & Development Council, I sincerely thank you for the opportunity to discuss our infrastructure utilities. The following are my observations of the challenges and potential resolutions to infrastructure needs in southern West Virginia. While the focus of our discussion is sanitary sewer service, most of the comments below are applicable to potable water service as well.

The infrastructure needs of Region I alone are staggering. In calendar year 2021 (to date), staff have prepared and submitted close to eighty applications, totaling over $119 million in need. Over twenty projects, representing more than $15 million, have been funded (many of which were applied for in 2020). It should be noted that most projects mentioned (both applications submitted, and funding received) represent water or sanitary sewer improvements. I am certain that many of these same issues are relevant throughout Appalachia, as well as the rest of our nation. It is my sincere hope that the following observations will be of assistance to you.

Challenges

1. Aging infrastructure: Much of the sanitary sewer infrastructure within our state is antiquated and outdated. Most of these systems are well past their useful lifespan, and some are more than 100 years old

2. Declining population and customer base: As you know, West Virginia has suffered a tremendous decline in population over the last several decades. While the customer base has dwindled, the costs associated with operating public utilities increases as electricity, chemical costs, and labor costs rise due to inflation. There are fewer customers left to bear the financial burden.

3. Topography: Rugged geographic conditions are a limiting factor for the expansion of sanitary sewer. Difficult terrain limits engineering options, and often rocky conditions result in difficult and expensive costs for installing sewer line for traditional systems.

4. Artificially-low rates: Many public systems refuse to raise utility rates. They do this with the mindset that they are helping their customers. They are harming the overall viability of the community by depriving themselves of the revenue necessary to properly operate

and maintain the system. Unfortunately, when systems experience catastrophic failure, they do not have the capital reserves required to remedy the situation. The utility must then rely on state and/or federal emergency funding to remediate the issue and resume operations in a timely manner. This is not fair to the funding agencies, nor to the political leaders that are thrust into the spotlight and pressured to provide "quick fix" money.

5. Lack of system mapping/no institutional knowledge: Adequate knowledge of the system and its assets is essential to proper maintenance, expansion, and repair. Many public utilities have no documented mapping; mental information is all contained within one or two veteran operators. If these operators retire, pass away, or leave unexpectedly then all that institutional knowledge disappears as well.

6. Lack of incoming workforce: There is a dearth of new operators and workforce coming online to work for these utilities. Often, new operators will work for a small utility, then leave for a more financially lucrative opportunity at a larger system after receiving the necessary credentials.

7. Lack of technologies: Both the leadership and the workforce of many utilities remain antiquated in their technologies, if they have any at all. For many sewer systems there is no integration of technology to improve management and operational efficiencies. A perfect example of this is how many utilities have failed to adopt virtual meeting practices and equipment during the COVID pandemic. Many municipalities and public service districts continue to insist on meeting in person, even though CARES act funding was widely available for the purchase of audio/visual equipment and software. Aside from the public health aspects of utilizing remote technology, utilities would benefit extremely from conducting meetings virtually. This methodology should be utilized regardless of any public health crises; conducting meetings virtually drastically reduces project costs by eliminating expensive travel fees and hourly charges for professional services such as engineers, legal counsel, accountants, and project administrators.

Possible Solutions

1. Regionalization: Many utilities are simply too small to operate efficiently given their dwindling customer base. These small, inefficient systems should be merged into a larger utility to realize the economies of scale.

2. Utilization of non-traditional systems: Many project areas are too small, too distant, or traverse terrain too rough to be viable for conventional sewer systems. In these situations, the utilization of non-traditional, de-centralized sewer systems provide one possible solution. Similarly, many sewage treatment plants require a certain level of use to operate efficiently. Dropping below that results in operational inefficiencies. Having de-centralized systems that a community can "walk away from" as populations decline means that there is no additional stress added to the main utility.

3. Frequent minor rate adjustments to match inflation and customer decline: This is perhaps the single most important response to our deteriorating infrastructure. It is imperative

that utilities implement regular rate adjustments to match inflation of labor and materials. Failing to do so only results in a utility that never has the resources to properly maintain their system.

4. Keep audits current: Many systems are remiss in completing audits and reports on time. Falling behind results in ineligibility for grant funding, as well as a general ignorance of the financial health of the utility.

5. Require implementation of current technologies: Require utilities to implement technologies that aid in system and employee transparency, efficiency, and record keeping. Using technology prevents manual entry of information (such as in maintenance logs, etc.), allows for work orders to be issued without staff having to physically return to the office, records pertinent information (such as job completion, field inspections, etc.) and offers increased public input and participation (online problem reporters, etc.).

6. System mapping: Completion of detailed system mapping aids in operational performance. Digital mapping means less time is spent searching for system features, staff can have information at their fingertips (ex: operating manual for parts hyperlinked to feature point on map), and scheduled maintenance can be depicted and tracked visually.

the wastewater -- drinking water wastewater bill we've been talking about and we hope gets signed into law when the President -- when the bigger bipartisan bill passes in the House. We're hopeful of that.

There's a couple of things that you've mentioned, and the reason we get these ideas is because you-all interact with us all the time to tell us where the needs are.

I've worked with Senator Booker on the workforce development piece. There is a $5 million appropriation in there to help. Now, I don't know what the solutions are going to be in terms of getting young people excited about working in the water field, but I think we have to make sure that we're starting with that recruitment earlier and also providing the availabilities for that so that the certifications are there.

The other one is the decentralized systems. I'll have to say my staff here, Travis Cone, made a tour into southern West Virginia and it was -- highlighted a lot of abandoned systems that were old coal camps and other things that are just kind of left in the ground, and that can't be a good environmental situation. So we've tried to help address some of that through these either abandoned or decentralized systems.

And lastly, we also had tried to address the mapping issue in this bill. Realizing that people don't know where things are, as you mentioned, Jason, that we put some mapping dollars in there -- emphasis in there, availability to be able -- and, you know, with some of the technologies that's available now, it might be a little easier. But, in any event, you're right, you can't fix something if you don't know where it is.

I wanted to ask on the financing thing, because, obviously, the big thing is the money and being able to cobble money together. So I'll just call you "Wayne," because I know you, Wayne. Wayne, let me ask you this: On the -- when you're -- when you're putting together -- and I've seen how you do it in terms of the prioritization of certain projects. And you mentioned the $400 million in drinking and $400 million in wastewater projects that are pending in front of you. And are you finding that the matches that the locals are using, some of the rescue dollars or other dollars, for their match more readily?

How are these cobbling together? More difficult or easier than they have been, say over the last four to five years?

MR. MORGAN: Thank you for the question. And being a clearinghouse and getting to work with all the

funding programs, and I won't go through the litany again, but you're working with about ten different programs.

SENATOR CAPITO: Right.

MR. MORGAN: So, I was on a project phone call the other day for an $11 million project, and we've got USDA on the phone; we've got the SRF program on the phone; we've got IJDC there, so we're putting it together a third, a third and a third.

Over the past six months, since the ARPA funds have become available to the local municipalities, the county commissions, our state funds are set up such that they require a 50 percent match from the Infrastructure Council funding. So many projects that were not viable before, I'll talk about -- although Parkersburg is a big utility and probably capable of going to the market, they do like to keep their rates as low as they can. But they came up with half-match with ARPA funds, and they put that together with the Drinking Water Treatment State Revolving Fund such that they were able, instead of borrowing for a $15 million project, they're borrowing for $7 million in loan and they're using their ARPA funds so that the constituents of Parkersburg keep their rates as low as possible.

And that rolls down to the smallest utility

that we work with, whether it's in McDowell County with Jason and his staff, or wherever it may be located. These ARPA funds are becoming more and more prevalent in providing funding for water and wastewater projects.

SENATOR CAPITO: Let me ask a quick question, because I heard this in Berkeley County, and that's our -- probably our -- one of our most growing counties, so they've got stresses and strains that are different in certain parts of the state. But there was a question raised as to whether they can go to the open market and get financing for the systems.

In a timing situation, is it quicker if you can go to the open market or -- and more favorable in the open market? What's the comparison on that?

MR. MORGAN: Thank you for the question. And John Reisenweber is our vice chair in the Infrastructure Council as a public member from Berkeley County. And essentially he made the Water Development Authority, Marie Prezioso, and myself as the Executive Director of the IJDC, aware that Berkeley County has got $80 million worth of needs in water and wastewater.

SENATOR CAPITO: Right.

MR. MORGAN: That's a big number, but growth is just tremendous there with what's going on there compared to other parts of the state.

USDA announced their rates at our meeting. They're at 2 1/8 percent for somebody like Berkeley County PSD, who would only qualify for market rates because the median household income there is high, and we're at 2.75. So kind of like a water plant in Lewisburg, that's a $30 million project, that a lot of funding programs have to come together to make the funding work for, our first thought about that when we were talking with Mr. Reisenweber, who represents the eastern panhandle on our Council, was it's not something IJDC can do, it's not something USDA can do, but the Water Development Authority might be able to go to the public market for them and finance the whole thing. And that way you're using the state audit or the state standing behind those numbers for Berkeley County. And it even becomes more important for small utilities to be able to use the state to be able to do that.

So we're going to figure out a way to get Berkeley County a large amount of money that they need, because, otherwise, they won't be able to accommodate this growth.

And they've had some industries that want to be there. They're on I-81. They've got, you know, everything there, the Shenandoah River, the Appalachian Regional Trail. It's one of the most beautiful places

you can get to as close as Washington, D.C. and Baltimore and New York City. It's just an opportunity.

SENATOR CAPITO: Okay. Thank you.

CHAIRMAN CARPER: Thank you.

Thanks very much for those -- those responses.

Senator Manchin.

SENATOR MANCHIN: Thank you.

I don't know whether it's working or not. Can you hear me?

Anyway, wanting to follow up on that, a lot of the money -- you know, the country is just about divided, not just "about." It really is divided between rural and urban.

The moneys that are available due to match down, do you find that there's less opportunities in rural, as far as the amount of money that you're competing for, versus what's going to urban?

And I'll tell you the reason why. I know in hospital funding and education funding, every time there is education in basically a category, whatever the category may be -- it could be water and sewer -- that most of the money is doubled up because the return on investment basically is the fed, because so many people in a concentrated area. If the federal government puts $10 million where there's 200,000 people, there's a

better return, showing you're helping more people for less money, than if you go and spend $10 million and there's only 50,000 people. That's the problem we have.

We've been trying to -- all of us have been trying to work to basically cut out 20 percent of any funding that comes from Washington must be dedicated to rural America, so that pot of money can only be accessed by rural parts of the country. If not, they get left behind.

And I don't know if you see that at all in, you know, I mean the demand you have and the need that we have in rural West Virginia -- which our whole state is rural -- is a lack of federal funding we need to match down to all these programs, whether you can match them or not, aren't available because of the federal dollars? Are you finding that?

MR. MORGAN: That's very true, Senator Manchin. You know, we talked about Parkersburg just because it was a recent project. They could go to the open market. Berkeley County could go to the open market. They could find funding in other locations, because they're large utilities. But the small utilities don't have that luxury. They've got to depend upon federal dollars; they've got to depend on state dollars.

And I'll go back to the reason I started in this industry, when I wanted to become a civil engineer at WVU and they said there's 75 percent grant funding from the SRF Clean Water Act.

We may never get back to that level of investment, but that's how the sewer systems got built in the United States was with that program, just like the interstate program.

SENATOR MANCHIN: Well, the whole thing I wanted to -- you know, 66 million people live in what we consider rural America. Sixty-six million. We want to make sure the funds are dedicated to where you-all have at least -- you know, if you're competing, you're competing with another rural part of the country, not with urban, not Chicago, not New York or any of that. So those are the things we want to make sure.

The next generation of water utility workers, we have a hard time finding utility workers, especially in smaller, rural areas, so we see a lot of deferred maintenance, or a lack of knowledge of how to maintain properly because they can't find the proper people to run the smaller PSDs.

Are you having that problem? Do you see that in West Virginia, and pumps and all that?

Todd, you might want to answer that one.

MR. GRINSTEAD: Yeah, we absolutely see that. Thank you for the question.

West Virginia Rural Water Association has a program now that we are operating. We're in a pilot program. We're about five months into it that where we have an apprenticeship program where we took on the -- I don't want to call it a burden, but we took on the task to do workforce development, and we're doing it in two ways. One is through our apprenticeship program where we have folks who want to be in the industry. We get them in there, get them certified.

SENATOR MANCHIN: What are you doing with the program -- how are you -- how are you advertising to have my child, my grandchild interested in that? How are you going about reaching out?

MR. GRINSTEAD: We'll be going to job fairs. We'll be going to high schools talking to guidance counselors. That's the second leg of this I was getting to, the fact that there's a lot of young folks don't even know we're an industry. All they know is they turn on their faucet, they get water; they flush the toilet, it's gone.

So we're taking that task on to try to market this industry to let people know -- young people know that this really is an industry, it's a good paying

industry, great benefits, longevity.

I mean, we're at the point now, over the next 10 years, we're going to lose 30 to 50 percent of our workforce.

SENATOR MANCHIN: Anybody speaking to technical colleges teaching any of these courses that you recommend? Have you talked to them about it?

MR. GRINSTEAD: Yeah, there's some of that going on, and there's some partnerships right now we're working on. We're even looking at partnering to where we can get some young folks that are still in high school, get them into these water plants and wastewater plants and let them kind of see what goes on, and they can choose their career path based off of that. And then they can dovetail right into an apprenticeship program at a local utility or a utility around us. We are working on that.

SENATOR MANCHIN: Jason, finally, I know that Shelley's staff and my staff, all of us have been working on this internet -- internet connectivity. You guys have been right on the front edge of this and working it hard.

If we don't fix it now, it's never going to be done. If we can't get this state connected in the next few years with the amount of money that we're going to

be throwing into it and putting into it, then I think rural America will be lost and left behind forever.

So I hope that there's a plan -- a statewide plan. And I know that you-all showed us your regional, and it could be as a statewide model. Is anybody in Charleston and from the Council, are they all buying onto this? Because, as the money comes, the money you-all have, and if the -- when the infrastructure bill passes, there will be tremendous dedication, tremendous dedication towards internet connectivity.

Maps are horrible. We're trying to get those realigned. So give me your best shot at the opportunities that we have and if it can be done.

MR. ROBERTS: Thank you, Senator. That's a good question. And yes, we do -- we do have a plan for doing a statewide analysis of broadband needs, basically making a bigger version of what we showed to you with the southern West Virginia.

SENATOR MANCHIN: Right.

MR. ROBERTS: We actually received $300,000, not Region 1, but Regional Optical Communications, our joint nonprofit.

SENATOR MANCHIN: Right.

MR. ROBERTS: We received $300,000 from ARC, actually just last month, for the match to serve towards

a U.S. EDA application to essentially do a statewide broadband study replicating the ROC model, looking where eligible areas are --

SENATOR MANCHIN: You might want to explain your model, because your model basically showed how you could take that area and have everyone connected.

MR. ROBERTS: Yes, sir. We used HUD, CDBG funds, Region 1 PDC using Wyoming County as an applicant.

SENATOR MANCHIN: Right.

MR. ROBERTS: Region 4 PDC used Webster County as an applicant, and then we combined those funds and went to U.S. EDA. Essentially, we had $500,000 to look at a regional broadband analysis, and we looked at the FCC eligible areas, eligible areas based on low to moderate income for HUD funds, for USDA funds, for distressed areas for ARC funds.

And we teed up about 80 projects, implementation projects. We had really detailed planning. I don't want to say engineering, but we had almost pre-engineering information. And that served as basically a playbook for the past four or five years. Whenever a pot of funds became available, we just plucked a project out of that ROC study, went to the funding sources. And we've submitted, I think, 26 or 28

applications, Senator, from that.

And that's exactly what we're trying to replicate through the statewide study.

SENATOR MANCHIN: Well, I hope you-all push it through. And I want to thank all of you for that and thank you all for being here.

And I want to recognize Mayor Rappold back there, Rob, one of the most active, involved mayors in the state of West Virginia, and also a Woodrow Wilson graduate, and a dear friend. Thank you.

Thank you, Senator.

CHAIRMAN CARPER: You bet. Thank you, Senator, Chairman, Governor, for joining us.

UNIDENTIFIED SPEAKER: There they go again.

SENATOR MANCHIN: There we go again, John.

UNIDENTIFIED SPEAKER: There they go again.

CHAIRMAN CARPER: Sorry. Mother of future governor. We'll see.

I remember when I was a kid coming back to Beckley visiting. I'd always go with my sister and stay with grandparents in Beaver -- Daniels. Daniels. They call it Daniels. And I'd spend nights there at my cousin's house in Beckley. My parents owned Patton's Market on Harper Road.

And I remember once one of my cousins, about

the same age as me – Ed Patton – his brother Dan, who was in the same high school graduating class with Gayle, and we'd work at Patton's Market. And one afternoon, Dan Patton, who was working at the local radio station said to Eddie, his younger brother, "How would you like to come to the radio station?"

And we said, well, we'd like to go there and see what radio stations are like, AM radio. And they let us go on the air. I can't believe that. I was, like, 12 or 13 years old, and they let us sing a song. And we sang.

SENATOR MANCHIN: This is going downhill fast.

CHAIRMAN CARPER: Robert Mitchum had a big movie called Thunder Road, so we all sang Thunder Road.

But I love music. That's where this is going. I love music. And I'm always looking for ways to connect ideas, and even legislation, with music. And the song that's going through my head right now is: "They say the best things in life are free, but you can give them to the birds and bees 'cause I want money. That's what I want."

And that is what we are hearing, there is a great need for money. There is a great demand for money. And as it turns out, we're like this close. What we're doing, we're this close. The federal

government is getting -- unleashing a torrent of money for all kinds of good causes: roads, highways, bridges, internet, rail, airports, water. I mean, we're this close.

And in the Old Testament, Moses on top of the mountain, you know, God said, you can go to the mountaintop and see the Promised Land, but you're not going to get there. It will come later.

Well, we're at the mountaintop. We are at the mountaintop. We can see the Promised Land. We're like this close.

Like, Joe is a former quarterback, and you know how you're pushing the football, you're pushing the football down the line. You got it in the 20-yard line, your 10-yard line, you're like pounding it on the ground at the end zone. We're like on the end zone. We're inside the red zone. We're on the end zone. We're right at the end zone. We've got to get this ball into the -- into the end zone.

I have a couple -- let me just say, sometimes we have a diverse panel. What I will do is ask each of the witnesses to point out to us some of the points -- major points and important points where you think there is agreement. Just maybe each of you like mention three areas where there is like really clear agreement.

And, Jason, why don't you -- and if you don't come up with three, two, but where do you think there's consensus in a path forward for us? And we would welcome that.

MR. ROBERTS: Thank you, Senator.

I think, based upon talking to funding agencies, and IJDC, and Water Development Authority officials, I think one of the biggest needs that we all agree on is the rate adjustments, you know, the minor, frequent rate increases. That's one.

I think the consolidation or regionalization is another one, and then some mechanism to fund operators is probably the third.

I think those are three massive issues facing the utilities, and so we all seem to be in consensus. The people that work in this in the trenches every day, that seems to be the high points for all of us.

CHAIRMAN CARPER: All right. Good. Thank you for that.

Wayne, please.

MR. MORGAN: I'm going to follow up on what Mr. Roberts just said is rate affordability is huge. It comes up in every municipal meeting that you go to when you're out there working with a municipality. And the SRFs are already set up to create rate equity.

In other words, if you have high rates, you qualify for a lot of grants. If you have low rates, you're going to get a loan. So I think the programs are already set up that way. Just continue to have the programs set up in such a manner such that we get rate equity as we move forward.

I won't mention the need for funds for infrastructure, because there's already a lot of agreement on that. But if we don't have funds in there for a workforce replenishment plan, we're going to have problems. And I think there's a lot of agreement that we need a rate force -- or a workforce plan in place so that we can get new workers as we move forward.

CHAIRMAN CARPER: Good.

SENATOR MANCHIN: Can I --

CHAIRMAN CARPER: Yes, please.

SENATOR MANCHIN: -- jump on that right there?

CHAIRMAN CARPER: Jump right in, Joe.

SENATOR MANCHIN: The Infrastructure Fund -- the State Infrastructure Fund, it was based on -- rates were based on how it would help people based on were they paying at least the 3,000-gallon, you know, based on water.

Is that still how that's done? I thought it was thirty-some dollars, thirty-six to thirty-nine

dollars for the first 3,000 gallons.

MR. MORGAN: You're exactly right. We follow the SRF program pretty much. We're just a little bit higher, but 3,400 gallons of water is what an average West Virginian uses. That was established by the Council.

SENATOR MANCHIN: Yeah.

MR. MORGAN: And if your rates are less than one and a half percent of the MHI, then you're going to get a loan. If you're between one and a half percent and two percent, we're going to give you a half-a-million-dollar grant and lower rates.

And if you've got --

SENATOR MANCHIN: How many areas in our state are below? Because I could never get them to raise it. And I understood the hardships, but then it was a conundrum because they couldn't qualify. We wouldn't even consider them when they were so far off. They wouldn't raise their rates.

MR. MORGAN: Well, that conundrum is what we're talking about here, and what Mr. Roberts mentioned is when you have rates less than one percent of the MHI, you're going to qualify for 20-year funding at 2.75 percent from us, which is not a great rate when you're giving one percent, 40-year money to people that

have high rates.

So we need to address that issue and the reluctance, and it's probably an education or training issue for municipalities, utility managers, others, that, hey customers, there's a cost to this service and we've got to recognize it so that we can keep your infrastructure up-to-date.

Thank you.

CHAIRMAN CARPER: This time yesterday I was in Georgetown, Delaware. We have three counties in Delaware. The southern most county is Sussex. It's very rural. We raise more chickens there than any county in America.

And we were having a ribbon-cutting at Delaware Technical Community College in Sussex County, Sussex County campus. And there was a ribbon-cutting for a project that we've been working on for a number of years dealing with creating trained people who can work on our cars, trucks, and vans, little ones, big ones. And we've heard for years, people are saying we need -- we need people to work on cars, trucks, and vans. Our poultry industry says, "We need people to work on our big trucks, and we can't find them, can't keep them."

So Del Tech created an institute, if you will, training academy, for folks to do just that, and we had

the ribbon cutting on it yesterday.

The reason why I mention it is because the state provided some money, the auto dealers themselves kicked in and raised over $1 million on a $5-million project. The poultry integrators kicked in. They raised close to $1 million as well. The State kicked in. Through Del Tech, they raised about another million dollars. We got about $2 million from EDA, Economic Development Administration, and so they built a community wealth, if you will, to provide help, and it works.

And that's (telephone ringing) -- would somebody get that, please. Maybe it's the President calling. I recognize that ring. I'm just kidding.

All right. Thank you. There we go. Good work. Thank you.

Anyway, it's a shared responsibility. That's my point. It's a shared responsibility. And some of it's on local folks, local communities, rate holders, and then so forth. Some of it is on us, and we're trying hard to deliver. And we're that close to doing it.

Okay. Please, Todd, you go right ahead.

MR. GRINSTEAD: I occur with these gentlemen here on their comments. You know, workforce development

is very passionate from us, as you can tell.

National Rural Water has a program where they receive grant money from USDA Rural Development, and that trickles down to the states. So it allows us to open up our workforce development team to go out and market our industry and get folks interested.

We also have a little bit of help through a grant through the ARC which helps with that, so we're trying to build this team to go out and market. We hope to be running some commercial ads on television, you know, local television, just to get interest into our system, so we've got a lot going on. We've just getting ramped up. Like I say, it's a work in progress, but we're working there.

And we're a little bit behind the eight ball in West Virginia. There's an operator shortage. It's not catastrophic, like it's going to be if we don't do something. So we're now to the point to where we're -- we're ready to do something. We're going to market.

Like I said, we're going to go in every high school and talk to guidance counselors. We're going to do job fairs. We're going to really work hard at trying to get them interested in our industry to replenish the operator shortage.

And in the process of that, through our

program, it's not just placing them in a job, it's training them. They get intense training throughout their process to become certified operators. So they get more than just studying for a test and taking a test. They get a lot more safety, a lot more hands-on procedural stuff, so it's going to be a great program.

CHAIRMAN CARPER: The point on training, worker training, we hear this in Delaware. We hear this, actually, across the country, as you know.

I went out for a run this morning. It was just turning daylight. And we stayed at the Marriott Courtyard on -- just off of Harper Road coming off the turnpike. And I almost got run over about ten times, but I finished my run and lived to tell about it. But I started counting the number of businesses where there were signs out that say "Hiring," "Help Wanted," "Help Needed," and I stopped counting at twenty, and there were more after that.

You talked about the opportunities for people to work to provide clean drinking water, wastewater for folks, and there's just some need for workers. We're in a big need that we have in the country is just for people to go to work, be willing to be trained. And we have to be able to train them and incentivize them to fill the jobs that are needed.

I need to take a quick phone call, and I'll be right back. And I'm going to ask Senator Capito and Senator Manchin just to ask maybe the next round of questions. I'll be right back.

SENATOR CAPITO: Well, thank you again. I am going to say that I know you probably notice I'm coughing. I've been tested. I want everybody to know I've had a cold, which none of us has had for two years, and it's miserable. So I apologize for that.

Mr. Grinstead, I wanted to ask you on the -- you mentioned in your -- in your remarks that the regulatory burdens that -- and you were -- you were pleased that the bill that was coming forward didn't place any additional -- or too many additional regulatory burdens.

I know that, for instance, in the pending legislations of PFAS and other kinds of chemicals there is a -- a movement to have all these water systems be able to test. Could you give us sort of a slice of life of how many -- how many different things you do have to test for?

I mean, you don't have to give them all to me, but, I mean, how complicated is this getting? And are we throwing out the old stressors on the system that are no longer a problem for us, maybe we've solved the

problem or we're not using the materials anymore and it's not getting into the water systems?

Are we modernizing that regulatory regime or is it just piling on and piling on?

MR. GRINSTEAD: I think, for the most part, it's just piling on. The situation with the PFAS has grown so much and, you know, it's only produced in a handful of locations in the United States, but it's showing up in nearly every water system out there, just from the use, from manufacturing, and all the situations that way.

One thing with that is that water systems get the water out of the ground, they get it out of the rivers, surface water, what have you. They do their best, and they do a great job in cleaning up the water to send it out to the customers. The problem is, they didn't place that in the water, you know.

So what we really want to urge legislation to do is to not look at the utility and set an MCL, or maximum contaminate level. That way, if a water system has this in their system, they get a fine, if you will, because they have this in their water. Well, we've got to work on the source, where it came from and how to remove it --

SENATOR CAPITO: Uh-huh.

MR. GRINSTEAD: -- without penalizing, especially the smaller water systems. You can't penalize them for something they have no control over.

SENATOR CAPITO: Thank you. Yeah. I mean, I think, obviously with the situation in Parkersburg and Martinsburg with the PFAS found in the water systems, and then the carbon, the $4-million fix in Berkeley County, the DOD, at our urging, did pay for that because it was caused by the base, the fire fighting foam.

But this is all over the country. I will tell you this: We did have an expert from the West Virginia Department of Environmental Protection testify before our committee, and they tested every rural water system for PFAS and only found it in three, the two already but also one in the northern part of the state in Glen Dale.

So that was actually a big relief, because we were worried, as exactly you said, that it's everywhere and what levels. So we're keeping our eye on that, understanding that to test, the cost of the test, and then the mitigation is what you're saying, don't penalize me, because I have it; I haven't done anything to the water --

MR. GRINSTEAD: Right.

SENATOR CAPITO: -- to get it, but I need help to mitigate to meet the standards.

MR. GRINSTEAD: Yes.

SENATOR CAPITO: And I think that's an excellent point.

On resiliency, we've placed a lot of emphasis on resiliency in a lot of things, but particularly in drinking water and wastewater, and, you know, to be able to withstand extreme weather, weather events related to climate change.

So what do you think about, Mr. Morgan, when you think about resiliency in systems? You've obviously dealt with a very large system. How are you looking at that in your new position?

MR. MORGAN: Well, resiliency is tremendously important. And as the United States has faced -- there has been some severe weather events recently, so being able to react to those, having the emergency centers set up, having funds available, one of the things that Rural Water and Mr. Grinstead has done, and this was implemented probably ten years ago, was the abilities for the utilities to share operators and workers and equipment.

So probably the best thing that's happened in the past decade that could be used as a model, and maybe it is in place across the United States, is if you have a flood that involves Clay, Kanawha, Fayette County,

which we did four years ago, you can borrow people from Parkersburg, Morgantown, wherever you need to, to get down there to help out and meet that need and help them get everything addressed.

So that's one of the resiliencies West Virginia has put in place that seems to be working very well.

SENATOR CAPITO: So, Mr. Roberts, I think in terms of, as we take this testimony back to Washington and Senator Carper's team, every state has a different way of cobbling together all their water systems. And, you know, we have a lot of PSDs that are small. Some of them are consolidating, like Putnam consolidated theirs, some in eastern Kanawha County and other parts of the state have consolidated theirs.

Am I reading your comments into the regionalization to mean that -- is that what you're talking about when you're talking about regionalizing?

MR. ROBERTS: Yes, ma'am. I think -- I think the regionalization will serve a couple of purposes. Consolidation is maybe what Mr. Morgan will call it. But again, you realize the economies of scale, and it also addresses the workforce shortage. Even though these utilities may not be physically connected, you do have a larger workforce, a larger pool, if you have

maybe a countywide PSD --

SENATOR CAPITO: Uh-huh.

MR. ROBERTS: -- to where, you know, if you just have one operator for a system and that operator has to go to a doctor's appointment or something happens, there's no backup.

SENATOR CAPITO: Right.

MR. ROBERTS: But if you have a regional system, you have a larger pool to pull from and you can spread that workload among more people.

SENATOR CAPITO: Right. And I realize that that can be a very politically sensitive situation in a lot of different areas. So I know that sounds easy, but it's not as easy as it sounds.

The other thing I think in terms of workforce is that, when I began this adventure of representing different parts of the state, I realized that early on the water operator also emptied the parking meters, made sure the trash was getting picked up, and was the nightwatchman, you know, at the county courthouse. And so everybody's -- you know, just the strains on that particular individual. So if they were out, the whole system goes down.

I know that we've professionalized more of the requirements for certifications. How can technology

bring us forward as we're modernizing our systems? I mean, help me understand what technology is. Is it more computers, more gauges, more -- less, you know, out in your truck trying to figure out where you've got leakages and all that? Is that how the modernization of the technology -- Mr. Morgan, you might want to answer that.

MR. MORGAN: I'm going to use Mr. Roberts's birthplace as an example. McDowell County PSD is assuming ownership of a lot of coal mine-owned water systems. And we just had an emergency in Davy in McDowell County. So Davy doesn't necessarily want to become part of McDowell County PSD, but the first step we're taking is tying in their telemetry system.

They've got an operator at Davy that does everything you just said and more, and he probably works for gas money, and he's retired from a job. And when he's no longer able to do that, Davy is not going to have water. So what they're doing as a first step for $100,000 worth of critical need funds that Region 1 applied for, is they're going to tie their telemetry system into McDowell PSD, which is the larger utility in that county, so that if this person gets a cold, has to miss two or three days, that McDowell County will know the level in the tanks, can turn on and off the

groundwater plant, because groundwater, you know what the quality is and you can run it automatically.

SENATOR CAPITO: Thank you.

Senator Manchin?

SENATOR MANCHIN: Yeah. Just what I want to touch on is basically the sewer systems that we have in West Virginia, well, really around the country, because they were done, and the way they were done in my little town of Farmington – we were so tickled to get a sewer system back in the '60s and '70s – they tied into the storm sewers, because that was the easiest, quickest way for us to handle.

Well, we know when you have heavy rains, the effluent that overflows into the creek, which we were trying to prevent from going in the creek in the first place, we're back to where we started from.

So the only thing I want to know now, that's probably the biggest cost, we have to separate storm water from sewer, so that basically storm water goes to the creek and sewer basically goes into the wastewater treatment plant.

Next of all, are we -- do we mandate that any plans for new be done and separated, so we don't want to approve federal government's money or your, you know, state matches or whatever, doesn't go to a sewer system,

just because they need a sewer system, that doesn't have the separation?

Are they still allowing them to do a plan where they can, you know, join them?

And, also, are we separating any? Do we have towns or cities who are separating them? And are they trying to separate them?

So, basically, where are we at in the sewer systems?

MR. MORGAN: Great question. And as I mentioned, the Needs Assessment that the Infrastructure and Job Development Council did identified $1 billion worth of need associated with what I term --

SENATOR MANCHIN: That involved separation and all that?

MR. MORGAN: That's the cost of the separation because of overflows that occur.

What's happening? Bluefield is doing separation. Essentially, you put in an 8-inch sanitary sewer, or a 10-inch, or a 12-inch, whatever you may need, and then that 36- and 42-inch combined sewer becomes your storm water utility. So it is being separated.

Clarksburg had a 30-inch line that was potentially collapsing. A building shouldn't have been

built over top of it, but you've got a multi-story building. Before they could get funding to take care of the structural integrity of that 30-inch storm waterline, they had to separate the sanitary sewer out of it as part of the project.

So that is being required. Anytime we go in and work on something or replace something, that's being addressed.

SENATOR MANCHIN: We're not approving any new ones, are we, unless they're separated?

MR. MORGAN: Really, the funding, whether it's SRF or the state addresses the wastewater. So the need, and I know it's a subsequent need, probably is to address storm water.

Some of the Clean Water SRF funds are being set aside for storm water, but those systems are just as old as the wastewater systems, so trying to find funding for that is probably a future project or something that needs to be addressed.

SENATOR MANCHIN: That is probably one of the most challenging things we have, especially for the environment, because any heavy rain, it just goes right over into the creeks again, which we try to take it out of.

So I don't know if that's part of the rule

making or whatever, Senator Carper, on that, and Senator Capito. Maybe you-all could look into that, if you could.

SENATOR CAPITO: John's nodding.

(Simultaneous speaking and laughter.)

CHAIRMAN CARPER: John, thanks. You can't see their lips move when we speak, but if those masks weren't on, you could.

All right. I got a couple questions and then I'm going to ask Senator Capito and Senator Manchin if there are any closing statements they want to give, and then we'll wrap it up.

I want to come back to Todd and to Wayne. We're not as informal in Washington. I mean, it would be Mr. Grinstead and Mr. Morgan, but I hope you can deal with worse things here. It feels more like West Virginia.

But a question for Todd and a question for Wayne. Just for a little bit of set the table, EPA has a grant program, as you may know, that's designed to provide assistance to small and disadvantaged communities to improve their drinking water resources. We talked a little about that already. It's a program that provides assistance to underserved communities that have no household drinking water or wastewater services

or are served by a public water system that's out of compliance with federal drinking water standards.

All right. My question: Would a program like this be of value to the wastewater community? And if so, what are some factors we should consider in setting a grant program up under the Clean Water Act?

Todd and Wayne, any comments you have would be welcome.

MR. GRINSTEAD: Absolutely, the wastewater industry could definitely prosper from that. You know, you have the same issues in wastewater that you do water. A lot of that would be geared toward making sure the technology is up and, you know, doing reliable process through waste treatment.

Operator certification, operator technical assistance, is a big part of keeping them up on the technology to be able to do a better job.

Wayne?

MR. MORGAN: What came up earlier, and it's called Green Funding with the State Revolving Fund Programs is the decentralized treatment. So in areas where they don't have drinking water service, the same thing could apply for wastewater. If you don't have service, there's green technology and expanding upon that and putting in the decentralized systems.

I was lucky enough to be at Watoga State Park the other day --

CHAIRMAN CARPER: Watauga -- in Watauga County? No. That's not in the North Carolina, is it?

SENATOR CAPITO: Uh-uh.

MR. MORGAN: No; this is a state park in West Virginia.

CHAIRMAN CARPER: My wife is from Watauga County, North Carolina.

MR. MORGAN: But, in any case, I got to go trout fishing on the Williams River, and I went into essentially what you call the porta potty, but that was the cleanest porta potty I've ever been in in my life. So sometimes old technology becomes new, and in areas that don't have service that have recreational value, these decentralized systems, or even something as simple as a porta potty, or having a latrine, makes a whole lot of sense. And if it's maintained and well taken care of, it provides a great service.

CHAIRMAN CARPER: My father is looking down today, just remember, saying, "Just use some common sense." There you go.

Anyone else on that question? Anybody else?

Okay. I have a second question I'd like to ask. This will be for Jason. And aging water systems,

declining populations, economic distress, and other factors are making it harder for thousands of small community water systems to keep up with day-to-day operating and system maintenance costs. We talked about that quite a bit. Our infrastructure plan had to ensure for upgrades. Additionally, federal funding cannot be used to perform routine system maintenance.

Now to my question: How can the federal government better support small systems in identifying problems and performing routine maintenance so that problems are addressed before they become major and catastrophic, please?

Prevention is worth a pound of cure, am I right?

MR. ROBERTS: Right. Thank you, Senator. That's a great question.

Again, I think you're all very aware of the issues that these small rural systems face. I really think that the role for some federal funding could be maybe have programs specifically dedicated just to maintenance and improvement of a system. You know, usually when we go for grant funding for a project, it's for a massive repair, or an expansion, or a new system somewhere.

Maybe have some micro loan or some micro grant

program dedicated specifically for just general maintenance. If they don't have the capability in-house, maybe they could contract that out to a larger -- larger firm or something.

I think that's one thing that's very much needed. That would be one -- I think an easy -- that would be some low-hanging fruit, Senator, quite frankly.

CHAIRMAN CARPER: We haven't used that term today, low-hanging fruit. We're always looking for some. And it's good to find it. Thank you for that.

And a last question, if I could, for the entire panel, and it deals with project priorities.

According to a recommendation from West Virginia Infrastructure and Jobs Development Council, I believe it was last year in 2020, in their Needs Assessment work, projects receiving funding commitments must continue to be based on -- this is a quote -- "objective uniform criteria." A quote.

And the most important criteria is the project's readiness to proceed to construction after receiving its funding commitment, so like shovel-ready.

Question: What other criteria should be used to make project funding decisions? What other criteria should be used to make project funding decisions?

How does these criteria -- how do these

criteria account for the unique and often times critical needs of small rural and disadvantaged communities?

And Todd, would you lead us on that one, please? You'll have the first -- the first swing at that one.

MR. GRINSTEAD: Yeah, thank you for that. I'm kind of at a loss of words there.

Wayne, would you --

CHAIRMAN CARPER: Yeah, let's pass it down to Wayne. Think about it and we'll come right back.

This happens to me more and more, especially as I get older. You're not that old.

MR. MORGAN: Thank you for the question.

CHAIRMAN CARPER: You're fine.

MR. MORGAN: And we're lucky enough to have funding that's based upon a readiness to proceed, so I do agree that that's a high priority. But we also have outfalls along trout streams, along the Hatfield and McCoy Trail. And if you get rid of those outfalls, you create tremendous economic opportunity for people that want to do the four-wheel trail riding throughout the United States that's growing every day. And if they're looking at a trout stream that has an outfall for every house that they go by, that's not a very attractive situation.

So I guess the other criteria is the pollution alleviation or the elimination of pollution that's occurring where we don't have public wastewater systems along potential recreational areas in the state of West Virginia, or throughout the United States.

CHAIRMAN CARPER: That reminds me a little bit of what we used to have in our Beaver Creek all those years ago.

Back to Jason.

MR. ROBERTS: Thank you, Senator.

I think -- I think one of the criteria you could use is maybe put some sort of weight on potential economic development. Right now, the way it's structured, if we want to do an expansion for maybe an industrial park or tourism, we really have to have somebody on the hook. We really have to know who's going to come in, and somebody really almost has to sign on the dotted line.

One of the things that you mentioned in your opening statement was, really, the government can't create jobs, but we can create a nurturing environment. And I really think that that's something if -- if we can take some federal funding and maybe expand water and sewer service to an area we know is going to be developable, that would really create that nurturing

environment.

And that may be something that weighs more heavily when we're going to the state or the federal funders in terms of, you know, well, it's not here now, but we know that there are people wanting to put a series of cabins in to cater to the trout fishers or to the Hatfield McCoy riders. So I think that's a criteria as well is the potential for development.

CHAIRMAN CARPER: Thanks for those comments.

Todd, you want to take another swing at that one?

MR. GRINSTEAD: Yeah, and I totally agree there that, you know, as far as the housing, industrial, whatever, you can have nothing without water and wastewater. I mean, so it has to be there, it has to be available, and you have to have a plan to move forward to be able to provide that. So, you know, some planning, some countywide planning or whatever, would be appropriate, but just to do decent planning and be able to be ready to move forward when these projects come along.

Yes, you can't make them shovel ready, but you can make them pretty close. You could at least have a good plan to fall back on to speed up your time to develop.

CHAIRMAN CARPER: Okay. Thank you. Thanks for those comments.

For some closing words, Senator Capito.

SENATOR CAPITO: Thank you. I want to thank the witnesses's excellent testimony. I'm very proud of the representation that you've given of our state and certainly our depth of knowledge and our, I think, vision for improving the water and wastewater availabilities throughout the state for a lot of different reasons.

I think as we've talked a lot about the bipartisan bill and the large drinking water and wastewater bill that we passed unanimously out of committee and 89-to-2 out of the Senate floor that we hope will come to the President's desk, help is on the way in larger amounts of money to all of these.

The rural set-asides are great. The decentralized systems, which also include septic tanks of $50 million, something that never quite gets funded, other things, workforce development that we've talked about, this is the biggest and most robust water bill that's ever been -- I think it's an increase of about 35 percent.

Here's where my concern, and I'm, you know, ready to do whatever I can do, but you guys are the

experts here. We can't squander this opportunity. We can't say, just because there's, you know, a lot of money that we -- that we have 26 projects and we're going to fund all of them a little bit or -- and we have a tendency to do that, because we want to make everybody kind of happy instead of -- I think we need to really prioritize.

And, Wayne, this is where you guys really come in. Really prioritize what can make the biggest bang for our buck. Complete these projects so that you're not -- you don't have a bridge to nowhere – sorry, Mercer County – or something of that nature, and so that you have the completion and we get the results from it.

And, you know, in some ways, we could get it all the way here if we combine our city and town money, if we combine the state money – I hope the governor is listening – and other things. We could really make, not just little strides here, but huge strides into addressing a lot of the problems that we've talked about today. So any way that we can help, we certainly want to.

I want to again thank the Chairman for highlighting this in our state and his home county in Raleigh, and I look forward to working with all of you in the future.

And thanks again to Senator Manchin, my buddy there, to -- this is something that there's no daylight between us on these issues. We're working hand in hand.

And I want to thank my staff for preparing us and preparing you-all for what I think was an excellent presentation.

Thank you.

CHAIRMAN CARPER: Thank you so much.

I yield to Senator Manchin for any closing statements, thoughts that he has, and I have a few things I want to add, and we'll call it a morning.

Senator.

SENATOR MANCHIN: Thank you, Senator Carper and Senator Capito, for allowing me to participate with you-all.

I'm so impressed with all three of you and the knowledge you have and the grasp of this. Shelley said it all, she really did, when she said we've got one shot. We've never had a shot like this in my lifetime, nor do I ever see it coming again for quite some time. This is one time you got to get everybody's attention.

What can we do? What can we finish? We don't need a bunch of starters. Give me something we can complete, because now there is enough money in the mix.

The Governor has money. They should be able

to match down. The cities have money; the counties have money. And there's a lot more coming. And it's just for this. This is the one time rural America has a chance to catch up, so anything that we can do to help make sure that there's a clear, direct path of how this is to get done.

Without the internet -- I think you've heard Shelley and myself talking about this, and our staffs have been totally linked and hooked up on this one. Without total connectivity -- and I've said this, in the 1930s, my grandparents didn't have electricity. Most of rural America didn't have electricity. Only 10 percent of West Virginians had electricity, if you can believe it. And if it wasn't for rural electrification -- and if they can do that in the '30s, in 1936 starting that, and be able to get every house -- almost every house in America, no matter how rural it may be, linked somehow connected to a wire, we sure as heck ought to be able to connect everyone to the internet.

And I look at that and I look at that basically infrastructure, that need, the same as I look at electricity. You know, the quality of life increased tremendously, and it will do the same tenfold over.

This is one time we cannot lose this opportunity. We're not going to come this way again.

Fixing our water and sewer systems, fixing them and just drinkable water. There's not a town in America, not a citizen who shouldn't be hooked up to a more sanitary system.

So I just implore you-all, and Senator Carper and Senator Capito's staff, and also the Committee that they head up, there's tremendous support about you. You got West Virginia, West Virginia, and West Virginia. If we don't do it now, gang, it ain't gonna happen. It really is not.

But thank you. You've been more than insightful on this and helpful and very professional. Proud of each of you. Now it's time to really go after it, gang. Go after it. Thank you.

Thank you, Senator.

CHAIRMAN CARPER: Before we adjourn, I have a couple of closing remarks, but I want to do a little housekeeping first. I want to ask Madam's consent to submit for the record a variety of materials that include letters from stakeholders and other materials that relate to today's hearing. And if there is no objection at either hearing, that will become a big part of the record.

Additionally, senators are going to be allowed to submit questions for the record up to the close of

business on Thursday, October 28th -- Thursday, October 28th -- and we will compile in our committee those questions and we'll send them out to each of you. We ask that you try to reply to us by November 11th. We got a couple of weeks after that. And we appreciate that.

I just want to say to Senator Capito how -- and Senator Manchin how grateful I am to be here. If you want to put a spotlight on a state where there's enormous need, where there's an enormous need for clean water to drink and a way to deal with waste in appropriate and thoughtful ways, it's West Virginia.

I love this place, and I know Shelley and Joe love it as much or more than I do. It's not just a coincidence that we ended up with this field hearing in Beckley, West Virginia. We're here for a reason. We are here for a reason.

Shelley, I don't know if you ever served in the House with a minister, African American from Pennsylvania, Bill Gray, but he and I served together until he ended up, he quit. And he -- he used to tell us this story. He told us a story about -- I never knew if it was a true story, but it's a great story. I'm going to share it with you today.

And it's a story in a rural part of the

country where there's communities, not like a place with stoplights and, you know, even paved roads, but people lived there. Families lived there and grew up there. And they had -- part of their water infrastructure was an old well where people could literally come and lower into the well a bucket and pull the water up and use it for their homes.

And sometimes there's a stone structure, a locks-like circular and -- around the top of wells to keep people from falling in. And one day -- kids liked to play and they'd walk around the top of the rocks. And one day a kid fell in. And the fall -- there was water in the well, and you could hear the kid splash when they hit the water and started crying for help. And the other kids were like alarmed and scared and they just ran off and ran back to their houses and tell mommy, mommy and daddy, so-and-so has fallen into the well and we've got to save him.

And people went into their basements and into their barns, they went into their garages, trying to find a piece of rope to tie together so they could save the kid. And everybody found a rope, some longer than others, and they tied the ropes together and they put the community rope, if you will, down into the well and saved this -- saved the child.

We -- every one of us in this room and across West Virginia and the country always have a piece of rope. All of us have a piece of rope, and every one of our states, especially this state and this county, there's a lot of kids, not literally in the well, but a lot of kids are in the well, and they need some help. And we have the ability to tie our ropes together and lower them into the well and bring kids to safety and families to safety and to a brighter future.

The question is: Will we do it? Can we do it? And believe it or not, the longest piece of rope for this undertaking is the one that we bring, the federal government. Huge amount of resources, $55 billion, I think, if I'm not mistaken, just in the infrastructure bill alone. Fifty-five billion, and a lot of it will go to those in need. A lot of it will go.

What's missing here is the -- you have to have the tied rope together, lower it into the well, and you got to lift the kid to safety. And that's sort of like where we are right now. That's where we are right now. We need to lift this kid to safety, sort of like getting the ball in the end zone. We are this close, this close to getting it done.

And nobody's worked harder than Shelley Capito

with Joe Biden in the earlier part of this year, and more recently, Senator Manchin or the President in this part of the year, to try to get us to the end zone. We're this close. This close. We got to get the ball in the end zone.

We got to get that kid out of the well. And if we do, not just West Virginia, but this entire nation will be better for it. Better for it. Let's do it.

And with that, this committee is adjourned, and thank you all for participating. This has been a great hearing. Thanks so much.

(Environment and Public Works Subcommittee field hearing adjourned at 11:56 a.m., October 14, 2021.)

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IDENTIFYING UNIQUE CHALLENGES FOR SMALL, RURAL, AND DISADVANTAGED COMMUNITIES IN ACCESSING AND MAINTAINING DRINKING WATER AND WASTEWATER TREATMENT INFRASTRUCTURE SERVICES (PART II)

FRIDAY, OCTOBER 15, 2021

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Dover, DE.

IDENTIFYING UNIQUE CHALLENGES FOR SMALL, RURAL, AND DISADVANTAGED COMMUNITIES IN ACCESSING AND MAINTAINING DRINKING WATER AND WASTEWATER INFRASTRUCTURE ASSISTANCE

FIELD HEARING

BEFORE THE

COMMITTEE ON

ENVIRONMENT AND PUBLIC WORKS

OCTOBER 15, 2021

The Committee met, pursuant to notice, at 11:00 a.m. at Kent County Levy Court, 555 South Bay Road, Dover, Hon. Thomas R. Carper (Chairman of the Committee) presiding.

Present: Senators Carper, Capito, and Coons.

SENATOR CARPER: Good morning, everyone. I'm Tom Carper, and I have the privilege of serving with Senator Capito as the Majority Chair of the Committee on Environment and Public Works. She's our ranking member and she hosted just a terrific field hearing yesterday in West Virginia. And I just want to thank her and her staff again for your hospitality for putting together just a wonderful forum as we look forward to providing better access to drinking water for people throughout this country and meeting their wastewater treatment needs as well.

Just by way of introduction, Senator Capito, I'm also delighted that my wingman, Senator Chris Coons, is here. Lisa Blunt-Rochester is going to be speaking later. Our at-large congresswoman is here and our witnesses are here. We welcome you all.

Shelley, just as a way of introduction, Dover's the capital of -- Dover wasn't always the capital of Delaware. In the beginning, there was a place up the road about 40 miles called New Castle by the Delaware River where William Penn came to this country many, many years ago and landed, bringing the deeds to the Province of Pennsylvania and what would become Delaware.

And after a number of years, the folks

here in Delaware decided they wanted a capital in Dover. And we have had a capital here for a long time.

We've had an Air Force base here for a long time as well. And an award was made by the Air Force every year as the Commander in Chief's Award for the best airlift base on the planet. Dover Air Force Base, I think, has won it more times than anyone else. And also, you know, the site for the remains of our fallen heroes, when they come back to this country to be united with their family members.

We have some businesses here. We used to have a -- you used to be able to find in Dover, on certain mornings of the week, it smelled like chocolate because we had a chocolate factory, chocolate pudding factory. We still have the factory. They make other things now. And we have, oh, gosh, any number of businesses that are located here in our state capital.

We also have, part of our national park is here and a couple of great state parks as well. So that's just a little bit about Dover.

I'd like to just also mention that before we had governors, we had presidents in the state, and one of our early presidents was a guy named Caesar Rodney. And Caesar Rodney's famous for riding his horse a couple

of days before July 4, 1776. He rode his horse from Dover, Delaware to Philadelphia, Pennsylvania and cast the tie-breaking vote in favor of the Declaration of Independence, so I'm proud of that as part of our heritage.

And on December 7, 1787, after deliberating for about three days, 25 white guys from all over Delaware had read and debated what was the draft Constitution sent to us from Philadelphia. The day after debating, they voted unanimously to ratify the Constitution, thus Delaware became the first state. That happened literally three miles from where we gather here today.

And so a little bit about us. And I just -- we're thrilled to be holding this field hearing and delighted you could all be here and be with us.

We have, actually, two panels of witnesses. One is a one-woman show. So I have our congresswoman, and she'll be followed by Cassandra Codes-Johnson.

Cassandra, would you raise your hand. All right. Thank you. Welcome, Cassandra.

Vikki Prettyman, Vikki, would you raise your hand. Vikki, nice to see you.

And, Rick Duncan. Rick, I said I see Rick almost as much as I see my wife. Not quite as much. He's ever-present in my life and I think it's a good thing. But we're delighted that you're all here.

And today we're going to focus on the challenges facing our drinking water infrastructure for people in this state, especially particularly in small, rural, and disadvantaged communities of Delaware.

As the recovering governor of Delaware, I always said --

And Shelley's dad was the governor three terms in West Virginia, so she's the daughter of a recovering governor.

But as the former governor of Delaware, I always said that my role was, and is as a United States Senator, to create, to help create a nurturing environment for job creation and growth within the First State. And that's a tall order in and of itself, but one that is nearly impossible to achieve without access to clean and reliable drinking water.

Senator Coons knows as a former county executive, and he started as a senator; Senator Rochester knows as a Cabinet member many times over, and now as our congresswoman, businesses don't want to be in places

where the water's not good to drink. And they don't want to be in places where there's not adequate wastewater treatment. So this is an incredibly important element as we try to create that nurturing environment for job creation and job preservation.

When it comes to its drinking water, Delawarean folks face a host of contamination issues with the water that flows from our taps. There's a lot of places, most places in Delaware, the water is just fine. And a clear majority, vast majority of the water is just fine, but not every place. And that's a concern to all of us.

From water pipes that contain lead to toxic pollutants like PFAS, one of the permanent chemicals that we hear about, communities need a lot of assistance to address these issues. And, fortunately, we, those of us that are up here and here can help with that, and we're intent on doing that.

In Sussex County alone -- that's our southernmost county, Shelley. It's one of the largest counties in America. They raise more chickens there than any county in America. We raise, in Delaware, 300 chickens for every person who lives in Delaware. So if you're -- and we import in the Port of Wilmington more

bananas than any port in the states in the country. So if you're eating chicken and bananas, we're your place.

But in Sussex County alone, there's almost 100,000 people -- more than half the county's population -- rely on private wells for their drinking water. And while some homeowners choose this option, other folks live too far from the municipality to access public utilities.

Some of these Delawarians are finding excess contaminants like nitrates, like iron in the water, which we know can contribute to adverse health impacts. And those health impacts are more likely to affect low-income households who cannot afford a home filtration system. And we can and must do more to help these families.

Many families in Delaware and across our country -- especially those with young children -- are also concerned about the lead in their water. And this potent contaminant leaches into drinking water from lead pipes, from faucets, and fixtures. In children, low levels of exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells. There is

no safe level of lead in drinking water.

And while we have not seen lead contamination levels anywhere near those in cities like Flint, Michigan, drinking water tests in 20 locations in Delaware since 2012 revealed lead levels above the federal safety threshold. Often, this contamination is found in communities with small systems. They do not have sufficient resources to manage their aging water systems.

Given the damage that even the smallest amount of lead poisoning can cause, especially in children, we must work to ensure that all communities would have the knowledge and resources to replace lead service lines to ensure safe, clean water for their most -- well, for our most vulnerable citizens.

We also have problems in Delaware with well and groundwater contamination from toxic "forever chemicals" like PFOA, like PFAS. We call them "forever chemicals" because once they enter our body and once they enter our environment, they can take thousands and thousands of years to decompose and break down.

We don't have thousands of years to address these issues. We must act quickly to ensure that all citizens in Delaware, all citizens in West Virginia

and beyond our borders have access to clean, safe drinking water.

Together, Senator Capito and I took significant steps to address these needs through our Drinking Water and Wastewater Infrastructure Act. That bill formed the basis for the Senate's Infrastructure Investment and Jobs Act, which passed the Senate by a strong bipartisan majority. My recollection is it was 89 to 2.

SENATOR CAPITO: Right.

SENATOR CARPER: We don't pass many bills by 89 to 2. They do that in the House, I'm sure. 89 to 2.

This bill provides billions of dollars for water projects across the country, directly targeting the communities with the most need, places like Ellendale just south of us here in Sussex County.

It took more than three decades, three decades, for Ellendale to pass a referendum that would allow low-income neighborhoods to connect to a public water system. I'll say that again. It took more than three decades for Ellendale to pass a referendum that would allow low-income neighborhoods to connect to a public water system. Funds from this bill will help make

sure that no community has to wait 30 years to have clean water flow from its taps.

Specifically, our bill provides $55 billion to the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Loan Fund, and the Small and Disadvantaged Community Program, which will help Delaware and other states finance a variety of community and statewide water infrastructure projects through grants and through debt forgiveness.

This legislation provided much more funding for the Assistance for the Small and Disadvantaged Communities Grant Program, which improves access to clean, safe drinking water, including the purchase of filtration systems. This grant program targets assistance to disadvantaged communities from across the country.

Our bill also provides $15 billion for removal or replacement of lead pipes, a substantial downpayment toward the replacement of all lead pipes in all of our communities.

A friend of mine who I asked him how he was doing, he says, "Compared to what?" Compared to what we spend and invest in the task of removal and replacement of lead pipes, $15 billion is a huge amount

of money.

There's very real need for these kind of communities here in Delaware and West Virginia, where Senator Capito represents, and in every state in our nation. Too many of our fellow citizens don't have clean drinking water, and yet they have every right to expect that they and their children would be able to drink freely and safely from their taps.

And with this legislation and the investments it enables, we have the opportunity to right a terrible wrong, and meet our moral responsibility to ensure all Americans can trust the water that flows through their faucets.

And before I yield and turn to our Ranking Member Senator Capito, I just want to mention -- just close with this in mind. When William Penn showed up and landed right there in New Castle, Delaware, about 40 miles north of us, bearing the deeds of what would become Pennsylvania and Delaware, most of the people then and for centuries after that, they would get their water from streams, or they would get their water from the wells that they drilled.

Over time, we've developed municipal wastewater treatment systems, and that was good for some

people. Other people continued to drink water from wells and from streams.

It was 1972, the Clean Water Act was -- I don't know if it was signed into law. I think it was enacted over Richard Nixon's veto, as I recall, but we began, we created EPA, and EPA began making grants to states, to communities for wastewater treatment systems for drinking water systems.

They did that, I think, until about 1987. Ronald Reagan became President. I was in the House. And we created a new system. We created for every state two distinct state revolving funds, one of them for drinking water and the other for water sanitation for wastewater treatment. And the federal government received each of the two revolving funds, and all the 50 states. The states would have to match those dollars, and the entities in the states for their utilities, their communities, or counties or whatever cities, if they borrowed money from the revolving funds, they had to repay the money with interest.

That worked pretty well for a long time. It's still got -- there is a problem. The problem is not every community, like Ellendale, like some of the places we visited in West Virginia yesterday, they don't have

the ability to repay the money. They just don't have the -- they have huge need. They need to draw monies down from those two revolving funds. They don't have the ability to repay the money.

In the legislation, Senator Capito and I made sure we did this. I think I was helpful in that and my staff, we made sure that our communities in distress, communities in need that certainly don't have that wherewithal, they have the ability to get help, too, both on the drinking water side and on the wastewater treatment side.

And with that, I'm going to turn to the Ranking Member Senator Capito with whom I'm privileged to lead this Committee. Thank you. Welcome.

SENATOR CAPITO: Thank you, Senator Carper. Thank all of you for coming. Thank you, Senator Coons. It's always good to see our fellow Senators in their home states. Everybody has a little springier step, I must admit, than when we're trudging the halls of the United States Capitol.

So this is my first visit to Dover, Delaware. I've been to Delaware before, but when Senator Carper mentioned that the aroma of chocolate used to fill this great city, I can think of a lot of worse things

that could happen than to have to wake up and smell chocolate every day. That sounds like a dream to me.

We did have a wonderful session in Beckley, West Virginia where I'm going to be very interested to see what our similarities are, because I think they're many because, obviously, driving over here, the realization that Delaware is a very rural state in many, many ways, and also probably has some of the economic challenges that we have in the state of West Virginia in terms of affordability, and how do you build systems and renew systems that were built 50, 60 years ago to meet the challenges of a growing population, but also just aging infrastructure.

And so I'm really pleased to be here to hear how Delaware's coping with these problems. And it's great to be here with you, Representative Blunt Rochester. Actually, I think we met one other time, but I know of her great service in the House.

And so I also want to tell you, you've got two great Senators, but I get to see Senator Carper all the time, and he is passionate about what he does. He's dogged in his determination, and he's a great communicator.

We were just talking about how he calls

everybody on their birthday, so that's 99 other people. And then I heard today that it's not just us you're calling, so you must be -- you must have had that down by now with the birthday greetings.

But anyway, it's very much appreciated and --

SENATOR CARPER: Chuck Grassley says to me about every other day, "It's not my birthday today. You don't have to call me today."

SENATOR CAPITO: So I'm happy to be here with his leadership and the partnership that we share and to see this in his home state.

I also want to thank the Chairman for his willingness to work and to address these challenges earlier with the bill that he talked about, the Drinking Water and Wastewater Infrastructure Act, and I won't get into the details and repeat. But I will repeat that we had, not only unanimous vote out of our EPW Committee -- and we have some pretty disparate-believing members on that committee. When you can get Bernie Sanders and Jim Inhofe to make the same vote, you're doing something right. And then off the floor at 89 to 2, and this bill, this water bill, is what is the basis of what you have heard of and is much discussed as the Bipartisan

Infrastructure Package.

And our water bill is contained wholly within that bill, verbatim, everything that we passed 89 to 2 out of the Senate. So it's a common -- the whole package is a commonsense bipartisan piece of legislation that not just handles water and wastewater, but also roads, bridges, and broadband, which is a very difficult challenge in certain parts of my state, being mountainous and rural, it's very much of a challenge.

So I would like to thank our witnesses for being here today and look forward to hearing their perspectives.

Mr. Chairman, I always -- we talk every week as he's getting ready to either get on the train or he's on the train or he's thinking about getting on the train to come home. Everyday Americans rely on the infrastructure that supports our drinking water systems. These are the systems that this nation really has prided itself on. Many of us have traveled all around the world and have seen the things that we take for granted in terms of water are so desperately needed all across, not just our country, but around the world.

Unfortunately, this nation is facing critical challenges in the resiliency of these systems,

and with many of our small and rural communities disproportionately affected by the wide array of water infrastructure challenges. You mentioned some of the chemical challenges, but also, in my state, we have an issue with losing the resource because we have aging infrastructure. And by the time it goes from the treatment plant to the home, we've already lost 50 percent of our water.

Think of our friends in California what they would think about that. I've often wondered if we ought to be building a pipeline out there and pipelining our water. We could make a lot of money on that.

Small rural communities are particularly strained and need additional support, but these are not, as I said, unique challenges to just one state. So I'm committed to addressing these challenges that we are facing. Reliable, modern water infrastructure is a fundamental responsibility of our government.

And I think we did address this in our Drinking Water and Wastewater Infrastructure Bill. As he has said, it provides lots of funding for new programs, but also existing ones, ranging from ensuring that -- you can imagine who put this one in -- systems have pipes that don't leak -- there I am -- to ensuring that there

is a sustainable water workforce, another passion of mine, and that can operate continued new infrastructure investments.

We provided a robust and, yes, I'll say it again, amazingly bipartisan piece of legislation that has a toolbox of solutions and alternatives.

So I look forward to hearing what you all have to say. Thank you for being so welcoming to me and my staff. I want to thank your staff, Senator Carper, and also the good folks here in the courthouse for accommodating us, and it's my honor to be here with all of you to hear from the great folks in the great state of Delaware.

Thank you.

SENATOR CARPER: Welcome. Thank you for those remarks. When I was moving up in the Senate, we had a fellow named Chuck Grassley and a fellow named Max Baucus who were two senior people on the Senate Finance Committee, which is a committee I'm now privileged to serve on. And they used to meet every week. One's a Democrat, and one's a Republican, and, eventually, they started bringing some of their staff in for meetings. You'd go to those meetings and you didn't know who worked for whom. You wouldn't know. And I'd just, you know,

see a good idea and steal it, and we've stolen that idea. That's really what we're doing on Thursday evenings or by phone. Sometimes we join them on the road through to West Virginia, I might be on the train, but we still do it.

And we have John Kane. John, would you raise your hand. John's also with us here and he's worked with the majority of the staff who have run in Delaware. And Adam -- Adam?

SENATOR CAPITO: Adam's here. He just stepped out. He's missing his big moment.

SENATOR CARPER: We'll pause right now until Adam comes back. No, we won't. But Adam usually joins us for those conversations.

I think one of the reasons we ended up putting out, unanimously by committee, water and infrastructure legislation, unanimously out of committee, roads, highways, and bridges and really provided the foundation on which this big infrastructure bill was written and now needs action in the United States House of Representatives with Lisa.

And so with that, I've been privileged to know Chris Coons for a long, long time and his wife for a long, long time, even before she was his wife, and that's

his wife anyway. But I was thrilled that he ran for the president of New Castle County -- elected -- thrilled he ran for county executive, and got elected. He did a great job in both, and I'm delighted he decided to take on really big things, and he ran and won election in the United States Senate.

There are I don't know how many committees in the Senate. How many would you say? 13, 14, something like that. He serves on most of them and he is just -- he's the hardest working guy in the Capitol. It's a hard job. He's the hardest working guy I know, and does a great job. Among the committees he serves on are Foreign Relations.

SENATOR CAPITO: You need to put this on.

SENATOR CARPER: Thank you. We'll start over. William Penn -- thank you.

In any event, we're thrilled that Senator Coons was able to adjust his schedule and be with us today. He is an appropriator. We authorize stuff, but he actually provides the dollars. He can't provide dollars without the authorizations, so it's hand in glove. We work really well. He's got great staff.

Welcome, Chris.

SENATOR COONS: Thank you so much,

Chairman Carper, Ranking Member Capito. It is an honor to join you, and to recognize you and thank you for the remarkable leadership you've both shown in this absolutely essential work-together in both the way you've approached it and what you've delivered for the American people.

There are things that tie Delaware and West Virginia, from Blades to Beckley, from Seaford to Parkersburg, parts of our industrial legacy, parts of the challenges that small, rural, and disadvantaged communities face in accessing the workforce, the funding, the infrastructure to actually deliver the safe and accessible reliable drinking water and the wastewater treatment infrastructure that is critical for our communities. But the way you go about hammering out these solutions is inspiring to the rest of us in the Senate and is a model for how every committee should work.

Frankly, if every committee worked as well as the two of you and your staff have worked together, we'd have a whole lot more solutions to the problems facing our country. And your leadership on the Drinking Water and Wastewater Infrastructure Act, which authorizes, as you said, $35 billion in critically needed

investments, is an absolutely central part of the bipartisan infrastructure bill, which we hope will soon be journeying to our President's desk.

To Congresswoman Blunt Rochester, thank you for your leadership on these issues, and in particular, your legislative leadership in moving the Low Income Water Customer Assistance Program Act, a truly innovative approach to addressing these key issues.

I look forward to hearing from Vikki and Cassandra and Rick. I recognize that my predecessor as County Council President, Stephanie Hansen, now State Senator Stephanie Hansen, an environmental lawyer, is here with us today.

I was also encouraged to see Seetha Coleman-Kammula from the Center for PFAS Solutions here.

I just came from Dover Air Force Base. All of us know that we have legacy challenges to address in our country, both in affordability, quality, and access of water. No one could craft better solutions than the Chair and Ranking Member of this important committee. Thank you for your tireless dedication to making the environment, the water, the future, better for all of us.

SENATOR CARPER: I'm really glad you came

and said all that. Do you need more time? Thank you. Thank you, Senator Coons. Thank you, Chris. Thank you for being my wingman, my colleague, and my friend.

Now I'd like to introduce our first witness, our Congresswoman Lisa Blunt Rochester. Lisa represents our state in the United States House of Representatives. She is an Assistant Whip.

Are you still an Assistant Whip? Assistant Whip for House Leadership. She sits on the House Committee on Energy and Commerce.

And what's the tagline on the Commerce Committee? What is it?

REPRESENTATIVE ROCHESTER: "If it moves, it's energy. If it stays still, it's commerce. We control everything."

SENATOR CARPER: There you go.

REPRESENTATIVE ROCHESTER: John Dingell, former Chairman.

SENATOR CARPER: He was the Chairman for life. In the House, I served in the House for, gosh, ten years. I was on a couple of good committees.

Senator Capito, how long were you in the House?

SENATOR CAPITO: 14.

SENATOR CARPER: 14 years. Were you an appropriator? What did you serve on?

SENATOR CAPITO: I was on Financial Services and Transportation.

SENATOR CARPER: All right. Those are good committees. I served on Banking. But the committee that you serve on is the end-all, be-all, so we're really lucky to have a seat on that committee. The committee has broad jurisdiction, as the Congresswoman said, over, among other things, healthcare, our environment, commerce, trade, energy policy, telecommunications, manufacturing, consumer protection, and drinking water -- great point today.

As the Energy and Commerce Committee's only former statewide health official, Lisa understands the importance of clean water as it relates to health. Lisa has spent her time in Energy and Commerce working on addressing the disparity in federal services for communities of color, and tackling our nation's opioid and addiction epidemic. She has been an amazing addition to the Delaware delegation. We could not ask for a better advocate in the House to meet our state's needs, and we're delighted you're with us today, Lisa.

Please proceed.

REPRESENTATIVE ROCHESTER: Thank you so much. Good morning, Chairman Carper. Good morning, Senator Capito, Ranking Member. Good morning, Senator Coons. It is truly an honor and blessing to be here.

Senator Carper mentioned working hand in glove in the Senate, but we, as a delegation, work hand in glove. And as I've said, I think we're the best delegation in the country. No offense, Senator Capito, but I think we're the best deligation in the country, and I am just honored to be here.

Good morning, also, to the witnesses, my fellow witnesses. I want to first start off by thanking the two of you, Senator Carper and Senator Capito, for your leadership. It has been mentioned before, but even calling this important hearing, I think for many of us in Delaware, but also across the country, this is a great opportunity to speak to the unique challenges that households and small rural and disadvantaged communities face every day to secure clean drinking water and wastewater services.

I also want to thank the Chairman and the Ranking Member for their strong leadership. It's been said a couple of times, you know, your work in a bipartisan manner, work that will really have an impact

on the communities across our country as they access these services, it is exemplary.

As Senator Coons has mentioned, I think we all know that if we all worked as well as you two work together and as well as your committee, we might even solve world peace. So we can, first of all, thank you so much for your leadership.

You are a true example, your committee, of bipartisan work this past year. The Drinking Water and Wastewater Infrastructure Act of 2021, which passed the Senate earlier this year, includes a provision that established a pilot program at the U.S. Environmental Protection Agency to assist low-income communities with their drinking water and wastewater utility bills and help fund upgrades to aging drinking water and wastewater infrastructure. This is an important step to provide long-needed improvements in water quality and accessibility for the communities that need it most.

Wastewater accessibility and affordability in the United States have been a mounting crisis for years. I've seen it firsthand in communities across our state. During my time with, then Governor Carper, recovering Governor Carper, I've had the opportunity to visit small communities that had been struggling with

contaminated well water for decades, towns like Ellendale, a small community in Sussex County with around 500 residents.

Nitrate, iron, and other pollutants in private wells have forced residents in communities such as Ellendale to use bottled water, not only to drink, but to cook, to clean, to bathe. In Delaware, approximately 173,000 residents, or nearly 2 in 10 Delawareans use private wells. And in Sussex County, almost half of the county's residents are dependent on private wells.

Some communities are in such remote and rural areas that even if they wanted to connect to a public water system, they are unable to do so. Despite this, and even though more than 13 million households rely on private wells for their drinking water, the federal government does not provide recommended standards or criteria for private wells.

For Ellendale, after fighting for decades for access to clean drinking water, a new public water system that will provide safe, clean, and reliable water to the residents is finally in sight, but the problem doesn't end when a community has access to a public water system.

Water must be affordable. Aging

infrastructure and the rising cost of drinking water and wastewater services have culminated in rapidly high rising water bills for public systems, and the COVID-19 pandemic has only exacerbated the problem.

In the midst of a public health emergency of unprecedented scale, access to clean drinking water and sanitation services has never been more important.

Last month, the Energy and Commerce Committee, on which I am a member, passed a measure to include $500 million to assist low-income households with their drinking water and wastewater bills during the ongoing pandemic. But even after the pandemic ends, low-income households will continue to need assistance.

In almost every part the country, families are struggling to pay their utility bills, a reality that is disproportionately affecting low-wealth communities and communities of color.

That's why earlier this year, I introduced H.R. 3293, the Low-Income Water Customer Assistance Programs Act of 2021. This bill would address the complex problem head-on by establishing a nationwide permanent program to assist low-income households with their drinking water and wastewater bills. I am proud to have to introduced this bipartisan, bipartisan,

bipartisan legislation with my colleague --

SENATOR CARPER: Did you say bipartisan?

REPRESENTATIVE ROCHESTER: -- from New York, Representative John Katko and my colleagues from Michigan, Representatives Debbie Dingell and Rashida Tlaib.

I was even prouder when the bill passed the House of Representatives earlier this year. This legislation will provide much needed relief to struggling families and give our community water and wastewater systems the reliable revenue stream needed to plan for and afford regular maintenance and upgrades to keep our water and environment safe.

Every Delawarean and every American, regardless of race, income, or ZIP code, should have access to clean, safe, reliable, and affordable water. It is a basic right, and an essential to public health, but right now, far too many Americans are being deprived of it.

We have an opportunity to right that wrong. We have an opportunity to make real and lasting improvements across our drinking water and wastewater systems. Access to water is a fundamental need, and we can and should deliver that to all Americans.

I thank you, Senator Carper. I thank you, Senator Capito, for your leadership and for the opportunity to address you today, and I look forward to the day when all Americans can have clean, safe, affordable, reliable drinking water and wastewater services. Thank you again.

SENATOR CARPER: And to that, all God's people say, "Amen." We have, sitting up here, we have in Senator Coons and Lisa probably two of the most devout members of any faith in the Congress. And Chris was an undergraduate major in chemistry, but at Yale he was a double major in divinity and law. And Lisa could be a minister in any church in the state, and a great one as well.

But for them and for me, as you heard yesterday in West Virginia, there's a moral imperative, a moral imperative that encourages, requires us to address these issues. I quote, probably more often than I ought to, Matthew 25. "When I was thirsty, you gave me a drink." And the question is, in too many cases, what we give you to drink. What comes out of faucets of people throughout our country, including West Virginia, and including too many places in Delaware, is water that's really not fit or not safe to drink. And we have a moral

obligation to do something about it, and we are bound and determined to do that.

Thank you so much for doing this.

REPRESENTATIVE ROCHESTER: Thank you.

SENATOR CARPER: It was great to see you. I look forward to seeing you soon. Thank you, Lisa.

And then I think we're going to break for lunch. We'll come back for the other witnesses later. No, not really.

I'm going to ask for our three witnesses to join us at the table, please. And, somebody, we may want to change out the nameplates, please. Okay.

Thank you, Lisa.

I am going to go ahead and begin introducing our witnesses.

Cassandra, I'm going to introduce you first. And, Cassandra Codes, C-O-D-E-S, oh, where did you get that name?

MS. CODES-JOHNSON: Long story. Codes-Johnson.

SENATOR CARPER: Codes?

MS. CODES-JOHNSON: Yes.

SENATOR CARPER: Codes, okay. Is that a family name?

Senate Committee on Environment and Public Works
Witness Testimony
of
Congresswoman Lisa Blunt Rochester

Oversight Field Hearing on "Identifying Unique Challenges for Small, Rural and Disadvantaged Communities in Accessing and Maintaining Drinking Water and Wastewater Infrastructure Assistance"

October 15, 2021

Good morning Chairman Carper, Ranking Member Capito, members of the Committee, and fellow witnesses.

I want to first thank Chairman Carper and Ranking Member Capito for calling this important hearing and for giving me the opportunity to speak about the unique challenges that households in small, rural, and disadvantaged communities face every day to secure clean drinking water and wastewater services.

I also want to thank the Chairman and Ranking Member for their leadership--and for the work that they have done to help communities across the country access and maintain clean and affordable drinking water and wastewater services.

I also want to recognize the Committee for the important bipartisan work they have accomplished this past year. The Drinking Water and Waste Water Infrastructure Act of 2021, which passed the Senate earlier this year, includes a provision that would establish a pilot program at the U.S. Environmental Protection Agency to assist low-income communities with their drinking water and wastewater utility bills and help fund upgrades to aging drinking water and wastewater infrastructure. This is an important step to provide long-needed improvements in water quality and accessibility for the communities that need it most.

Water accessibility and affordability in the United States have been a mounting crisis for years. I've seen it firsthand in communities across Delaware. During my time in the Governor's office, I started working with the Ellendale community, a small community in Sussex County with less than 500 residents. For decades households across Ellendale have been dealing with contaminated well water.

Nitrate, iron, and other pollutants in private wells have forced Ellendale residents and communities like Ellendale to use bottled water, not only to drink, but to cook, to clean, and to bathe.[1] In Delaware, around 173,000 residents use private wells and in Sussex County, almost half the county's residents are dependent on private wells.[2]

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[1] https://www.delawarepublic.org/post/new-federal-water-law-help-clean-local-supplies-defend-beaches-expand-port
[2] https://whyy.org/articles/disconnected-thousands-in-delaware-lack-access-to-safer-public-water/

Some communities are in such remote and rural areas that even if they wanted to connect to a public water system, they are unable to do so. Despite this, and even though more than 13 million households rely on private wells for their drinking water, the federal government does not provide recommended standards or criteria for private wells.[3]

Ellendale has been fighting for decades for access to clean drinking water, and a new public water system that will provide safe, clean, and reliable water to the residents is finally in sight—but the problem doesn't end when a community has access to a public water system.

Water must be affordable. Aging infrastructure and the rising costs of drinking water and wastewater services have culminated in rapidly rising water bills for public systems—and the COVID-19 pandemic has only exacerbated the problem.

In the midst of a public health emergency of unprecedented scale, access to clean drinking water and sanitation services has never been more important. The pandemic is projected to cost water and wastewater utilities nearly $30 billion, and consumers are expected to shoulder this cost in the form of increased bill payment—on top of the worst recession since the Great Depression and widespread job insecurity.[4]

Last month, the Energy & Commerce Committee passed a measure to include $500 million to assist low-income households with their drinking water and wastewater bills during the ongoing pandemic. But even after the pandemic ends, low-income households will continue to need assistance.

In almost every part of the country, families are struggling to pay their utility bills, a reality that is disproportionately affecting low-income communities and communities of color.

That's why earlier this year, I introduced H.R. 3293, the Low-Income Water Customer Assistance Programs Act of 2021. This bill would address this complex problem head on by establishing a nationwide, permanent program to assist low-income households with their drinking water and wastewater bills. I am proud to have introduced this bipartisan legislation with my colleague from New York, Representative John Katko, and my colleagues from Michigan, Representatives Debbie Dingell and Rashida Tlaib.

I was even prouder when the bill passed the House of Representatives earlier this year. This legislation will provide much needed relief to struggling families and give our community water and wastewater systems the reliable revenue stream needed to plan for and afford regular maintenance and upgrades to keep our water and environment safe.

Every Delawarean and every American, regardless of race, income, or zip code, should have access to clean, safe, reliable, and affordable water. It is a basic right and is essential to public health – but right now, far too many Americans are being deprived of it.

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[3] https://www.epa.gov/privatewells

[4] https://www.nacwa.org/docs/default-source/resources---public/water-sector-covid-19-financial-impacts.pdf

We have an opportunity to right that wrong. We have an opportunity to make real and lasting improvements across our drinking water and wastewater systems. Access to water is a basic need that we can and should deliver to all Americans.

Thank you for the opportunity to testify today.

MS. CODES-JOHNSON: Yes, sir, it is.

SENATOR CARPER: Okay. All right.

Cassandra Codes-Johnson, Associate Deputy Director of the Delaware Division of Public Health. How long have you held that position, Cassandra?

MS. CODES-JOHNSON: I've been with the division for eight years now.

SENATOR CARPER: Eight, okay.

MS. CODES-JOHNSON: Yes.

SENATOR CARPER: You started right out of school?

MS. CODES-JOHNSON: Yes. We'll say "yes."

SENATOR CARPER: In her current role, Cassandra provides oversight for over -- is it 700? -- 700 dedicated public health staff who provide a variety of services to protect and promote the health of Delawareans, including services that protect the drinking water of our state. Thank you for that.

Where did you grow up?

MS. CODES-JOHNSON: I'm a native New Yorker.

SENATOR CARPER: Where?

MS. CODES-JOHNSON: Long Island, New York.

SENATOR CARPER: Oh, okay. How did you

end up down here?

MS. CODES-JOHNSON: My parents, they retired from working in New York and moved to the great state of Delaware, and I would visit with the grandkids and decided that this was a place where I wanted to raise my kids.

SENATOR CARPER: Okay, good. So your parents gave you an assist on the play. That's great. Tell them I said "Thanks."

MS. CODES-JOHNSON: Yes.

SENATOR CARPER: The second witness is Vikki Prettyman, State Manager of the Southeast Rural Community Assistance Project Incorporated. Vikki has served as the Delaware and Maryland State Manager for the organization since, I think, last year --

MS. PRETTYMAN: June.

SENATOR CARPER: This year. No, this year.

MS. PRETTYMAN: June of this year.

SENATOR CARPER: So you've only been at this for about four or five months. In this role, she oversees a staff of 3,000 Technical Assistance Providers -- actually, three assistance providers, Technical Assistance Providers, multiple water and

wastewater treatment projects for communities and municipalities across Delaware and Maryland, as well as private well and septic homeowner assistance for both states.

You know, one out of six people in households in Delaware get their water from wells, as I recall.

MS. PRETTYMAN: Wells.

SENATOR CARPER: Before joining SERCAP, she served as the Town Administrator for Blades for the past 11 years, where she managed a number of projects, which included installation of a backup well to support Blades' two existing wells and addressed the PFAS contamination in Blades' water source close to town. Blades is a town just in the southwestern part of our state near Seaford.

Our third witness is Rick Duncan. Rick is the Executive Director of the Delaware Rural Water Association. In 2019, under Rick's leadership, the Delaware Rural Water Association broke ground on their second training facility. Delaware Rural Water is one of the premier training and technical support organizations for small water service operators in the state of Delaware.

Rick began his water career in 1983 as a water distribution operator with the Town of Rehoboth Beach. And the word "Rehoboth Beach," not many people know this, Rick, but the word "Rehoboth" in Rehoboth Beach means "room for all." Isn't that nice? Room for all.

In 1997, Rick was hired by the Town of Selbyville, not too far from Rehoboth, to manage its Public Works and Water Filtration and Distribution System. In 2000, he was elected as Town Councilman, and for the past 21 years, continues to serve in that role overseeing Selbyville's water facility, solid waste, local streets, and parks and recreation activity.

And we want to welcome, warmly welcome each of you here. And we just thank you from the bottom of our hearts for the work that you do with your lives and the leadership that you've provided here in this state.

And with that, I'm going to ask, Cassandra, would you just lead us off, please. Thank you, ma'am.

We'll hear from each of our witnesses and then ask some questions.

Please proceed.

MS. CODES-JOHNSON: Thank you. Good morning to the entire Senate Committee on Environment and Public Works. Thank you, Senator Capito and Senator Carper, for holding this hearing. Thank you, Senator Coons for being here. Thank you, Representative Lisa Blunt Rochester, for your very important comments.

My name is Cassandra Codes-Johnson and I serve as the Associate Deputy Director for the Department of Health and Social Services, Delaware Division of Public Health. The Delaware Division of Public Health, through our Health Systems Protection Section, regulates drinking water and administers the Delaware Drinking Water State Revolving Fund, which here -- from here on out will be referred to as "the Fund."

Each year, the Fund, DWSRF, uses federal funds which have been supplemented with state bond bill funds over the last several years to support drinking water system improvements throughout Delaware.

The Fund supports drinking water systems throughout a combination of grants and loans with funding in the last few years specifically focused on disadvantaged communities as identified by the median household income of a population. The Fund typically provides some principal forgiveness to any drinking water

project that exceeds 1.5 percent of the median household income as additional support for disadvantaged communities.

The Division of Public Health has loaned out, often with 100 percent principal forgiveness, over $23 million for water infrastructure investments over the last ten years. As we discuss the work of the Fund in helping communities access clean, safe drinking water, I would like to highlight a few recent successes that also illustrate the challenges that communities in Delaware face in accessing clean, safe drinking water.

Over the years, the Fund helped the town of Georgetown replace water mains and service connections, including lead service lines, to improve the quality and consistency of water provided to residents. This Fund also allowed Georgetown to upgrade its water treatment facilities, including installation of a new treatment plant in 2012.

As one example of public health benefits, the additional treatment funded through these state and federal investments helped to remove trichloroethylene, or TCE, a solvent and known carcinogen from the community's drinking water source. This action, together with the removal of lead service lines, will benefit the

public through the reliable delivery, treatment, and storage of water for the community of Georgetown.

Laurel, Delaware is another example of a community where state and federal funding programs led to public health and safety benefits for residents. Laurel replaced distribution and service connection lines, including those that contain asbestos. The town upgraded water treatment facilities to remediate high levels of nitrates, a widespread groundwater contaminant, especially in Southern Delaware. This is important because nitrate contamination has been linked to health impacts, such thyroid cancer, gastrointestinal issues, miscarriages, and birth defects.

Over the years, the town of Milton used resources from the Fund to replace water main pipes, create loops within the pipe system, and eliminate dead ends to reduce the amount of water remaining in lines for extended periods, which improved water quality. The town has also provided treatment upgrades at the water treatment facility, as well as helped citizens that cannot connect to the public water system upgrade or install private wells.

In the spring of 2010, the city of Seaford utilized state and federal funds for a distribution

system improvement project that allowed private well owners to connect to the public water system. Well owners often face nitrates and other natural contaminants, but can also be impacted by environmental releases, surface contamination, and other factors that impact safety and quality of their drinking water. Compounding the issue, traditional DWSRF funding is often precluded from assisting homeowners with the financial burden of connecting to a nearby system.

The Distribution System Improvement Project allowed the State to provide federal Disadvantaged Community Additional Subsidy, essentially paying for half of the project costs.

The projects described have benefited approximately 24,000 Delawareans, almost half of which are persons of color, and many of the projects highlighted are located in rural areas of Delaware. Many rural communities, lower-wealth communities, indigenous communities, and communities of color often face greater numbers of or more dangerous hazards than other communities. The multiple hazards can then aggregate to amplify harmful health impacts on these communities. These cumulative impacts can affect multiple generations and place additional weight on already overburdened

communities. These communities are often referred to as "environmental justice communities."

In Delaware, we're working really hard to address these inequities, but require support in this effort by the federal government. The President's environmental Justice40 Initiative sets the lofty but necessary goal of making sure that 40 percent of all federal funding is used to provide assistance to environmental justice communities that have long suffered from historic underinvestment in infrastructure, including water infrastructure.

We support the passage of the President's Build Back Better agenda, which includes the Drinking Water and Wastewater Infrastructure Act of 2021, as well as additional funding for water infrastructure projects, lead and PFAS remediation, and support for small, rural, and disadvantaged communities.

Specifically, the Drinking Water and Wastewater Infrastructure Act of 2021 supports these communities by authorizing more than 35 billion for water resource development projects across the country with a focus on upgrading aging infrastructure, addressing the threat of climate change, and investing in new technologies and providing assistance to marginalized

Testimony of

Cassandra Codes-Johnson

Associate Deputy Director, Delaware Division of Public Health

before the

U.S. Committee on Environment and Public Works

for the hearing entitled:

Identifying Unique Challenges for Small, Rural and Disadvantaged Communities in Accessing and Maintaining Drinking Water and Wastewater Infrastructure Assistance

October 15, 2021 (Dover, Delaware)

Introduction

Good morning/afternoon to the entire Senate Committee on Environment and Public Works. My name is Cassandra Codes-Johnson and I serve as the Associate Deputy Director for the Department of Health and Social Services (DHSS), Delaware Division of Public Health (DPH). The Delaware Division of Public Health, through our Health Systems Protection Section (HSP), regulates drinking water and administers the Delaware Drinking Water State Revolving Fund, referred to here on out as the Fund. Each year the Fund (DWSRF) uses federal funds, which have been supplemented with state bond bill funds over the last several years, to support drinking water system improvements throughout Delaware.

Delaware's Drinking Water State Revolving Loan Fund

The Fund supports drinking water systems through a combination of grants and loans, with funding in the last few years specifically focused on disadvantaged communities as identified by the Median Household Income (MHI) of a population. The Fund typically provides some principal forgiveness to any drinking water project that exceeds 1.5% of the MHI as additional support for disadvantaged communities. A lower interest rate, principal forgiveness or a grant may be made available based on impact to projected residential user rates as a percentage of Median Household Income (MHI). Impacts equivalent to 1.5 percent or more for end users are targeted for loan forgiveness and other options to ease burdens on utility customers.

Projects whose loans are repaid help support future projects. In these cases, we deposit part of the interest to a discretionary fund within the Fund that can be used for emergency response and other needs that support clean drinking water.

DPH has loaned out, often with 100% principal forgiveness, over $23,000,000 for the water infrastructure investments described below over the last 10 years. As we discuss the work of the Fund in helping communities access clean, safe drinking water, I would like to highlight a few recent successes that illustrate the challenges that communities in Delaware face in accessing clean, safe drinking water.

Georgetown, Delaware

Over the years, the Fund helped the Town of Georgetown replace water mains and service connections, including lead service lines, to improve the quality and consistency of water provided to residents. This funding also allowed Georgetown to upgrade its water treatment facilities, including installation of a new water treatment plant in 2012.

As one example of public health benefits, the additional treatment funded through these state and federal investments helped to remove trichloroethylene (TCE), a solvent and known carcinogen, from the community's drinking water source. This action, together with the removal of lead service lines, will benefit the public through the reliable delivery, treatment and storage of water for the community of Georgetown.

Laurel, Delaware

Laurel, Delaware is another example of a community where state and federal funding programs led to public health and safety benefits for residents. Laurel replaced distribution and service connection lines, including those that contain asbestos

The town upgraded water treatment facilities to remediate high levels of nitrates, a widespread groundwater contaminant, especially in southern Delaware. This is important because nitrate contamination has been linked to health impacts such as thyroid cancer, gastrointestinal issues, miscarriages and birth defects.

The removal of the asbestos service lines and nitrates from the water reduces negative public health impacts and improves the quality of life for residents living in Laurel.

Milton, Delaware

Over the years, the Town of Milton used resources from the Fund to replace water mains pipes, create loops within the pipe system, and eliminate dead ends to reduce the amount of water remaining in lines for extended periods, which improved water quality. The Town has also provided treatment upgrades at the water treatment facility, as well as helped citizens that cannot connect to the public water system upgrade or install private wells.

Seaford, Delaware

In the spring of 2010, the City of Seaford utilized state and federal funds for a distribution system improvement project that allowed private well owners to connect to the public water system. Well owners often face nitrates and other natural contaminants, but can also be impacted by

environmental releases, surface contamination and other factors that impact safety and quality of their drinking water. Compounding the issue, traditional DWSRF funding is often precluded from assisting homeowner with the financial burden of connecting to a nearby system.

The distribution system improvement project allowed the state to provide federal Disadvantaged Community Additional Subsidy, essentially paying for half of the project costs.

It is important to note that traditional funding for water infrastructure projects, such as loans from the Fund, often limits the ability of disadvantaged communities to support fees necessary to hook up to a public water system. The traditional funding for the SRF program is allocated and allotted annually by the US EPA via a competitive grant application process. The limitations placed on the intended use of these federal funds does not allow for operation and maintenance projects, including the cost of connection fees. Supplemental funding sources, such as grants or loan forgiveness, can be utilized to achieve these much-needed connections.

The Impact of Water Investments on Low Income and Environmental Justice Communities

The projects described above have benefitted approximately 24,000 Delawareans, almost half of which (11,000) are persons of color. And many of the projects highlighted are located in rural areas of Delaware.[1]

Many rural communities, lower- wealth communities, indigenous communities and communities of color often face greater numbers of or more dangerous hazards than other communities. The multiple hazards can then aggregate to amplify harmful health impacts on these communities. These cumulative impacts can affect multiple generations and place additional weight on already overburdened communities. These communities are often referred to as "Environmental Justice communities"

A September 2019 Report, *Watered Down Justice*, by the Natural Resource Defense Council and Environmental Justice Health Alliance highlights the additional challenges that are often faced by small water systems. Many small water systems do not have the capacity to maintain and improve their physical infrastructure, identify and address threats to drinking water (which facilities, industries, or factors outside their control often cause), or comply with current standards, as the Environmental Protection Agency (EPA) has noted. In addition, many small systems "are likely to serve low-income, vulnerable populations.

In Delaware, we are working to address these inequities, but require support in this effort by the federal government. The President's EJ40 Initiative sets the lofty, but necessary goal, of making sure that 40% of all federal funding is used to provide assistance to Environmental Justice communities that have long suffered from historic underinvestment in infrastructure, including water infrastructure. We support that passage of the President's Build Back Better Agenda, which includes the *Drinking Water and Wastewater Infrastructure Act of 2021* (DWWIA 2021), as well as additional funding for water infrastructure projects, lead and PFAS remediation, and support for small, rural, and disadvantaged communities.

[1] Impacts based on specific projects and demographic information can be found at http://www.city-data.com/city/Delaware.html.

Specifically, The *Drinking Water and Wastewater Infrastructure Act of 2021* supports these communities by authorizing more than $35 billion for water resource development projects across the country with a focus on upgrading aging infrastructure, addressing the threat of climate change, investing in new technologies, and providing assistance to marginalized communities.

I would also just like to note that in Delaware, we have used our strong municipal partnerships to thoroughly streamline federal cross cutters; and although burdensome, we have 100% compliance with those regulations. Cross-cutting federal authorities are the requirements of other federal laws and Executive Orders that apply in federal financial assistance programs. These federal cross cutters ensure that Environmental, Social and Economic authorities and acts are incorporated into all of the SRF projects. These guidelines ensure that Environmental Justice, Farmland protection, Safe Drinking Water, Equal Employment Opportunity, and the like are considered and part of every drinking water project. They also provide for the use of prevailing state wages and mandate that all iron and steel be American-made.

Closing

In closing, I would like to thank the entire U.S. Senate Environment and Public Works (EPW) Committee for working to invest in our nation's water infrastructure with a focus on equity, and look forward to continuing to work with you to better meet the drinking water needs of the people of Delaware.

communities.

In closing, I would like to thank the entire U.S. Senate Environment and Public Works Committee for working to invest in our nation's water infrastructure with a focus on equity, and look forward to continuing to work with you all to better meet the drinking water needs of the people of Delaware.

Thank you.

SENATOR CARPER: Thank you very, very much, Cassandra. Thanks for doing this. I appreciate it.

Vikki Prettyman, please proceed.

MS. PRETTYMAN: Thank you, Chairman Carper, and Ranking Member Capito.

SENATOR CARPER: You want to make sure your mic is on. Is it on?

MS. PRETTYMAN: Is that better? Oh. Can you hear me now?

SENATOR CARPER: It should have a green light.

MS. PRETTYMAN: There we go. Sorry.

SENATOR CARPER: Thank you.

MS. PRETTYMAN: Thank you, Chairman.

SENATOR CARPER: We want to hear every

word.

MS. PRETTYMAN: Thank you, Chairman Carper and Ranking Member Capito, Senator Coons, for this opportunity to address the needs of water systems in small, rural, and tribal communities.

My name is Vikki Prettyman, and I am the Delaware and Maryland State Manager for SERCAP, the Southeast Rural Community Assistance Project.

SENATOR CARPER: You're saying SERCAP.

MS. PRETTYMAN: I'm sorry?

SENATOR CARPER: Go ahead and explain what SERCAP is.

MS. PRETTYMAN: SERCAP is technical assistance from -- SERCAP serves Delaware all the way down to Florida, and we help rural and small communities with water and wastewater and stormwater needs.

SENATOR CARPER: Good. Thank you.

MS. PRETTYMAN: Thank you.

The Southeast Rural Community Assistance Project, we are the regional partner of our Rural Community Assistance Partnership. Last year, RCAP served more than 3.4 million rural and tribal residents, more than 2,000 of the smallest, most distressed communities, including 46 active projects in Maryland and Delaware.

Water and sewer service is a driving factor for economic growth. Of the approximately 150,000 public water systems across the country, 97 percent serve small communities, and 72 percent serve communities of 500 or less. Small communities are challenged by the ever-increasing cost of operations over a smaller, sometimes dwindling, customer base.

COVID has further exacerbated the challenges rural communities face with many suffering a significant drop in revenue when employers shut down businesses and some customers were unable to pay their bills. With the mounting financial losses, communities were forced to defer infrastructure projects, adding to the more than 1 trillion that EPA estimates the water sector needs. The burden largely falls on communities with federal funding reduced from 63 percent 59 years ago to 3 1/2 percent today.

Small systems in our two states coped with COVID and reduced revenue in a variety of ways. One Delaware town estimated its revenue loss of $375,000 per month and requested temporary forbearance on their USDA loans. While it's safe to say that all systems suffered some impact of COVID, it hit the small systems the hardest.

There are many rural communities that are not connected to wastewater systems at all, resulting in raw sewage in yards and waterways, contaminated drinking water for residents, and the threat of associated diseases, trapping people in a vicious cycle of poverty.

I want to thank Senators Capito, Booker, and former Senator Jones for introducing a bill that would create a grant program to address these challenges.

There's great need in rural communities for a permanent nationwide low-income customer assistance program. A pilot program was included in the Infrastructure Investment and Jobs Act, but a 40 utility pilot program, 10 being small community systems, doesn't begin to address the need for low-income families nationwide. We have assistance programs for low-income Americans for food, shelter, heat, and healthcare, but no such program for water.

I thank Representative Blunt Rochester for her work with Representative Capito along with Senators Cardin and Wicker for introducing bipartisan legislation.

And thank you, Senators Carper and Capito, for your leadership.

While we are sincerely grateful for all the hard work you have done advocating for this program's

inclusion, we urge the Committee to create a nationwide permanent program housed at EPA in the budget reconciliation package.

Civic and religious charity organizations are seeing a decrease in corporate and personal donations, but an increase in requests for assistance, particularly assistance to pay utility bills. The basic need -- particularly assistance to pay water bills after the shutoff moratorium was lifted.

The basic need for water has never been more highlighted as it has been during this pandemic. A Delaware nonprofit focusing on the needs of our most marginalized community members saw requests for assistance with water bills more than double. Before COVID, requests for assistance to pay a water bill of $60 -- now they're seeing requests to pay water bills of 600 or more to avoid being shut off.

Water systems are universally concerned about emerging contaminants. The many compounds that fall under the umbrella of PFAS have already been detected in a couple of locations in Delaware. I happen to have been the town administrator of one of those towns. The town was helped out financially and technically by state and federal agencies, but once the

public health crisis was resolved with a new filtration system, the cost of operating and maintaining that system resides solely with the town.

For a town of about 1,500 residents, a poverty rate of more than 22 percent, this can be a crushing burden indeed. Replacement of the filter media alone can cost more than $30,000, a task that is required every three -- could be required every three to six years. There is an added issue of disposal of the old media as hazardous waste and increased operations cost of the new treatment system.

Our citizens should not bear the financial burden and increase to their water bills due to remediation of these pollutants. Federal investment is needed to address those emerging issues. SERCAP works with communities and partners across Delaware and Maryland and the entire Southeast U.S. to advocate for and generate economic opportunities and improved quality of life in rural areas. The services provided through these programs deliver critical assistance in the small and disadvantaged communities where it is most needed.

I thank the Committee for inviting me to testify today and look forward to working with you and more -- and your colleagues to ensure these important

priorities are passed into law.

I'll leave you with this one quote from the former U.S. surgeon general in 1952. "Water is essential to life -- the life of a city, as well as the life of human beings. Without water, a person dies. Without water, a community faces the same fate."

Thank you very much.

SENATOR CARPER: Who was the surgeon general in 1952? Go ahead. You can make it up. We won't know.

MS. PRETTYMAN: I should have written that down. I'm sorry.

SENATOR CARPER: That's all right. While Rick's testifying you can --

SENATOR CAPITO: Wasn't that you?

SENATOR CARPER: I'm sure you can find it.

SENATOR CAPITO: Weren't you the surgeon general then?

SENATOR CARPER: It was not me.

MS. PRETTYMAN: It does begin with an L.

SENATOR CARPER: I was an admiral, not a general. No, I was not an admiral. All right.

With that, Rick, you have two tough acts to follow, don't you think? I'm sure you're up to it, so

Testimony to the

US Senate Committee on Environment and Public Works

Ms. Vikki Prettyman

Delaware & Maryland State Manager

Southeast Rural Community Assistance Project, Inc.

October 15, 2021

About SERCAP/RCAP

Thank you, Chairman Carper and Ranking Member Capito for this opportunity to address the needs of water systems in small rural and tribal communities.

My name is Vikki Prettyman and I am the Delaware and Maryland State Manager for SERCAP, the Southeast Rural Community Assistance Project. SERCAP is a regional partner of the broader Rural Community Assistance Partnership (RCAP) - a national network of non-profit partners working to provide technical assistance, training, and resources to rural and tribal communities in every state, territory and on tribal lands. Our regional partners have more than 300 technical assistance providers that help build small system capabilities for sustainable and resilient water and wastewater utilities. Last year, RCAP served more than 3.4 million rural and tribal residents in more than 2,000 of the smallest, most distressed communities, including 46 active projects in Delaware and Maryland for that year.

RCAP COVID Survey Results

The talent, innovation, and resiliency of America's rural areas will play a central role in the future of the U.S. economy.

The availability of water and sewer service is a driving factor for economic growth. Of the approximately 150,000 public water systems across the country, 97 percent serve communities of 10,000 or less, and 72 percent serve communities of 500 or less. The average population of the communities we served in 2020 was 1,500, with a Median Household Income of half the national average. We served more than 40 percent of America's persistent poverty counties, and almost 300,000 individuals from indigenous communities.

The big challenge for small communities is spreading out the ever-increasing costs of operations over a smaller, and sometimes dwindling, customer base. The price tag of a million-dollar project can have a staggering effect on a town of 1,500 with 800 customers. That same million-dollar price tag would have little impact on a community of 50,000 with 20,000 customers or more to absorb a share of the total cost.

COVID-19 has further exacerbated the challenges rural communities face, with many communities suffering a significant drop in revenue when employers shut down businesses. Those whose jobs would not allow working from home were either furloughed or simply un-employed, so that their income levels dropped as well. At the same time that commercial and industrial demand decreased, residential demand increased as people couldn't go out to work as usual and their school-aged children were now home all day and all night. Municipalities and utilities were faced with providing intensified service while laboring under a significant reduction in income to cover their costs.

RCAP conducted a survey of project communities in May 2020 regarding the impact COVID had on their utilities. More than 31 percent of respondents estimated they would not be able to

continue to cover their operational costs for more than six months, due to an estimated revenue loss of between $3.6-5.5 billion for small systems as a whole.

Many of these systems, more than 43 percent, said they relied on one full-time operator or less, leaving the communities' services at risk if their operator fell ill. With these mounting financial losses, communities were forced to defer infrastructure projects, adding to the more than $1 trillion in upgrades and repairs that the EPA estimates that the water sector needs. This burden largely falls on communities since federal funding for water infrastructure is a paltry 3.5% of annual investment in the sector, down from 63 percent 50 years ago. That burden becomes increasingly heavy as the size of the systems becomes smaller.

Small systems in Maryland and Delaware

Small systems in Maryland and Delaware have felt the impact of COVID and reduced revenue as much as in any other state. One Maryland utility's staff decided to isolate at the water plant for the most intense period of the pandemic. Their decision was based on the premise that they didn't want to bring potential infection to each other from outside the plant, and that someone had to keep the water system running because hygiene and sanitation were now more important than ever. They brought their sleeping bags, cots and air mattresses to the plant and stayed there day and night for several weeks. Another town in Delaware suffered such a drastic drop in revenue that it formally requested a moratorium on its USDA loan because it needed every penny just to keep the systems running. While it's safe to say that all systems probably suffered some impact from COVID, it hit the small systems the hardest.

Committee's Recent Activity:

Funding is incredibly important, but in small communities, it is not enough. Technical Assistance (TA) is needed to build and strengthen local capacity to take on these challenges. The recent work of the committee has been extremely beneficial to the communities we serve. Last Congress, EPW produced two drinking water and wastewater infrastructure bills, DWIA 2020 and AWIA 2020, which included several critical priorities that have now been folded into the Infrastructure Investment and Jobs Act (IIJA).

In addition to increasing overall funding for the Clean Water and Drinking Water State Revolving Funds, the Infrastructure Investment and Jobs Act includes many provisions particularly helpful to rural communities.

One is the reauthorization of a program that allows for up to 2 percent of the Drinking Water SRF to be set-aside for Technical Assistance and extends TA to EPA's Small and Disadvantaged Communities Grant Program. Additionally, the IIJA requires that states use not less than 20 percent of the Drinking Water SRFs for grants, negative interest loans, or to refinance debt. These SRF provisions are especially important for small and rural systems, because one major unexpected emergency can leave small utilities financially distressed. Given their small base of ratepayers, loans may not work for these communities.

The bill also extends the EPA's National Priority Area TA Program to communities that are facing an imminent threat to public health and allows nonprofits like RCAP to provide TA to schools and childcare facilities to ensure that water is safe for every child. Further, the IIJA creates circuit rider programs to assist small systems, and a grant program to improve efficiencies at small utilities.

I want to thank both of you, Senators Carper and Capito, for your leadership in getting all of these important issues included.

Besides the rural utilities we work with, there are many rural communities that are not connected to any wastewater system at all, resulting in raw sewage in yards and waterways, contaminated drinking water for residents, and chronic debilitating diseases like hookworm. Challenges like this can trap people in a vicious cycle of poverty. I want to thank Senators Capito, Booker, and former Senator Jones for the introduction of a bill that would create a grant program to address these challenges, and I commend the committee for including it in the legislation that eventually folded into the water portions of the IIJA.

Key Priority for Rural Communities:

Finally, one additional priority for rural communities is the creation of a permanent nationwide low-income water and wastewater customer assistance program. While a nationwide program did not make it into the IIJA, a pilot program was included in the bill. While this is a step in the right direction, the current funding need for low-income families is estimated to be over $8-billion and I can tell you from firsthand experience that action to help them is needed now.

This lack is one that disproportionately impacts our rural communities. According to the most recent estimates, the non-metro poverty rate is 16.1 percent, much higher than in metro areas. Further, counties experiencing long-term poverty are almost exclusively rural.

We have assistance programs for low-income Americans for food, shelter, heat, and health care. There is no such program for water or wastewater. I thank Senators Cardin and Wicker for introducing bipartisan legislation, and thank Senators Carper and Capito for your leadership in advocating for a 40-utility pilot program in the IIJA, with 10 of those pilots being set aside for rural utilities. While we are sincerely grateful for all the hard work you have done advocating for this program's inclusion in the IIJA; in a country with 150,000 utilities, 97% of whom serve small populations, 40 pilots is simply not enough. We urge the committee to create a nationwide, permanent program housed at EPA in the budget reconciliation package.

Civic and religious charity organizations are seeing a decrease in corporate and personal donations but an increase in requests for assistance, particularly assistance to pay water and sewer bills after the shut-off moratorium was lifted. The basic need for water has never been so highlighted as it was during this pandemic. A Delaware non-profit focusing on the needs of our most marginalized community members saw requests for assistance with water and sewer bills more than double and they have an increase on their street ministries of 573%. Assistance asks increased from needing a base water bill paid of $60.00 to now needing $600 or more to

avoid shut off. Citizens who were givers to their organization just a year ago were now the ones asking for help. Those in poverty are in survival mode and the bare essentials are either not readily available or have increased in cost.

Maryland's MHI is $84,805 according to the most recent census. This is 26% higher than the US MHI of $62,843. However, Somerset County Maryland, which is largely rural has an MHI of only $37,803. Allegany County on the other end of the state has an MHI of $45,893. These are the communities and individuals who need the most help with their utility bills, including water and sewer. These same rural areas need the most assistance we can give them to help them at least keep up with their own service needs even if they can't compete with the larger jurisdictions.

Another big concern for all water systems is the topic of "Emerging Contaminants." The many compounds that fall under the umbrella of PFAS have already been detected in a couple of locations in Delaware. I happen to have been the Town Administrator of one of those towns and know firsthand what a financial burden and risk to public health it can be.

The town was helped out financially and technically by the state and the federal agencies, but once the public health crisis had been resolved with a new Granular Activated Carbon filtration system, the cost of operating and maintaining that system resides with the town. For a town of about 1,500 residents, an MHI of $60,908 and a poverty rate of more than 22%, this can be a crushing burden indeed. Replacement of the filter media alone can cost more than $30,000, a task that can be required every 3-6 years. In addition, there is the issue of disposal of the old media as a hazardous waste and the extra operations cost associated with the new treatment system. As often happens, solving one problem leads to consequences that cost even more money. Our citizens should not bear the financial burden and increase to their water bills due to remediation of these pollutants.

SERCAP works with communities and partners across Delaware and Maryland, and the entire southeast U.S. to advocate for and generate economic opportunities and improved quality of life in rural areas. The services provided through these programs deliver critical assistance in the small and disadvantaged communities where they are most needed. I thank the committee for inviting me to testify today, and I look forward to working with you and your colleagues to ensure these important priorities are passed into law.

I'd like to leave you with this quote from a former US Surgeon General in 1952:

"Water is essential to life – the life of a city as well as the life of a human being. Without water, a [person] dies. Without water a community faces the same fate."

please proceed. Delighted to hear you. Thank you.

MR. DUNCAN: Good morning. Welcome, Senator Capito, to Delaware.

SENATOR CAPITO: Thank you.

MR. DUNCAN: Chairman Carper, Senator Coons, it's good to see you again. I think we met last at the opening of our aeration treatment plant in Selbyville years ago, so we look forward to --

It's an honor to appear before you today and have you at the Senate Committee on Environment and Public Works hold its field office hearing here in Dover to talk about Delaware water issues.

I am Rick Duncan, the Executive Director of the Delaware Rural Water Association where I've enjoyed working for my past 31 years. As Senator Carper said, I'm also an elected official for the past 22 years in the town of Selbyville, which is a small municipality 55 miles south of Dover here.

Delaware Rural Water is a nonprofit association of small and rural communities with over 240 members. Our critical part of our mission at the Rural Water Association is to travel directly into our small, rural communities and assist them with operating, governing, financing, upgrading, and maintaining their

water and wastewater infrastructure. This includes compliance with an abundance of federal Clean Water and Safe Water Act regulations, as well as all the training needed to keep local officials, operators certified and educated on the latest rules, regulations, and technologies.

It would be not be an exaggeration to say that I have traveled through every community water system in the state, and mostly all the public water systems, providing on-site, hands-on technical assistance over my 31 years, and I have done this probably more than one time.

Delaware has 482 public water systems, of which, 207 are community water systems. Only three of these water utilities serve populations of over 100,000 people, and only 34 serve a population between 3,300 and 10,000. That means 448 of these total 482 public water systems serve fewer than 3,300 persons.

Small rural communities have more difficulty affording public drinking water and wastewater service due to the lack of population density and the lack of economies of scale. This challenge is compounded by the fact that rural communities have lower average median household incomes and often have higher rates of

poverty. Many small communities have only one operator with multiple duties, not just water treatment, while a large community may have a team of technical experts including engineers, chemists, and highly trained operators as part of their full-time staff.

On behalf of all the small rural communities in the state, thank you, Senator Carper and Senator Capito, for crafting and passing in the Senate the Drinking Water and Wastewater Infrastructure Act. We enthusiastically support enactment of the bill and appreciate the many helpful and beneficial provisions for rural America in your water legislation, including the expansion of technical assistance and grants targeting communities with the greatest need, which should help us address rural environmental justice, sustainability of water infrastructure, protecting the public from PFAS contamination, compliance with the new Lead and Copper Rule revisions, reducing nutrient concentrations into source water, improving the country's water workforce, defending against cyber attacks on water supplies, and other priorities.

The town of Selbyville and municipalities in Delaware would like to sincerely thank Congress for funding we received under the 1.9 trillion American

Rescue Act. Selbyville received approximately 1.4 million from this legislation. We will be using a significant portion of this funding for drinking water and wastewater infrastructure updates, including a new storage facility, filter backwash recovery, and other urgent needs.

The main concern in Delaware's small and disadvantaged communities is aging water infrastructure. Much of the water infrastructure around the state is many decades old and experience chronic failures causing noncompliance. Pipe materials have reached their intended use age and are crumbling and failing. This deterioration is occurring while we are witnessing dynamic increases in the cost of materials like pipe, hydrants, meters, fixtures, and treatment chemicals.

This adverse trend is compounded by another problematic trend. Our communities cannot fill their demand for new water and wastewater operators. We need help. Our experience in Selbyville is similar to many small rural communities in the state. Unfortunately, many are smaller, including numerous mobile home parks where, due to the limited economies of scale, there is no ability to solve their water infrastructure challenges without grant-rich subsidies.

In addition to funding assistance through state revolving funds, small and rural communities need help with hands-on technical assistance in training with funding applications, understanding all the complicated EPA rules, including the new Lead and Copper Rule, and training of new operators.

Lack of water and wastewater operators in the workforce remains one of the most troubling trends in Delaware. We have many experienced operators retiring and very few new operators coming into the field. Currently, Delaware Rural Water collaborates with Polytech and the state's Pathway education programs who train high school students who are not college-bound to be trained in basic water operations. This has been a great success for us here at Delaware Rural Water. And today, we welcome William Penn High School, which has joined us, with Rural Water in our training program for high school students.

Rural Water is grateful for the 55 billion in water infrastructure funding in the Bipartisan Infrastructure Framework legislation, which is more EPA water infrastructure funding than anyone could imagine. Rural Water is committed to working with the state agencies and moving the funding out into projects and

helping all the communities in Delaware to apply and secure the funding. It will be a quite welcome challenge to move the funding from program dollars to approved projects. Rural Water foresees a great demand for on-site technical assistance in the application process, project design, and education of the new funding for all our state's rural communities.

Thank you, Mr. Chairman, and members of the committee for the honor to testify for rural America, and we are grateful that you have included a voice for rural America at this hearing. In addition, we deeply appreciate the numerous opportunities this committee has provided rural America to be included in crafting of federal water and environmental legislation and the policies. Thank you.

SENATOR CARPER: Thanks very, very much for all you do and certainly for being here today and sharing those thoughts with us.

Senator Coons had to modify his schedule in order to be able to join us here for an hour. I just want to say thank you, not just for being here, but for being where we really need you, especially in the Appropriations Committee to make sure that the work that Senator Capito and I are doing with our colleagues on our

Testimony of

Richard A "Rick" Duncan Sr

of the

Delaware Rural Water Association

and the

The Town of Selbyville, Delaware

before the

U.S. Committee on Environment and Public Works

Subject: Drinking Water and Wastewater Infrastructure

October 15, 2021 (Dover, Delaware)

Introduction

Good morning, Chairman Carper and members of the committee. It is an honor to appear before you today and have the U.S. Senate Committee on Environment and Public Works hold its field hearing here in Dover to talk about Delaware water issues.

I am Rick Duncan, the Executive Director of the Delaware Rural Water Association, where I have worked for the past 31 years. I am also an elected official for the Town of Selbyville, which is a small municipality 55 miles due south of Dover.
Delaware Rural Water is a non-profit association of small and rural communities with over 240 members.

The Environment and Public Works Committee is very important to rural and small-town America. Every federal dollar that has been granted to the many thousands of small towns to build, expand, and maintain their drinking water and wastewater infrastructure through the State Revolving Funds was authorized by this committee. We are grateful for the numerous ways this committee has included rural America in crafting federal water and environmental policy.

A crucial part of our mission at the rural water association is to travel directly to all small and rural communities and assist them with operating, governing, financing, upgrading and maintaining their water and wastewater infrastructure. This includes compliance with an abundance of 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. It would not be an exaggeration to say that I have traveled to every community water system in the state and most all of the public water systems to provide onsite hands-on technical assistance over my 31 years. And I have done so more than one time, in many cases.

***DRWA's Mission Statement**: To meet the needs of member water and wastewater systems by providing quality information, training and technical assistance and legislative representation, and to assist them in maintaining a high standard of service to their communities.*

Delaware has 482 public water systems, of which 207 are community water systems. Only three of these water utilities serve populations of over 100,000 persons, and only 34 serve a population between 3,300 and 10,000 persons. That means 448 of the total 482 public water systems serve fewer than 3,300 persons. I have included the entire database of Delaware public water systems with my written statement. My town "Selbyville" is one of the communities serving fewer than 3,300 persons.

Environmental Protection Agency (EPA) SDWIS Database (2021 third quarter)

GPRA Inventory Summary Report

Population Size Category	<=500		501-3,300		3,301-10,000		10,001-100,000		>100,000		# of Systems	Population Served Count
	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count	# of Systems	Population Served Count		
PWS Type Code												
CWS	127	23,786	43	55,601	18	114,045	16	385,673	3	417,346	**207**	**996,451**
NTNCWS	81	9,173	12	15,918							**93**	**25,091**
TNCWS	159	20,217	23	19,412							**182**	**39,629**
Grand Total	**367**	**53,176**	**78**	**90,931**	**18**	**114,045**	**16**	**385,673**	**3**	**417,346**	**482**	**1,061,171**

SUBMISSIONYEARQUARTER is equal to **2021Q3**
and PRIMACY_AGENCY_CODE is equal to **DE**
and NPM_CANDIDATE is equal to / is in **Y**

The Rural and Small Community Dilemma

Small and rural communities have more difficulty affording public drinking water and wastewater service due to lack of population density and lack of economies of scale. This challenge is compounded by the fact that rural communities have lower average median household incomes and often have higher rates of poverty. Likewise, we have a much more challenging time complying with our federal Clean Water Act permits and Safe Drinking Water Act (SDWA) regulations and operating complex 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 - and often operate similar complex treatment systems that are smaller in scale but no less sophisticated to operate and troubleshoot. Many small communities have only one operator with multiple duties, not just water treatment - while a large community may have a team of technical experts including engineers, chemists, and highly trained operators - all as part of their full-time staff.

Thank You for Authoring the Drinking Water Infrastructure Act of 2020 (DWIA)

On behalf of all communities in all the states, thank you, Senators Carper and Capito, for crafting and passing (in the Senate) the "Drinking Water and Wastewater Infrastructure Act." We enthusiastically support enactment of the bill and appreciate the many helpful and beneficial provisions for rural America in your water legislation. Your legislation includes numerous beneficial provisions such as the expansion of technical assistance, subsidized funding initiatives within the state revolving funds targeted to the communities with the greatest need, new targeting of funding assistance to disadvantaged communities, etc. We also appreciate the fact that your legislation does not include any new federal unfunded mandates on local governments. Moreover, we are grateful for your attention to enhancing the technical assistance authorizations under the SDWA and CWA.
We look forward to working with you on the following water policy issues of mutual concern: enhanced technical assistance including rural environmental justice, sustainability of water

infrastructure, resilience to extreme weather, protecting the public and environment from PFAS contamination, compliance with the new Lead and Copper Rule Revisions, reducing nutrient concentrations into source waters and sources of drinking water, improving the country's water workforce, defending against cyberattacks on the water supply, supporting regionalization of small water systems when appropriate, limiting water service disconnections on vulnerable customers, and other issues. The rural water circuit rider approach presents the most successful model for advancing our shared priority water initiatives.

Thank You for the American Rescue Plan Act

The Town of Selbyville and the other small municipalities in Delaware would like to sincerely thank Congress for the funding we received under the $1.9 trillion (of which $19.5 is reserved for communities with fewer than 50,000 persons) COVID-19 Stimulus Package, otherwise known as the American Rescue Plan Act (ARPA). Selbyville received approximately $1.4 million from this legislation. We will be using a significant portion of this funding for drinking water and wastewater infrastructure updates, including our new storage tower, filter backwash recovery system and other urgent needs. Our town also has other competing pandemic-related funding demands including economic relief for our citizens adversely impacted by the pandemic, law enforcement, public safety, and other demands. Our town council is in the process of allocating the funding to address the demands of the pandemic. We appreciate that Congress allowed local governments the flexibility to use the funding as they see fit based on local priorities versus having the funding programmed in by the federal government. Thank you for providing this flexibility and deference to local discretion - it will result in the most efficient and locally determined use of the funding. Most of the local governments in Delaware are looking at water infrastructure as a priority use of the funding - it is desperately needed in many communities and very much appreciated.

Current Water and Wastewater Infrastructure Trends in Delaware

The main concern in many of Delaware's small and disadvantaged communities is aging water infrastructure. Much of the water infrastructure around the state is many decades old and experiencing chronic failures and non-compliance. Pipe materials have reached their intended-use age and are crumbling and failing. This deterioration is occurring while we are witnessing dramatic increases in the cost of materials like pipe, hydrants, meters, fixtures, and treatment chemicals. Moreover, the current global supply chain shortages and price inflation are having a very adverse impact on the water community. This adverse trend is compounded by another problematic trend - our communities cannot fill the demand for new water and wastewater operators. We are working with many Delaware towns to find solutions which almost always require funding - much of which is coming from the state revolving funds.

My town "Selbyville's" situation with our drinking water and wastewater utilities is typical of many Delaware small communities. We only have 2157 total residents to pay for all the water infrastructure. We need more supply to meet the town's water demand which means we need to finance an approximately $5 million for a new water storage tank, and we want to remove all the existing lead service lines (called "goosenecks") that will likely be required to be removed under EPA's next Lead and Copper Rule. We don't even know where these lines are in the town and we will have to dig up roads and mains to find them and replace them with modern materials. Additionally, we will have to have much of this work permitted by the state because it will require digging up our state roads. We estimated that these leaded materials serve as many as 40-50% of homes. We are able to meet the federal lead in drinking water compliance level by adjusting the pH of our water and adding corrosion inhibiting chemicals. We are teetering around the federal compliance level for TTHM'S under a different and very complicated federal EPA water regulation called the Disinfection Byproducts Rules.

In order to stay under the federal level for this rule, we have to release or "waste" treated water throughout the community each day because the longer the water stays in the service mains, the more at risk we are of violating the federal compliance level requirement. If this flushing is not successful, we will have to install new aeration treatment systems before our disinfection process - this will be costly and complicated. In addition, we have failing old cement sewer lines causing some inflow and infiltration issues within our wastewater systems. Also, the wastewater system needs new headworks pipes to increase capacity to meet demand. Our town's sewer system has approximately 29 lift stations that pump the sewage from low-lying areas to the sewer filtration and disinfection plant. Flushable wipes currently are causing a severe problem for us. Each day one of these lift stations are becoming clogged with the flushable wipes and destroying the pumps at the lift stations which means we have to call a contractor to come and pump out the lift station and install a new pump. This costs many thousand dollars per event. We are trying to educate the population to stop flushing the wipes, but our efforts are not working well, and we may have to use more punitive measures.

Our experience in Selbyville is similar to many small and rural communities in the state. Unfortunately, many are smaller, including numerous mobile home parks where due to their limited economies of scale, there is no ability to solve their water infrastructure challenges without grant-rich subsidies.

Technical Assistance and New Operator Training

In addition to funding assistance through the state revolving funds, small and rural communities need help with technical assistance & training with funding applications, understanding of all the complicated EPA rules, including the new Lead and Copper Rule, and training of new operators.

Lack of water operators in the workforce remains one of the most troubling trends in Delaware. We have many experienced operators retiring and very few new operators coming into the field. Rural Water collaborates with the state's "Pathways" education program to train high school students who are not college-bound to be trained in basic water operations as part of their high school curriculum. Selbyville just hired a recent local high school graduate who completed the 12-week program, supported by our rural water training program. Millsboro just hired two recent high school graduates, one for their water utility and another for their wastewater utility. This program is working, and we are trying to have it expanded to more high schools in the state. This week we welcome the William Penn High School in New Castle to our program. The water utility operations career is stable and rewarding, and we need to bring the skills and training to more young people who are unaware of the opportunity. Some communities in Delaware cannot find a certified operator necessary to operate their utility, and some have had to turn to the neighboring community to operate their utility. New EPA rules will only increase the demand for training. For example, the new Lead and Copper Rule will likely require every community to create maps of all the lead service lines in their communities. This rule will be very challenging for small and rural communities as more training is required, and we will need more direct technical assistance to meet the new demand for understanding the rule (including the mapping, new testing requirements including in school and child care facilities, lead line replacement program, and new public education programs.)

Small and rural communities have relied on Delaware Rural Water's on-site technical assistance and training to comply with the abundance of federal EPA regulations, avoid EPA fines, and maintain drinking water and wastewater compliance.
Small communities want to ensure quality water and rural water provides them the shared technical resources to do it. It is important for EPA to recognize that small local water supplies are operated and governed by people whose families drink the water every day and are locally

elected by their community. Some of the smallest communities rely on volunteers to operate their local drinking water supplies. Enhancing drinking water and wastewater quality in small communities is more of a resource challenge than a regulatory problem.

The most successful approach for technical assistance is the “Circuit Rider" concept, created by Congress, which provides an expert with experience in water utility operations and compliance. This expert can travel directly to small and rural communities, as needed, to assist with rule compliance and generally eliminate the need for civil enforcement. Additionally, it is essential that the assistance provider only represents the community’s interest to identify the most economical solution and provide the best advice for local decision-makers. Small and rural communities want and need to know how to comply in a simple and affordable manner – and similarly, how to operate and maintain their water utilities. With additional resources, it would be possible to provide such on-site assistance and assessment to every small community out of compliance, correct the situation, or develop a workable plan to return to compliance shortly. A Circuit Rider is a person with expertise in water or waste treatment operation, maintenance, governance, and compliance who constantly travels the state to be available on-site to any community needing assistance. For these Circuit Riders to be effective and helpful, they must be available to travel directly to any given community to work specifically with a community’s unique treatment and personally educate that operator, mayor, or other local officials on how to solve their particular problem. They have to be available when the community needs help, such as nights, winters, after natural disasters, weekends, etc. Also, they must be non-regulatory to gain the trust of the local communities. Every small community wants to provide quality water to protect their citizens and the environment. Still, they need to know, often with hands-on demonstration, just how to operate their water or wastewater systems. Circuit Riders operate free of charge to small communities which often saves the community many thousands of dollars hiring consultants or opening themselves to civil penalties under the CWA and SDWA. Again, they only work in the interest of the small community they are assisting.

Cybersecurity in Water Utilities

The cybersecurity systems of large cities are fundamentally different from the systems of small communities that are typical of over 90 percent of the U.S. water public water supplies. Large cities have very complex cybersecurity and SCADA systems to operate and protect their utilities. Because of their complexity, they also have many more potential targets for hostile actors and cyberattacks. On the other hand, their size and economies of scale provide them far greater financial and technical resources to protect their complex systems - and they are doing a very good job of protecting their water supplies. However, any successful cyberattack on a small community that results in drinking water contamination would result in causing psychological panic on a national scale as communities fear their own drinking water supply could be threatened. This is why small communities believe that protecting our water supplies from any cyberattack is just as important as protecting large communities. Large and small communities have a shared mission to protect and enhance the health and safety of our citizens. We believe that any federal government policy for water cybersecurity must treat small and large communities very differently while recognizing the fundamental differences in the complexity of the water systems, financial resources, and technical capability. The reality is that small towns have limited financial resources, which must be targeted to meet our greatest needs. We would not want to see any new federal cybersecurity initiative or regulation result in the reprioritization of these limited resources to compliance with a new federal cyber program. And small communities simply can't just increase water rates to cover the cost of new federal requirements. Increasing water rates on our low-income residents can have the unintended consequence of forcing them to go without something they desperately need.

The Bipartisan Infrastructure Framework Legislation

We are grateful for the $55 billion in water funding in the Bipartisan Infrastructure Framework legislation (H.R. 3684), which is more EPA water infrastructure funding than anyone could imagine. We are committed to working with the state agencies in moving the funding out into projects and helping all the communities in Delaware apply and secure the funding. It will be quite a welcomed challenge to move this funding from program dollars to approved projects. We foresee a great demand for technical assistance in the application process, project design and education of the new funding for all our state's small and rural communities.

Closing

Thank you, Mr. Chairman and Members of the Committee, for the honor of testifying for rural America, and we are grateful that you have included a voice for rural America at this hearing. In addition, we deeply appreciate the numerous opportunities this committee has provided rural America to be included in the crafting of federal water and environmental legislation and policy.

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EPA SDWIS Inventory Data Delaware

PWS Name	PWS Type	Population
ARTESIAN WATER COMPANY	CWS	208,875
WILMINGTON WATER DEPARTMENT	CWS	107,976
SUEZ WATER DELAWARE	CWS	100,495
REHOBOTH PUMP DISTRICT	CWS	65,639
BETHANY BAY PUMP DISTRICT	CWS	43,532
NEWARK WATER DEPARTMENT	CWS	40,000
DOVER WATER DEPARTMENT	CWS	38,000
REHOBOTH BEACH WATER DEPARTMENT	CWS	30,000
MIDDLETOWN WATER DEPARTMENT	CWS	22,582
DEWEY BEACH WATER DEPARTMENT	CWS	22,400
MEADOWS PUMP DISTRICT	CWS	19,234
SOUTH BETHANY (AWC)	CWS	16,843
CAMDEN PUMP DISTRICT	CWS	16,197
SUSSEX SHORES WATER COMPANY	CWS	12,450
ANGOLA PUMP DISTRICT	CWS	12,265
BETHANY BEACH WATER DEPARTMENT	CWS	12,000
SMYRNA WATER DEPARTMENT	CWS	11,813
GARRISON LAKE PUMP DISTRICT	CWS	11,538
LONG NECK WATER COMPANY	CWS	11,180
MILFORD WATER DEPARTMENT	CWS	9,800
LEWES BOARD OF PUBLIC WORKS	CWS	9,400
BAYSIDE PUMP DISTRICT	CWS	8,363
THOMAS COVE	CWS	7,977
CHURCH CREEK	CWS	7,665
MILLSBORO WATER DEPARTMENT	CWS	7,500
GEORGETOWN WATER DEPARTMENT	CWS	7,259
FOX HUNTER CROSSING	CWS	7,035

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SEAFORD WATER DEPARTMENT	CWS	6,699
DOVER AIR FORCE BASE	CWS	6,124
MUNICIPAL SERVICES COMMISSION	CWS	6,000
ARTESIAN NORTHERN SUSSEX REGIONAL	CWS	5,511
CAMDEN WYOMING SEWER AND WATER AUTHORITY	CWS	5,000
DELMAR UTILITY COMM (TN OF DELMAR)	CWS	4,500
LAUREL WATER DEPARTMENT	CWS	3,984
EAST NCC DISTRICT	CWS	3,954
NORTH WEST PUMP DISTRICT	CWS	3,774
CLAYTON WATER DEPARTMENT	CWS	3,500
HARRINGTON WATER DEPARTMENT	CWS	3,174
MILTON WATER DEPARTMENT	CWS	3,082
BROADKILN BEACH WATER COMPANY	CWS	2,976
DELAWARE STATE FAIR	NTNCWS	2,952
OCEAN VIEW WATER DEPARTMENT	CWS	2,688
BRIDGEVILLE WATER DEPARTMENT	CWS	2,256
SELBYVILLE WATER DEPARTMENT	CWS	2,157
DELAWARE CORRECTIONAL CENTER	CWS	2,000
DELAWARE CITY WATER DEPARTMENT (AWC)	CWS	1,872
SUSSEX TECHNICAL SCHOOL DISTRICT	NTNCWS	1,800
SWANN KEYS	CWS	1,764
WILMINGTON VAMC	NTNCWS	1,695
GULLS WAY CAMPGROUND	TNCWS	1,617
FELTON WATER DEPARTMENT	CWS	1,591
REHOBOTH BAY COMMUNITY	CWS	1,575
BURTONWOOD	CWS	1,503
BRIDGEVILLE PUMP DISTRICT	CWS	1,500
MALLARD LAKES	CWS	1,500
SIEMENS HEALTHCARE DIAGNOSTICS	NTNCWS	1,500
PERDUE FOODS LLC	NTNCWS	1,500
TRAP POND STATE PARK SYSTEM 2-NATURE CTR	TNCWS	1,500
SUSSEX CENTRAL HIGH SCHOOL	NTNCWS	1,450

HOLLY LAKE CAMPSITES SYSTEM 2	TNCWS	1,375
BAYWOOD GREENS	CWS	1,347
WEST DOVER PUMP DISTRICT	CWS	1,326
ANGOLA BEACH ESTATES	CWS	1,275
PINEWOOD ACRES	CWS	1,200
BLADES, TOWN OF	CWS	1,200
MOUNTAIRE-MILLSBORO	NTNCWS	1,200
OAK CREST FARMS PUMP DISTRICT	CWS	1,188
WINDSONG FARMS (AWC)	CWS	1,104
KENT CO. REGIONAL SPORTS COMPLEX - SYS 1	NTNCWS	1,040
FRANKFORD WATER DEPARTMENT (AWC)	CWS	1,014
TRAP POND STATE PARK SYSTEM 3 - CAMPING	TNCWS	1,000
WAWA #830	TNCWS	1,000
HENLOPEN ACRES, TOWN OF	CWS	999
SLAUGHTER BEACH PWS	CWS	978
GREENWOOD WATER DEPARTMENT	CWS	973
WICKSFIELD	CWS	963
WILD QUAIL PUMP DISTRICT	CWS	963
SOUTH EAST PUMP DISTRICT	CWS	930
LAUREL VILLAGE MOBILE HOME PARK	CWS	918
DE-LUX DAIRY MARKET - SEAFORD	TNCWS	916
DAGSBORO WATER DEPT	CWS	900
ROUTE 10 PLAZA	TNCWS	900
TUCKAHOE ACRES SYSTEM #2	TNCWS	900
HOLLY LAKE CAMPSITES SYSTEM 3	TNCWS	900
FREDERICA WATER DEPARTMENT	CWS	870
HOLLY HILL ESTATES	CWS	831
KENTON PUMP DISTRICT	CWS	816
SHORE STOP #227 TOWNSEND	TNCWS	800
TREASURE BEACH CAMPGROUND SYSTEM 1	TNCWS	786
EVELYN MORRIS ELEMENTARY SCHOOL	NTNCWS	780
TREASURE BEACH CAMPGROUND SYSTEM 2	TNCWS	771

ALLEN HARIM FOODS INC	NTNCWS	750
TUCKAHOE ACRES SYSTEM #1	TNCWS	750
STOCKLEY CENTER	CWS	749
DELAWARE MUSEUM OF NATURAL HISTORY	TNCWS	700
FORT DELAWARE STATE PARK	TNCWS	700
TREASURE BEACH CAMPGROUND SYSTEM 4	TNCWS	699
WINTERTHUR	CWS	687
ARBYS - LEWES	TNCWS	675
CLEARBROOKE ESTATES PUMP DISTRICT	CWS	669
ROYAL FARMS - ELLENDALE - 141	TNCWS	657
HOME TOWN VILLAGE OF COOL BRANCH	CWS	654
WOODBRIDGE HIGH SCHOOL	NTNCWS	650
AUGUSTINE CREEK	CWS	621
BYLERS STORE (WEST DOVER)	NTNCWS	601
CAPE WINDSOR COMMUNITY ASSOCIATION INC	CWS	600
SHORE STOP #236 CANTERBURY	TNCWS	600
SOUTHWOOD ACRES PUMP DISTRICT	CWS	582
PINE TREE CAMPSITES	TNCWS	576
FREDERICA PUMP DISTRICT	CWS	552
DUNKIN - NORTH DOVER	TNCWS	550
TALL PINES RESORT COMMUNITY SYS1	CWS	538
BURGER KING - SEAFORD	TNCWS	525
BAYSHORE MOBILE HOME PARK	CWS	516
MEDING AND SONS	TNCWS	515
BRIDGEVILLE MALL	CWS	500
FOX POINTE SUBDIVISION	CWS	500
DOVER SKATING CENTER	TNCWS	500
FELTON-GOOSE CREEK FOOD STORES	TNCWS	500
SURF BAGEL	TNCWS	500
BARKERS LANDING	CWS	498
LAKELAND/BEECHWOOD PUMP DISTRICT	CWS	486
MOBILE GARDENS I	CWS	476

CANTERBURY CROSSING PUMP DISTRICT	CWS	471
SUSSEX COUNTY INDUSTRIAL AIRPARK	NTNCWS	450
BOONDOCKS RESTAURANT	TNCWS	450
STEAMBOAT LANDING SYSTEM 1	TNCWS	448
DEER MEADOWS	CWS	447
CEDAR VILLAGE L.L.C.	CWS	445
FARMINGTON MINI MART	TNCWS	433
HUNTER MILL ESTATES PUMP DISTRICT	CWS	432
BALTIMORE AIRCOIL	NTNCWS	430
MAGNOLIA WATER DEPARTMENT	CWS	425
DELAWARE BEACHES JELLYSTONE PARK	TNCWS	412
TREASURE BEACH CAMPGROUND SYSTEM 3	TNCWS	411
HOLLY LAKE CAMPSITES SYSTEM 1	TNCWS	405
GRANTS WAY PUMP DISTRICT	CWS	402
EPWORTH CHRISTIAN SCHOOL	NTNCWS	400
EAGLES NEST FELLOWSHIP CHURCH	NTNCWS	400
SILVER VIEW FARM	CWS	398
SAND HILL ACRES	CWS	384
COUNTRY GROVE	CWS	381
SOUTH SHORES	CWS	381
HARTLY ELEMENTARY SCHOOL	NTNCWS	375
PEPPER CREEK DISTRICT	CWS	372
DONOVAN/SMITH MOBILE HOME PARK	CWS	369
CEDAR LANDING	CWS	357
AKRIDGE SCOUT RESERVATION	TNCWS	354
FENWICK CENTER I	TNCWS	350
LONG NECK VILLAGE	CWS	345
SHAWNS HIDEAWAY SYSTEM #1	CWS	341
FOREST GROVE PUMP DISTRICT	CWS	330
NEW MARKET VILLAGE	CWS	321
CAREY ESTATES, LLC	CWS	312
RIDGEWOOD MANOR C/O RHP PROPERTIES	CWS	310

AVALON WOODS OWNERS ASSOC INC	CWS	306
VIOLA DISTRICT	CWS	306
SCOTTSDALE MOBILE HOME PARK	CWS	300
LAUREL OASIS RESTAURANT	TNCWS	300
PORT DELMARVA INC	TNCWS	300
BIG OAK FAMILY CAMPING	TNCWS	300
CEDAR SHORES CONDO ASSOCIATION	TNCWS	300
HOMESTEAD CAMPING	TNCWS	300
TRAP POND STATE PARK SYSTEM 4-CYPRESS PT	TNCWS	300
301 PLAZAS	TNCWS	300
COUNTY SEAT GARDENS	CWS	297
BRIARWOOD MANOR MHP	CWS	296
PINE HAVEN MHP AND CAMPSITES	TNCWS	267
HUNTERS POINTE PUMP DISTRICT	CWS	261
GREENWOOD MENNONITE SCHOOL	NTNCWS	260
POINT FARM	CWS	258
PINNACLE REHABILITATION & HEALTH CENTER	CWS	256
VOSHELLS COVE PUMP DISTRICT	CWS	252
KITTS HUMMOCK IMPROVEMENT ASSOC	CWS	252
DOVER AIR PARK	CWS	252
COUNTRY LIVING MOBILE COURT	CWS	250
PYLE SERVICE CENTER	NTNCWS	250
SUMMIT VILLAGE SHOPPING CENTER	TNCWS	250
HELENS SAUSAGE HOUSE	TNCWS	250
VIC MEAD HUNT CLUB	TNCWS	250
DEEP BRANCH FAMILY CAMPGROUND	TNCWS	246
HOMESTEAD PARK	CWS	230
COOPER FARM PUMP DISTRICT	CWS	228
LAKE FOREST ESTATES	CWS	225
ENCHANTED ACRES MHC LLC	CWS	225
ALLEN HARIM - PINNACLE PROCESSING PLANT	NTNCWS	225
MID-ATLANTIC FAMILY PRACTICE	NTNCWS	225

PINE RIDGE MOBILE HOME PARK	CWS	222
ROOKERY SOUTH	TNCWS	222
DELAWARE STATE FIRE SCHOOL	TNCWS	219
HANOVER FOODS CORPORATION	NTNCWS	217
INDIAN RIVER ACRES PUMP DISTRICT	CWS	216
PONDS OF ODESSA (AWC)	CWS	216
BAYVIEW IMPROVEMENT COMPANY	CWS	214
GREEN ACRES PUMP DISTRICT	CWS	213
SAMBOS TAVERN	TNCWS	212
HOLLY OAK MOBILE HOME PARK	CWS	210
LOVE CREEK PARK	CWS	210
CROSSWINDS MHP, LLC	CWS	210
PEPPER RIDGE PARK	CWS	209
HOLLY VIEW MOBILE HOME PARK	CWS	207
FREDERICK LODGE PUMP DISTRICT	CWS	204
MEADOWS AT CUBBAGE POND	CWS	201
ST ANDREWS SCHOOL I	NTNCWS	200
CRODA UNIQEMA, INC	NTNCWS	200
EMERGENCY OPERATIONS CENTER	NTNCWS	200
BRANDYWINE CREEK STATE PARK	TNCWS	200
CRABBY DICKS	TNCWS	200
GREENVILLE COUNTRY CLUB	TNCWS	200
COUNTRY CORNERS MARKET	TNCWS	200
SEAFORD SWIMMING POOL	TNCWS	200
WARRENS STATION RESTAURANT	TNCWS	200
ASHLAND NATURE CENTER SYSTEM #1	TNCWS	200
STEAMBOAT LANDING SYSTEM 2	TNCWS	200
KILLENS POND STATE PARK SYSTEM #2	TNCWS	200
LEWES CENTER	TNCWS	200
SHOPPES OF MT PLEASANT	TNCWS	200
LOST LANDS RV PARK	TNCWS	198
SUSSEX MANOR MOBILE HOME PARK	CWS	195

SANDY RIDGE PUMP DISTRICT	CWS	195
TALL PINES RESORT COMMUNITY SYS3	TNCWS	194
TRAP POND STATE PARK SYSTEM 7 CABIN	TNCWS	194
DRAWYERS CREEK PUMP DISTRICT	CWS	192
COUNTRY CLUB VILLAGE (TUI)	CWS	192
TODDS MOBILE COURT	CWS	189
PINE VALLEY MOBILE HOME PARK	TNCWS	186
BEACH BABIES DAY CARE	NTNCWS	180
KILLENS POND STATE PARK SYSTEM #1	TNCWS	180
NRG ENERGY, INC	NTNCWS	178
SUMMIT POND PUMP DISTRICT	CWS	177
MOUNTAIRE FARMS CORPORATE OFFICE	NTNCWS	175
BIDERMAN GOLF COURSE	TNCWS	175
WOODLANDS OF MILLSBORO PUMP DISTRICT	CWS	171
CENTREVILLE SCHOOL	NTNCWS	170
MISTY PINES PUMP DISTRICT	CWS	168
COLONIAL ESTATES MOBILE HOME PARK	CWS	165
PEDDLERS VILLAGE SHOPPING CENTER	NTNCWS	165
BOMBAY HOOK REFUGE	TNCWS	160
SURFING CRAB	TNCWS	160
ANGOLA CREST II	CWS	159
ROYAL FARMS STORE #171	TNCWS	155
OAK GROVE ESTATES	CWS	150
SHADY ACRES MOBILE HOME PARK	CWS	150
QUILLENS POINT	CWS	150
BUCKLEYS TAVERN COMPLEX	TNCWS	150
SMITH LANDING SYSTEM 1	TNCWS	150
MULLIGAN'S POINTE LLC	TNCWS	150
ROOKERY NORTH (SYSTEM #1)	TNCWS	150
CAMP ARROWHEAD SYSTEM #3	TNCWS	150
SHAWNS HIDEAWAY SYSTEM #3	TNCWS	150
SHORE STOP #245 FREDERICA	TNCWS	150

GROTTO PIZZA SOUTH BETHANY	TNCWS	150
SAVANNAH RD. CENTER	TNCWS	150
SHORE STOP #256 MILFORD	TNCWS	150
HEDGEROW HOLLOW TRAILER PARK	CWS	147
GREEN STINGER, THE	TNCWS	145
G AND R CAMPGROUND	TNCWS	145
CENTRAL DELAWARE HABITAT FOR HUMANITY	NTNCWS	142
WILLOW TREE PROPERTIES LLC	CWS	141
ST ANDREWS SCHOOL II	NTNCWS	140
GRANADA MOBILE HOME COURT	CWS	138
SUSSEX ACADEMY ELEMENTARY SCHOOL	NTNCWS	138
INGRAM VILLAGE (AWC)	CWS	135
DOVER MEADOWS PUMP DISTRICT	CWS	135
INV PERFORMANCE MATERIAL, LLC	NTNCWS	135
LITTLE SCHOLARS CENTER I	NTNCWS	134
HOLIDAY ACRES, LLC	CWS	132
PINE HAVEN MHP AND CAMPSITE SYSTEM #3	TNCWS	132
DELAWARE ELECTRIC CO-OP	NTNCWS	130
FISHERMANS VILLAGE	CWS	129
PONDS OF WILLOW GROVE	CWS	126
PARADISE ESTATES	CWS	126
ASHLAND NATURE CENTER SYSTEM #2	TNCWS	125
FIELDSTONE GOLF CLUB	NTNCWS	124
TWIN MAPLES TRAILER PARK	CWS	123
LONG FARM ESTATES PUMP DISTRICT	CWS	123
RISING SUN PLAZA	TNCWS	122
WILLOW LAKE PUMP DISTRICT	CWS	120
MAMIE A WARREN CENTER	NTNCWS	120
COZY CRITTERS DAYCARE	NTNCWS	120
WEST FENWICK STATION	TNCWS	120
MT PLEASANT TRAILER PARK	CWS	117
TEAL POINT	CWS	117

BETHANY CREST LLC	CWS	115
CENTER FOR THE CREATIVE ARTS	NTNCWS	115
SPLASH BAY SHORE DAY SCHOOL	NTNCWS	115
SMITH LANDING SYSTEM 2	TNCWS	114
UNITED PARCEL SERVICES	NTNCWS	112
DOVE ESTATES	CWS	111
SEA WINDS PUMP DISTRICT	CWS	111
BLUE HERON ESTATES	CWS	111
SERENITY MANOR ESTATES	CWS	110
CENTRAL DELAWARE CHRISTIAN ACADEMY	NTNCWS	110
PICKERING BEACH COMPANY	TNCWS	109
SHADY OAK TRAILER COURT	CWS	108
VILLAGE OF GRANDVIEW	CWS	108
WEBBS LANDING PUMP DISTRICT	CWS	105
FAIRWAYS INN	TNCWS	105
CAPTAIN'S WAY	CWS	102
CENTRAL CHRISTIAN SCHOOL	NTNCWS	100
HERTRICH	NTNCWS	100
HEARTH RESTAURANT	TNCWS	100
BETHANY CLUB TENNIS	TNCWS	100
OCEAN BAY PLAZA	TNCWS	100
CAMP BARNES INC	TNCWS	100
WOODSIDE GOOSE CREEK	TNCWS	100
CAMP ARROWHEAD SYSTEM #1	TNCWS	100
WHITE CLAY CREEK STATE PARK (SYSTEM 1)	TNCWS	100
BAVARIAN BAKERY AND DELI	TNCWS	100
SHORE STOP #237 MILFORD (NORTHSIDE RT1)	TNCWS	100
SOUTH FORK DELI	TNCWS	100
THE COUNTRY STORE, INC.	TNCWS	100
G AND R CAMPGROUND II	TNCWS	100
ROYAL FARMS - CHESWOLD	TNCWS	100
COUNTRY CENTER GIRL SCOUT CAMP	TNCWS	100

SPORTS AT THE BEACH SYSTEM 1	TNCWS	100
LYNCH HEIGHTS FUEL CORP	TNCWS	100
MESSICK'S MHC LLC SYSTEM 5	CWS	97
STAGE VILLAGE MHC	CWS	93
HARTLY MOBILE HOME PARK	CWS	90
SAND HILL MOBILE HOME PARK	CWS	90
CAMP ARROWHEAD SYSTEM #4	TNCWS	90
CHILD CRAFT COMPANY	NTNCWS	88
SHELL, WE BOUNCE	TNCWS	88
DOVER INDOOR TENNIS	TNCWS	87
J & J MHP	CWS	84
KINGDOM KID'S DAY CARE	NTNCWS	83
SHELLS LEARNING CENTER III	NTNCWS	83
LITTLE PEOPLE CHILD DEVELOPMENT CENTER	NTNCWS	82
FLYING DUTCHMAN MOBILE HOME PARK 3	CWS	81
LAUREL PUMP DISTRICT	CWS	81
HAPPY GO LUCKY TRAILER COURT	TNCWS	81
DELAWARE TURNPIKE ADMINISTRATION	NTNCWS	80
COURTSIDE PICKLEBALL & TENNIS CLUB	TNCWS	80
INN AT MONTCHANIN	TNCWS	80
LITTLE EINSTEIN'S PRESCHOOL & SCHOOL AGE	NTNCWS	79
TALL PINES RESORT COMMUNITY SYS4	TNCWS	79
CHERRY CREEK VALLEY	CWS	78
PICTSWEET COMPANY, THE	NTNCWS	78
BLANTON'S MANUFACTURED HOME COMMUNITY	CWS	75
O A NEWTON AND SONS INC	NTNCWS	75
HOCKER'S SUPER CENTER	NTNCWS	75
FISH HOOK MOBILE HOME PARK	CWS	72
MESSICK'S MHC LLC SYSTEM 4	CWS	72
THE VINES OF SANDHILL	CWS	72
MOTHER GOOSE CHILDREN'S CENTER	NTNCWS	70
CHILDREN & FAMILIES FIRST - SMYRNA	NTNCWS	70

CAMDEN WYOMING MOOSE	TNCWS	70
FORT DUPONT	CWS	69
TALL PINES RESORT COMMUNITY SYS2	CWS	69
CROSSROAD CHRISTIAN CHURCH ACADEMY	NTNCWS	68
MARYDEL PLAZA	TNCWS	68
SMYRNA CHRISTIAN SCHOOL & CHURCH	NTNCWS	67
EDS MOBILE HOME PARK	CWS	66
COUNTRYSIDE HAMLET	CWS	66
STARGATE PIZZA RESTAURANT	TNCWS	66
UPCOUNTRY MANUFACTURED HOME COMMUNITY	CWS	65
COUNTRY REST HOME	CWS	65
HILLTOP TRAILER PARK	CWS	65
WILLIS AUTO MALL	NTNCWS	65
MESSICK'S MHC LLC SYSTEM 6	CWS	63
MILTON CHEER INC.	NTNCWS	63
CARPENTERS ROW	CWS	60
PLEASANT ACRES, LLC	CWS	60
UNIVERSITY DE CARVEL RESEARCH & ED CNTR	NTNCWS	60
CHILD'S PLAY BY THE BAY	NTNCWS	60
HARTLY FAMILY LEARNING CENTER	NTNCWS	60
OLLIES IMAGINATION STATION	NTNCWS	60
MT CUBA CENTER	NTNCWS	60
CHILDRENS SECRET GARDEN	NTNCWS	60
RED MILL INN	TNCWS	60
INDIAN RIVER YACHT CLUB	TNCWS	60
ANGOLA CREST I	TNCWS	60
ABBOTTS MILL NATURE CENTER	TNCWS	60
WOODS EDGE I	TNCWS	60
KILLENS POND STATE PARK SYSTEM #3	TNCWS	60
SHAWNS HIDEAWAY SYSTEM #4	TNCWS	60
SHAWNEE COUNTRY STORE	TNCWS	60
AUBURN VALLEY STATE PARK	TNCWS	57

WHITE CLAY CREEK STATE PARK (SYSTEM 3)	TNCWS	56
DISCOVERY COVE LEARNING CENTER	NTNCWS	55
PAPEN FARMS INC	TNCWS	55
MARANATHA COURT	CWS	54
KENT CO REGIONAL WASTEWATER FACILITY	NTNCWS	54
RAINBOW DAY CARE	NTNCWS	54
DANIELS TRAILER PARK	TNCWS	54
ANYO PROPERTIES	TNCWS	52
COUNTRYSIDE ESTATES	CWS	50
LAW MOBILE HOME PARK	CWS	50
GREENWOOD COUNTRY RETIREMENT	CWS	50
VILLAGE SQUARE ACADEMY LEARNING CENTER	NTNCWS	50
SUMMIT AVIATION	NTNCWS	50
CHILDREN & FAMILIES FIRST - COOL SPRINGS	NTNCWS	50
LULLABY LEARNING CENTER, INC.	NTNCWS	50
FIRST STEP PRESCHOOL	NTNCWS	50
KELLYS TAVERN	TNCWS	50
TOWNSEND TAVERN & LIQUOR STORE	TNCWS	50
DELAWARE STATE POLICE TROOP 9	TNCWS	50
SHOPPES OF MILLVILLE	TNCWS	50
SHULTIES GENERAL STORE	TNCWS	50
HOLTS LANDING STATE PARK	TNCWS	50
NORTH GATE SHOPPING CENTER	TNCWS	50
WILLIAMSVILLE COUNTRY VILLAGE	TNCWS	50
SHORE STOP #231 RISING SUN	TNCWS	50
SHORE STOP #279 GREENWOOD	TNCWS	50
SHORE STOP #253 NEW CASTLE	TNCWS	50
SOUTHERN GRILL OF ELLENDALE	TNCWS	50
BRUMBLEY'S FAMILY PARK	CWS	48
BANKS PLAZA	TNCWS	48
ALLEN HARIM - DAGSBORO HATCHERY	NTNCWS	47
CENTREVILLE LAYTON SCHOOL	NTNCWS	47

PERDUE FEED MILL	NTNCWS	47
FOREST PARK	CWS	46
BRAFMAN FAMILY DENTISTRY	TNCWS	46
WOODS EDGE MOBILE HOME PARK	CWS	45
MESSICK'S MHC LLC SYSTEM 3	CWS	45
KENT COUNTY MOTOR SALES	NTNCWS	45
INTERCOLLEGIATE STUDIES INSTITUTE	NTNCWS	45
KENT CO. REGIONAL SPORTS COMPLEX - SYS 2	NTNCWS	45
KRISTINS CARE AND LEARNING CENTER	NTNCWS	44
BRIDGEVILLE COMMERCIAL PARK	TNCWS	44
HY-POINT DAIRY FARMS	NTNCWS	43
GANDER WOODS PUMP DISTRICT	CWS	42
WOODLAND TRAILER COURT	CWS	41
HAND-N-HAND EARLY LEARNING CENTER	NTNCWS	41
STRIMELS MOBILE HOME PARK	CWS	40
CRYSTAL STEEL FABRICATORS	NTNCWS	40
GLASGOW DELI	TNCWS	40
JP'S WHARF	TNCWS	39
BRENFORD PLAZA BUSINESS CENTER	TNCWS	37
MESSICK'S MHC LLC SYSTEM 2	CWS	36
LIGHTHOUSE POINT AND COMMUNITY CENTER	NTNCWS	36
WOODS EDGE II	TNCWS	36
NORTHSIDE PROFESSIONAL CENTER	NTNCWS	35
GUARDIAN ANGELS' DAYCARE	NTNCWS	35
DELAWARE STATE POLICE TROOP 4	TNCWS	35
ALLEN HARIM - SEAFORD FEED MILL	NTNCWS	34
BLUE MARLIN ICE, LLC	TNCWS	34
DOLLAR GENERAL - KENTON	TNCWS	34
LITTLE EINSTEIN'S SCHOOL AGE CENTER	NTNCWS	33
LYNCHS MOBILE HOME PARK	CWS	32
LAKESIDE HOME LLC	CWS	32
HAPPY PLACE CHILDCARE OF MIDDLETOWN	NTNCWS	32

AUGUSTINE INN RESTAURANT	TNCWS	32
AMERICAN CLASSIC GOLF CLUB, LLC.	TNCWS	32
EVANS FARMS/FROZEN FARMER, LLC	TNCWS	31
CONNECTION COMMUNITY CHURCH, INC.	TNCWS	31
WHITE OAK SUBDIVISION	CWS	30
FLYING DUTCHMAN MOBILE HOME PARK 1	CWS	30
FLYING DUTCHMAN MOBILE HOME PARK 2	CWS	30
CHILDRENS CENTER, THE	NTNCWS	30
LOTUS BLOSSOM LEARNING CENTER	NTNCWS	30
SHINING TIME DAY CARE CENTER	NTNCWS	30
MARYDEL AG SUPPLY, LLC.	TNCWS	30
GRAYS TRAILER PARK	TNCWS	30
FREDERICKS COUNTRY CENTER	TNCWS	30
SKATEWORLD, INC.	TNCWS	30
PRIMEHOOK NATIONAL WILDLIFE REFUGE	TNCWS	30
NOTHING BETTER	TNCWS	28
ROYAL FARMS #117 - PEARSON CORNER	TNCWS	27
KILLENS POND STATE PARK SYSTEM #5	TNCWS	26
ONE 13 TAVERNS	TNCWS	26
HARRINGTON MOOSE LODGE 534	TNCWS	25
YORK BEACH MALL	TNCWS	25
VALERIES BAR & GRILL	TNCWS	25
REHOBOTH BEACH COUNTRY CLUB	TNCWS	25
WHITE CLAY CREEK STATE PARK (SYSTEM 2)	TNCWS	25
KILLENS POND STATE PARK SYSTEM #4	TNCWS	25
TRAP POND STATE PARK SYSTEM 5-RANGER MAN	TNCWS	25
THE STORE IN GUMBORO	TNCWS	25
MOMMA G SOUL FOOD & JAMAICAN RESTAURANT	TNCWS	25
SUMMIT CENTER	TNCWS	25
SHAMROCK MOTEL	TNCWS	25
TACO'S CHABELITA	TNCWS	25
WOODSIDE CENTER	TNCWS	25

SHORE STOP #296 MILLSBORO	TNCWS	25
SHORE STOP #270 MILTON	TNCWS	25
NORTH DOVER PLAZA - SYSTEM 2	TNCWS	25
SPORTS AT THE BEACH SYSTEM 2	TNCWS	25
SPORTS AT THE BEACH SYSTEM 3	TNCWS	25
SPORTS AT THE BEACH SYSTEM 4	TNCWS	25
SPORTS AT THE BEACH SYSTEM 5	TNCWS	25

committee -- you know, we can authorize programs, authorize spending from now until the cows come home, or the chickens come home, and it would be for not if we don't have the appropriations, and Senator Coons delivers. So thank you, Chris.

SENATOR COONS: Thank you so much, Chairman. Thank you, Ranking Member Capito. And thank you to the witnesses who've spoken so movingly about the urgent need for more funding, for more technical assistance, for more training, and a stronger workforce.

When I was county executive, I was responsible for a wastewater treatment system that served half a million people and had 1,800 miles of sanitary sewer and 75 lift stations, and we did have that team of engineers and technical advisors. The challenges that you face in rural and disadvantaged communities is far greater than I had previously appreciated, so I am grateful for your testimony.

Thank you so much for accommodating me and allowing me to join you today. And I look forward to funding anything that you appropriate now and in the future. Thank you.

SENATOR CARPER: Thank you, Chris. All right.

Senator Capito, would you like to lead us off?

I want to just mention something if I can while Rick is sitting here. He's from Selbyville, elected for 21 years, did you say? One of the things that is different in Delaware than when I first came here a million years ago right out of the Navy, one of the things that's different is we've become -- people come here for a variety of reasons as tourists, national park, our wildlife refugees. People come here for our beaches. People come here because we have tax-free shopping.

But one of the things that increasingly people come here for is because of music. And it was weeks ago, we had the Firefly concert just up the road at the Dover Downs. I think there were 75,000 people there. It's about the tenth year that we've done it. We've had huge acts, like, you know, Paul McCartney, just some of the biggest acts in the country.

You can find, from all the way down to all the way north to Wilmington, the Grand Opera House, the Freeman Stage, University of Delaware, Carpenter Hall; it's just all up and down, including here in Dover. In Selbyville, there's a place called Freeman Stage. Take just a second. My recollection is something magical is

happening at Freeman Stage in terms of, I think, 1,500 people, I think, can show up in the summers from Memorial Day through Labor Day for concerts, some of the biggest acts around. But I think they're building, creating something like a pavilion or something really exciting.

Would you just take a minute on that, Rick.

MR. DUNCAN: Freeman Stage is -- we've attended several concerts there. It's a great addition in Selbyville. It draws and attracts a lot of people and stuff like that. So they host a lot of good events there and stuff like that, so we welcome them as much as we can, so they provide great shows.

SENATOR CARPER: People have been coming to our beaches and they're good ones. They're some of cleanest, loveliest beaches around. And folks like to shop and we have good food -- but music, and I think they're going to be able to seat 4,500 people at the Freeman Stage in the next development.

Do you recall the statewide stages? Remember the statewide stages legislature which was designed to help especially music venues that were hard-hit by the pandemic? And one of the most helped is the Freeman Stage. So we're delighted they're in

business, up and running.

MR. DUNCAN: Up and running.

SENATOR CARPER: They provide great, great entertainment. Thank you.

I'm going to yield to Senator Capito for the first round of questions, and we'll just take it from there.

SENATOR CAPITO: Thank you. Thank all of you. Very interesting perspectives, a lot of similarities, and a few differences, and probably many more similarities between our two states. And thank you for what you do for the citizens of Delaware.

Let me ask a question of Ms. Codes-Johnson on the health perspectives in the PFAS area. Have you had to -- and lead. I want to know what is the pervasiveness of this in Delaware as far as you know. And are lead pipes a big issue here, and what are you seeing there?

MS. CODES-JOHNSON: Yes. Well, I can respond more in detail on the record later for that, but, yes, we do have a problem with lead pipes here in Delaware, again, due to aging infrastructure, right, in certain communities, and we have a pretty robust lead program, right, to actually do testing.

SENATOR CAPITO: State program?

MS. CODES-JOHNSON: State program, State-funded lead program to help with testing of kids, right, to actually be able to determine and catch early, you know, levels of lead.

SENATOR CAPITO: Have you found that that's an issue? I mean, obviously, with Flint, Michigan, that was a big issue that we found -- finding that it's high, low, or it seems to be something that's been managed?

MS. CODES-JOHNSON: We do have an issue with lead for kids here in Delaware that we're working really hard to address, and I know Senator Hansen, who's also here, and others are really helping to lead that issue. There is a legislative body here in Delaware that is looking at the lead issue. There's a committee that is established by the governor that is working on looking at how we can strengthen both the testing and remediation for lead for kids here in Delaware.

SENATOR CAPITO: Good, thank you. I would -- just FYI, those of you who are interested in the PFAS issue, I know there's some in the audience that are interested in that, we're going to be having a hearing on that next week, I believe, with Radhika Fox, who is in

charge of those issues. Both the Chairman and I have been very aggressive on that in terms of pushing for some kind of safe drinking level. And, hopefully, we're going to get some more definitive answers from the EPA. That's been something that's -- a lot of interest everywhere, but certainly for the two of us most assuredly.

Let me ask you, Mr. Duncan, just so I understand the structure here, I know what our structure -- you have all these rural systems. You have a couple big systems. Do you have, like, public service districts like we have in West Virginia? Or who runs those rural services? Are they municipalities? I know you only have three towns.

MR. DUNCAN: They're municipalities. They're areas -- service areas. We also have privately owned, which is under the PSC.

SENATOR CAPITO: Okay.

MR. DUNCAN: The Public Service Commission.

SENATOR CAPITO: Right.

MR. DUNCAN: Stuff like that.

SENATOR CAPITO: So when you're putting together an improvement, and we talked about costs of all of this. When you're putting together a system that

needs improved, we have an Infrastructure and Jobs Council that sort of ranks these, and then tries to pull funding from EDA and USDA and all this because not one entity can afford all of this, the cost of one. I mean, some of them can, but not normally in rural areas.

Do you have that kind of a system here in Delaware where you have a coordinating body that helps to get to the affordability? Because what I'm trying to get to is the issue of raising rates. Is it as big an issue in Delaware as it is in West Virginia? It's certainly at the lower end, it's got to be, but just in general, our communities haven't raised their rates, many of them, for many, many, many, many years.

MR. DUNCAN: As a councilperson, we never want to raise rates, but we have to.

SENATOR CAPITO: Right. Of course you don't, yeah.

MR. DUNCAN: We don't want to, and so -- it doesn't get us elected so -- but we do have the Water Infrastructure Advisory Council. We do have a program set aside there that we can offset funding for water and wastewater utilities to do an asset management program, capital improvements program, and stuff like that to help offset some of those and see what their needs are for

rate recovery, capital improvements, and so forth like that.

SENATOR CAPITO: You mentioned the asset management issue as something that the Chairman and I dealt with in this bill so you can identify where your assets are. Some of -- okay. I know I'm in the first city of the first state, right?

SENATOR CARPER: No. Lewes was the first town.

MR. DUNCAN: Lewes.

SENATOR CAPITO: Oh, Lewes.

SENATOR CARPER: 400 years ago. 400 years ago.

SENATOR CAPITO: Oh, okay. Sorry, I got that wrong.

SENATOR CARPER: The people in Lewes --

SENATOR CAPITO: That gentleman right there told me --

SENATOR CARPER: The people in Lewes will be upset if we --

SENATOR CAPITO: I know. He's right there. Sorry. A city in the first state, how about that? But some of your infrastructure's got to be very, very old because you've obviously developed early as a

state.

Do you have a pretty good idea of where all your infrastructure is? I mean, I know it's a small state, but I'd be interested to know, particularly in the rural areas, if this asset management piece that we've put in is going to be of help to Delaware.

MR. DUNCAN: The Office of Drinking Water, several years ago, had a subcontractor work with Rural Water and other agencies to help to identify these, go out, and studying every town, municipality and just find out what that figure was going to cost and where all the aging infrastructure was, stuff like that. A lot of our municipalities have taken advantage of the grants that they can get through the Water Infrastructure Advisory Council to narrow the scope down, I guess, of what they need, so, yes.

SENATOR CAPITO: But there's still a need there for --

MR. DUNCAN: There's always a need.

SENATOR CAPITO: -- more delineations and clarity.

MR. DUNCAN: Yeah. You can't see what's buried. So --

SENATOR CAPITO: No.

MR. DUNCAN: And it's a lot of work trying to identify where these pipes are --

SENATOR CAPITO: Right.

MR. DUNCAN: -- without drilling test holes and stuff like that so it's a big number, you know --

SENATOR CAPITO: Right.

MR. DUNCAN: -- to do that. So...

SENATOR CAPITO: Right.

Ms. Codes-Johnson, what would you say your biggest challenges are for public health? I mean, we talked about lead; we talked about PFAS. But is there anything else there? Obviously, lack of drinking water, I mean, obviously, it's got to impact education and younger children, ability to economically develop certain areas. Do you want to expound on that a little bit from the public health perspective?

MS. CODES-JOHNSON: It was mentioned earlier, I think, in Representative Lisa Blunt Rochester's comments and also, I think, others have talked about this. We are very concerned about our private well owners here, here in our state, and how we can support them because, oftentimes, they don't live close enough to get drinking water from a public, right,

from a public utility. And the inability to have access to that public source of water means that there's no mandatory monitoring, right, or treatment for any contaminants, right, that may be in that water so -- and, you know, and we promote recommendations for inexpensive well testing and things of that nature.

But really less than 2 percent, is what we're seeing, of people with private wells actually, you know, do that on a regular basis. And so private well contaminants affect low-income and environmental justice communities, we know, right, at a disproportionate rate. And in the same token, you know, these residents often struggle to be able to afford the bottled water that they need, right, on a daily basis --

SENATOR CAPITO: Right.

MS. CODES-JOHNSON: -- to support their families. So that's a challenge that we see. And we think things like promoting regionalization, you know, where we can and offering well rehabilitation services and more education for private rural owners in our rural parts of the state are some things, in addition to maintaining the disadvantaged community's additional subsidies are necessary to help in that area.

SENATOR CAPITO: Well, as part of this

bill that we've been talking about that we hope gets to the President's desk soon as part of the bigger infrastructure package, we did put, I believe, $50 million into decentralized systems such as what you're talking about.

But where I was coming from this week with Senator Booker, it kind of surprised me, being from what I consider a very rural state, he's impressed upon me that New Jersey still has very, very rural areas, which I'm sure that they do. But, you know, we've got these septic systems that have been around for way too long. They can't be replaced -- well, they could be replaced; they're too expensive to be --

MS. CODES-JOHNSON: Right.

SENATOR CAPITO: -- replaced. So this will have some assistance with that to be able to hit exactly what you're talking -- these systems that aren't connected to anybody and to be able to give some assistance through the State to that individual resident rather than to a municipality or a county system.

So you said one word that we heard a lot yesterday, and it's hard in a small state because we take ownership of all of our small communities every -- you know, you mentioned you're on the city council of your

small community. There's a lot of pride there, so it's hard to say we need to regionalize because you feel like you're going to give up your governance or your ability to make decisions for your own citizens. But, you know, to get more bang for your buck, that's really the way to go.

And certainly with the technology, as it's moving forward, you can maybe help a little bit with the workforce issue if you can regionalize and then have your technical expertise, or even if you went into more modern ways of monitoring than the old meters and everything that we used to have, or we still have, I think that could be a way for rural America to really be more effective in this area.

So thank you, Mr. Chairman.

SENATOR CARPER: Thank you. Senator Capito, thank you so much.

Senator Capito has been a leader on the PFAS, PFOA, permanent chemicals, clean water and clean drinking water standards and continues to do that and I'm privileged to help with that.

Every now and then, people are probably hearing a noise outside overhead. We had a couple of -- have two kinds of airplanes at Dover Air Force Base,

which is just down the street. One of them is the C-17, a more modern aircraft for a big plane. But the much bigger plane is the C-5. A C-5 carries twice as much as a C-17, flies twice as far -- actually carries three times as much, I think. So I think what we're hearing is C-5s flying in the balance pattern flying overhead.

I was about -- gosh, seven, eight years ago, Senator Capito -- I was driving literally right by this building on my way to Southern Delaware coming right down that Route 113. And there was a traffic backup about a half mile north of the base. And I wonder what this is. And I got a phone call from my staff on my cell phone and said a C-5 has gone and crashed just south of the base.

And what happened is one of the largest airplanes in the world -- the C-5 owns more aircraft records, I think, than any aircraft in the world. You know, they're an incredibly reliable aircraft. And I came there, and I spent a lot years of my life as a naval flight officer. C-5, they're getting ready to fly, I think, over the top of the world, you know. They land maybe in Afghanistan with a full bag of fuel, a full order of cargo.

And the C-5 has four engines. And C-5,

they preflight it, they board the plane, gassed it up, and they were taxiing, got the clearance, and down the runway, hit refusal speed, took off. And as they climbed out, one of the things that the flight engineer checks on is engine warning lights to make sure the four engines are okay. And they got, out of the four engines, they got one engine warning light, which is not good. And the flight engineer, rather than turning off, shutting down that engine, shut down the wrong engine. And a plane that was flying with a full bag of fuel, full load of cargo, instead of flying on four engines, all of a sudden was flying on two.

And they tried as hard as they could to get back around to come back and try to land on the runway they had just taken off on, and they ended up about a mile short. And by that time, the rescue crews on the base had been warned, notified, and they were summoned, and they just got as fast as they could down to where the crash site was, covered it with foam, covered the aircraft with foam, put out whatever fire was there, and, at the end of the day, everybody lived.

SENATOR CAPITO: Oh, that's great.

SENATOR CARPER: Everybody lived. It was a miracle. That's the good news. Bad news is there were

several communities around Dover Air Force Base. They have PFOA, PFAS pollution in their water.

And I remember another time when I was a naval flight officer stationed out in Moffitt Hill, California close to Palo Alto, driving to work one morning. And I had to have had an early flight so it was about 8:00 in the morning, driving down the 101 to the base, and I can see black smoke coming up from my base off in the distance. I had no idea what was going on. I got closer and closer. I went in the gates, the main gate, and the person at the main gate, the guard said, "We had a crash here." He said, "It's a" -- we had, at the field, we had a NOLA -- or NASA, rather, NASA aircraft, big airplanes. And we have the P-3s, which are pretty big four-engine airplanes, but not as big as the NASA planes. And we had dual runway flights, a parallel runway, so you can have two airplanes landing side-by-side, literally on different runways.

And the air traffic controller made a human error, and he allowed the large NASA plane to literally land on top of the Navy plane. I think 18 people died. And during that, immediately, when the crash occurred, the rescue trucks came out, and they sprayed down the aircraft. They were going to save as

many people as they could.

And there's an irony here that the chemical ingredients that were used to try to save lives in both of those crews have now threatened lives in terms of the drinking water that we have. The question is -- and this has occurred especially in military bases around the country and also at airports, we have a lot of groundwater contamination. The question is what do you do about it? How do we clean it up? Who's going to pay for it? What kind of standards are going to be set for what is safe? And what is the levels for the presence of these chemicals in our water? What's safe and we're able to drink and not have to worry about damaging our health?

So these are the kinds of issues that we get to deal with, and Senator Capito has been a huge leader on this stuff already, and I'm pleased to be able to help with that. And that's just an example, real life example from right here, of what can happen with creating hazards for our drinking water.

And in Delaware, I think I said one out of six Delawareans depend on a well for their drinking water. That would be about 170-, 175,000 people in all, and they use private wells. They don't have access to a public water system. Some of the communities here in

Dover nearby Dover Air Force Base that have seen their groundwater polluted by PFOA or PFAS are now getting access to public water, which is a good thing.

The private well contamination affects all kinds of folks, including low-income folks the most, because they can't afford home filtration systems in many instances that eliminate pollutions, including nitrates. We have a lot of nitrate pollution.

You know, in Southern Delaware, we raise all these chickens. And what I think I said earlier, we have, I think, 300 chickens for every person in Delaware. That's a good thing. We sell a lot of chickens around the world. They also create a lot of manure, which is a high phosphorus, high nitrogen fertilizer. But if you put too much on the land, it can seep into the groundwater and even to our surface water, so that's a challenge as well. Nitrates is a real problem for us.

A question I would have, just really for the whole panel, if I could, what more can Congress and the federal government do to ensure safe, clean water for individuals who rely on private wells for their drinking water?

Rick, would you like to take that one first?

MR. DUNCAN: What more --

SENATOR CARPER: What more can Congress and the federal government do to ensure safe, clean water for individuals who --

MR. DUNCAN: Rural Water --

SENATOR CARPER: -- rely on private wells for their drinking water?

MR. DUNCAN: Rural Water works with all entities, whether they be private, municipal, and so forth. So, and at the end of the day, we're there to help provide clean, safe, potable drinking water. We often get calls at Rural Water about, you know, nitrates and water and stuff on how we can rectify the problems of water. So, you know, we work close with the Office of Drinking Water, and they offer different test kits and so forth. So we also have, as members of the Rural Water Association in Delaware, members who have units that can kind of extract the nitrates and so forth and provide that service and stuff like that.

So we feel that we do a fantastic job, you know, working with the ones that are having nitrate issues. I know we can't catch them all, but there are ways to resolve and help work through the nitrate problems and so forth, so -- but it is going to happen

here in Delaware. You know, we are farmland and stuff like that, so I think with additional funding and so forth to help eliminate some of these and corrective actions and so forth and come up with programs, and we can conquer the problem.

SENATOR CARPER: Thank you.

Vikki, same question. What more can Congress and the federal government do to ensure safe, clean water for individuals who rely on wells for their drinking water?

MS. PRETTYMAN: Thank you for the question, Senator Carper.

First, I'd like to say that there is a private well -- for private well owners, there's a private well class. There's also the National Groundwater Association that provides technical assistance along with RCAP, and our many programs, and SERCAP within the state of Delaware.

It's important to private well owners that they understand their well. We offer private well assessments that we come out to their home and can show them where their well was located, print out the information from DNREC giving them the depths, when it was installed, and educate them on the ways that their

well could be contaminated by visually looking at the wellhead and advising them on what should be there and what shouldn't. I think it's critical that continued funding for these programs continue.

The contamination issue with their -- if they do have a broken septic, if they have a leaking septic and understand that those -- the septic tank being in disrepair can affect their drinking water is very important. Nitrates, you know, they -- it's not something that you can see. You can't smell it. They don't know that it, you know, it's in their water. And they think that if it tastes good, it smells good, it looks good, then it's good; it's great water, and that's not necessarily the truth. And they think if something is contaminated, that boiling it can get rid of that contamination. And we know with nitrates that boiling it concentrates the nitrates.

So I think education is so important and continued funding to technical assistance programs like SERCAP and RCAP is very important.

SENATOR CARPER: All right. Thank you, Vikki.

Cassandra, same question.

MS. CODES-JOHNSON: I wholeheartedly agree

with the panel. I think offering a more robust system for well rehabilitation services, providing more public health-lead programs for provision of education, right, for families who are well owners, education and tools and resources to support them. I believe the funding that Senator Capito mentioned will go a long way as well in helping to support our private well owners in our state.

SENATOR CARPER: I could be mistaken on this. I've asked John Kane, who's our lead staff member on EPW with respect to water issues, to check with our team, but I believe last time I checked, here in Delaware, we have a Department of Health and Social Services, and Lisa used to be the deputy secretary of that department. She was a member of the Administration.

But we have, within the Department of Health and Social Services, a Division of Public Health, and I think we have the capability, the Division of Public Health has the capability to provide, for a couple of dollars, the testing of water that's the drinking water for folks who don't have a public system. What do we have? It's $4? Yeah, $4.

MS. PRETTYMAN: $4.

SENATOR CARPER: $4. And a pretty good, pretty good price for a lot of certainty and reassurance.

This question -- let's see.

Cassandra, had you finished? I think you had.

MS. CODES-JOHNSON: Yes.

SENATOR CARPER: Yeah, yeah. Thank you.

Rick, I'm going to come back to you if I could. The issue, and I'm sure Senator Capito remembers it, the issue of worker retention, worker training keeps coming up.

We just had, earlier this week, a celebration down in Georgetown, which is the county seat of our southernmost county, Sussex County. And at Del Tech, which is one of the finest community colleges in America, we had the dedication of the Automotive Center for Excellence, and it was a partnership between Del Tech, which is largely state sponsored. There's money that was -- literally, the idea was to train people who can fix cars, trucks, vans, big cars, big trucks, and small ones as well. And, eventually, they'll be either trained to work on electric-powered vehicles, and maybe eventually, after that, hydrogen-powered vehicles.

One of the challenges that our automotive dealers in this state have had for years is finding enough trained workers to take care of the vehicles and

make sure that they're working. And I remember going into an auto dealership down just about 20 miles south of here in the town of Milford about ten years ago when we got the first Chevrolet. They had a press conference. I wanted people to know we had an electric vehicle, it was a hybrid, and I wanted people to know about it. That's why we did a great press event on that.

Then I went and did a tour of the shops, the repair shops. It was a Saturday. And the fellow who owned i.g. Burton said, "One of our biggest challenges is just having people trained who come here and work, do this work, and we lose them." And I said, "Well, maybe you should pay them more money." And he said -- I said it at one point, you know, joking. But he said, "We started -- we paid people to start" -- this was a decade ago -- he said, "30 or 40,000." He said, "One person, we pay almost $100,000 to be a technician to fix cars." And I said, "Well, that's a lot."

But as it turns out, almost every auto dealer has the same problem. All three integrators had the same problem. And what we've done is created this partnership with Del Tech, state, county, something called the Economic Development Administration entity that Senator Capito and I work with very closely. We

have jurisdiction over them, and they invest in projects just like this, just like that one.

And what we had to do for the auto dealers, for the poultry integrators, is make sure they had a workforce; make sure they had a workforce. And it wasn't that the workforce was aging. They just didn't have -- they just couldn't keep them, just couldn't keep them. We have a similar problem all over the country, I hear, with worker retention. You know, we've got a bunch of these small utilities and some of them have just one employee, maybe a couple. And they're not getting any younger like some of my colleagues in the Senate.

I mentioned Chuck Grassley earlier; he's 88. He's going to run for reelection. And I think Dianne Feinstein's 88. And who else is 80? Richard Shelby. And I told Chuck Grassley, when he announced he was going to run for the election, I said, "When I'm 88, I'm not going to be going through reelection." And I said, "I just hope I know who I am, where I am." I'll be happy with that.

But retention, workforce retention, each of you, if you'd give us some thoughts on that.

Rick, why don't you lead us off.

MR. DUNCAN: 380,000 wastewater operators

throughout the country, 30 to 50 percent will be retiring within the next five to ten years. These operators serve as public health officials and are also, not only personally responsible for complying with all the applicable federal, state drinking water Clean Water Act regulations for supplying the small communities in safe drinking water and sanitation every second of the day.

Again, unfortunately, a vast majority of the Delaware small community water systems have been unable to attract, train, and retain the next generation of workforce due to the lack of career path, coupled by low salary levels and population density. At Delaware Rural Water, we've seen this need to act quickly and partnered with the National Rural Water and the Delaware Department of Labor to initiate our water and wastewater systems operator apprenticeship program back in 2019, and we were very proud of the work to address this urgent need. And, in fact, we just had our first graduating class this past spring.

Delaware Rural Water apprenticeship program leverages workforce development activities, including career path and modern systematic apprentice model for 4,000 hours of on-the-job training at a work -- at a water or wastewater system, 288 hours of formal

classroom training, instruction, and additional guidance from Delaware's subject matter. Some of the benefits operators get for an apprenticeship program include expanded job opportunities in rural America by including access to pre-apprenticeship youth outreach and mentorship programs. We've established a systematic training method for water and wastewater utilities.

We've also improved the workforce participation and retention of water workers in small communities. We certify our water workers' proficiency with an identifiable career path. We've modernized the water industry's approach to workforce development. We also enhanced professionalism and upscaled the incumbent worker, increased the recognition of the public benefit that water and wastewater systems deliver to the communities. We always work with the employers on scheduling of wage increases, and it's to provide the sophisticated and advanced technologies these system operators need every day. So we're proud of our apprenticeship programs and working with the Department of Labor here in Delaware.

SENATOR CAPITO: Can I just ask a quick question? I'm going to jump in real quick. How many people have you had go through that program?

MR. DUNCAN: We've had 20 in our apprenticeship program now.

SENATOR CAPITO: How do you recruit them?

MR. DUNCAN: We have our apprenticeship coordinator go out to municipalities. We work with our career path, our Pathways people and so forth. We do a lot of advertising, TV advertising, so forth. If you want to change your career, you want a new path at life, we go out and research and we just, you know -- we just put the information out there that, you know, we're getting ready to be starting our vets program up. You know, we're doing apprenticeship for vets coming back and so forth. So it's -- a lot of it is word of mouth, but we're outside in municipalities, communities doing job fairs and so forth like that.

SENATOR CAPITO: Thank you.

SENATOR CARPER: For anybody, with respect to retention, we have a lot of utilities, really small, many of them have one employee, one or two employees, and in some places there, we're seeing consolidation, almost a merger, between small utilities. Is that part of the answer to worker retention to give them the ability to actually pay more money? Is that part of what needs to be done, or can it help address this problem?

MR. DUNCAN: We're fortunate in Delaware, most of our municipalities have more than one. We do have some, we would call it circuit rider water operators that take care of multiple systems, so forth. Yeah.

SENATOR CARPER: Okay. Let me ask our other witnesses, any thoughts on worker retention or workforce retention? If you don't have anything for us on this, there are plenty of other questions we have. Anything you want to mention? Workforce retention. Going? Going?

MS. CODES-JOHNSON: I'll --

SENATOR CARPER: Yeah, go ahead.

MS. CODES-JOHNSON: I just want to -- I just, you know, want to say that the infrastructure that Delaware has built with our Pathways Programs, right, in our schools is a really good opportunity, right, to look at growing economies in places, right, where we need additional expertise for the long run and to actually start to engage with these schools really early, right, start to engage with youth really early for them to understand that there are different career paths, right, that they can have an opportunity to engage with. That, you know, a college degree, right, may not be the pathway for everyone, and to expose them to other opportunities.

So I'm really happy to hear that this program is in Delaware and Delaware Rural Water is doing this and hope that there's an opportunity to spread and scale it.

SENATOR CARPER: Not everybody needs to go to college, as you know, not everybody. And sometimes we think you've got to go to college in order to get a good job. Not true. Not true. And some of the jobs most in demand pay well and don't require a four-year degree, may not require a two-year associate's degree. Del Tech is our community college here in Delaware. They have something called the SEED program, and for folks who, actually students, who have a, like, B, B minus average or something coming out of high school, right after graduation from high school, they end up -- they can take advantage of the SEED scholarship and go to a two-year college free; free. And a lot of them can get a certificate if they get an associate's degree. They can get a certificate that can be transferrable and used around the state, around the country.

The other thing, a couple of our witnesses have mentioned the Pathways Program. Jack Markel, remember Jack Markel, who's our governor?

SENATOR CAPITO: Uh-huh.

SENATOR CARPER: A very good governor; I'd

like to say he was one of the two or three best governors we ever had. I wish he could hear me say that. But one of the things that they launched in his administration was a Pathways program. So we've got all our kids graduating from high school. Some are going to go to two-year college; some are going to go into four-year college; some will go in the military, and some will just wonder, what do I do now. And the idea of the Pathways Program was to create 20, 25 pathways for students to start working on throughout their time in high school. We started, I think, with 27 kids in the first year that we did it. Now we've got about 25,000, which may not sound like a lot, but in little Delaware, that's a lot of people. That's a lot of students, and so we're very proud of that program.

MR. DUNCAN: I'd just like to comment that I wrote a 12-week program and took it into the Indian River High School District and talked with the career paths coordinator, and she provided me with ten students. By the time we ended the 12 weeks, we were down to eight students, taking those on field trips and so forth and giving them exams, having the municipality city managers come in, public works directors quiz these kids while they were taking tours, and every one of them were on

spot with the 12-week.

And we're proud to say that upon graduation, three of these students were hired by municipalities as soon as they graduated: two in the wastewater field, one's in the water field now. So we're proud of that work that we did there in the schools.

SENATOR CARPER: Good.

MR. DUNCAN: And like I said, we just started this program up in the William Penn High School starting this week, so we're proud of that.

SENATOR CARPER: William Penn High School is the largest high school in Delaware.

MR. DUNCAN: Yep.

SENATOR CARPER: Bigger than some colleges. All right.

Senator Capito, I have a couple more questions, but why don't you take over.

SENATOR CAPITO: Yeah. I have one final question for everybody. I talked about resilience a little bit in my opening statement. You know, infrastructure needs to be resilient in terms of being able to withstand extreme weather events, whether it's climate change or something like that. I'm sure, being on the coast, your weather events are different than

ours. But I think it can encompass more of that in terms of resiliency.

So we can start over here with -- I'll just call you Cassandra, if that's okay. You know, when you think about the different stressors that can test a water system's resiliency, what stressors are at the forefront, and especially with respect to protecting our public health?

MS. CODES-JOHNSON: So, you know, there are many stressors, you know, that we can think of. So things like, you know, more frequent storms, right, due to climate change. You know, I think that's a big thing here with us seeing more and more frequent storms and the unpredictability of those storms is -- and then the issues that then occur as it relates to our water systems as a result.

SENATOR CAPITO: Right.

MS. CODES-JOHNSON: Right.

SENATOR CAPITO: Yeah. That's what I thought about, yeah.

MS. CODES-JOHNSON: Yeah. As a result of -- as a result of those storms. So, you know, I think from a public health perspective, really working to equip, right, communities with the tools that they need

to actually be able to be more resilient as it relates to these storms.

Recently, you may have heard, Senator Capito, that here in our great state just in Wilmington, due to Hurricane Ida, right, we are still dealing with and still reeling from the floodwaters that have damaged over 200 homes right in the city of Wilmington. And there are then additional repercussions as it relates, right, to the water system in those communities. So we really do need, from a public health perspective, and also from an infrastructure perspective, right -- I don't know what comes first, the chicken or the egg, right? For us, looking at Wilmington, I think it's more -- it's an infrastructure perspective first, really being able to identify those neighborhoods that need -- that have -- that need better drainage systems, right, to be built, like, yesterday that will then support their public health needs in the long term.

SENATOR CAPITO: Good. Thank you.

Ms. Prettyman?

MS. PRETTYMAN: Thank you for the question --

SENATOR CAPITO: Sure.

MS. PRETTYMAN: -- Senator Capito. With

AWIA, the requirement was 3,300 in population and above, you needed to have your risk resilience assessment and your emergency response plan. Most municipalities right at that 3,000 population may not have the staff to be able to complete those. And so I think technical assistance providers being able to come in and assist them is very important.

But also, the populations below 3,000, the smaller systems still see the same issues from intense rain events, flooding. So I think it's important that we be able to also provide them with that assistance to do a short-form type of risk and resilience assessment.

COVID showed us a lot about where some municipalities fall short, especially with the municipalities that have only that one operator. And if that operator fell sick with COVID, you know, it was hard to be able to maintain the testing that is required to be done on a daily basis if something were to happen with the drinking water.

So understanding where you're more vulnerable at is very important, and we need to educate our municipalities, and I believe even the smaller ones below the 3,000, it's very important for them to be able to do that.

SENATOR CAPITO: Okay.

MS. PRETTYMAN: Thank you.

SENATOR CAPITO: Mr. Duncan?

MR. DUNCAN: We've been working with risk and resilience for 31 years as I've been there. Every water system is under some type of risk, and has some type of resistance. Towns in the north have different issues, have different risks than our coastal towns. You know, we, in the coastal side, we deal with saltwater intrusion, you know, we monitor that. In the north, we had PFAS more heavily than we do in the southern part. So we work with the water systems very close, and making sure they are up-to-date on their EPA guidelines and so forth. They follow the project and make sure they're reporting those forms and so forth.

We also want to make sure they have their emergency response plans up-to-date, so you've got to have those. But in doing that, you have to maintain that data, you know. Like we're saying, 30 to 50 percent of the workforce is retiring. So the next operator that comes in may not have that knowledge of completing a risk resilience program, so providing technical assistance is a plus. We've got to have those providers out there working with these systems, making sure they understand

the rules and regulations of risk and resilience.

SENATOR CAPITO: Well, thank you. I think I will say, my anecdotal story is living in Charleston, West Virginia. We had a chemical -- you'll remember this, maybe -- massive chemical spill into our main water provider, and about 600,000 people and affected my own home. And, you know, when you've lived through something like that, you really realize, number one, what's the emergency plan. Well, I'm not sure we really knew what that was. What is this chemical that has been spilled into our water and what kind of health effects does it have? Didn't have that answer.

And it goes really to the question you're saying. You need to pre-identify your risks. I mean, this chemical tank that leaked was an eighth of a mile up river from the intake. I mean, somebody should have been able, you know -- that should have -- they should have known that. You would think they would ask the question, What's in those tanks? And what could possibly --

MR. DUNCAN: Right.

SENATOR CAPITO: And, honestly, we had -- it ended up to not be a big health issue as much as you could smell it in your water. And so it just erodes your confidence, even though maybe -- I'm not going to drink

this water that's smelling like this. And even though they said, "Oh, go ahead. You can take a shower." Well, you know, who wants to shower in licorice-smelling water that you're not really sure what it is?

So I think all the answers that you've put forward, after having lived through an experience like that, I think you're right on it. It's just enacting it. And I do agree with when you get into the smaller systems, it is hard for people. So a short form, you know, that's the answer there to help them. And then, obviously, more technical expertise as they go along.

But, thank you, that's the end of my questions.

SENATOR CARPER: All righty. I have one more quick question, and this will be for you, Vikki. And I would just ask you to take just a minute or two. You could probably spend the afternoon talking about it, but I don't want you to do that. Just take a couple of minutes and tell us a little bit more about the ongoing work related to PFAS contamination in Delaware, and how the contamination has impacted communities, especially small communities with limited resources. We're especially interested in your personal perspective in dealing with these contaminants in Blades, just a couple

of years ago. Keep it brief, but you can give us those thoughts. Thank you.

MS. PRETTYMAN: Well, you're right. I probably could talk for days on it.

SENATOR CARPER: Yeah.

MS. PRETTYMAN: First, the impact that PFAS has on a community can be devastating, and I do want to thank you and your team for being there in our time of crisis. It, indeed, was a learn-on-the-fly experience. I had never heard of PFAS prior to being told by the EPA that it's present in your drinking water and you're well above the HAL. It was, you know, a lot of learning about -- again, this was several years ago, so we know a lot more now -- but what best filtration system, what will work best with just the existing plant. We had so many questions. Do we interconnect with our -- with Seaford? Do we -- will the machine -- will the filtration system that we did go with be built and delivered on time, the components and the equipment that's needed to install it? So it was a lot of questions, and we were very fortunate to have a municipality from up north that had recently been through it come down and assist. They even lent the town hoses to connect for the filtration system to the, you know, to

the existing plant.

My -- it was great that the state was there and we were able to get HSPA funds to assist with the financial side. You know, the filtration system costs well over $300,000 to purchase, ship it, install it. But could you imagine that on a municipality of 1,500 with a more than 22 percent poverty rate, the operations and maintenance cost that it will be? I had mentioned earlier that it was over $30,000 to replace the media. And when you're first at it, you don't know if the media needs to be replaced every three years or every six years, so there's testing that has to be done several times a year in order to see how that media is taking out the PFAS.

And so those expenses are incurred on a municipality, and it simply isn't fair for a municipality of that size, or any municipality, to have to bear the costs of those testing -- of the media replacement and the disposal of the media because it has to be disposed of as a hazardous material, so there's all that cost that's involved. The citizens should not bear the burden of that financial situation, and we need to make the polluters pay. So that's my...

SENATOR CARPER: Thank you. Thank you for

those words of wisdom.

MS. PRETTYMAN: Thank you.

SENATOR CARPER: Let me close with this. Senator Capito and I work with every Democrat and Republican member of our committee, ultimately, on this to write legislation dealing with clean drinking water, wastewater treatment, and providing other infrastructure: roads, highways, bridges, and on and on and on. We put out the legislation unanimously out of committee. The full Senate passed the legislation 89 to 2. That provided really the building block on which the rest of the infrastructure package was loaded.

While all this was going on, Shelley, Senator Capito, was negotiating with the President of the United States, right from Delaware, to try to find common ground between the Congress and the Administration on the infrastructure issues, and I think she, through her personal efforts, really helped to create an environment where a consensus could be developed in the Senate that led to a 69, and I think, to 30 vote in favor of a very broad bipartisan infrastructure package that includes the water issues that we're talking about.

That legislation is over in the House now. And we're waiting for a negotiation to bear fruit between

Senator Manchin, from West Virginia, and maybe a couple of others, and the leader of the House, Nancy Pelosi, to see if we can't find agreement on the second piece, another package, a belated package for the reconciliation that helps families in a lot of good ways. It focuses on climate change. But they've got to have agreement on that piece so we can move forward.

We've got to get this infrastructure bill passed. There is a great, great need in West Virginia, in this state, and 48 other states as well. And the legislation that we've developed and have literally waiting to go in the House, it would change lives, save lives, and there's a great sense of urgency for that. And we want to just underscore that here today.

I just really want to thank you for being here. Thank you for your life's work. Thank you for your caring about the people of this state and other states as well, and keep up the good work.

Before we adjourn, a little bit of housekeeping. I want to ask for unanimous consent to submit for the record a variety of materials that include letters from stakeholders and other materials that relate to today's hearing. We ask for unanimous consent, and you listen to see if anybody's going to object. Nobody's

going to object hearing this, so we're good to go.

Additionally, the senators will be allowed to submit questions for the record through the close of business on Friday, October 29th, and we will compile those questions, we'll send them to our witnesses. We ask the witnesses to reply by Friday, November 12th.

In closing, again, we want to thank all of you for your testimony, for your responses to our questions, the work that you do, and for doing so much for the people of our state to provide for them essential utility services. And, really, you provide for them life, life and health. You can't do much more for people than that, so thank you.

And with that, this hearing is adjourned.

Again, Senator Capito, thank you. I want to thank you, staff.

John Kane, John, would you raise your hand. And the other members of our team, John Kane's team. Anybody else here?

Danny, thank you so much.

And, Travis, would you just raise your hand.

SENATOR CAPITO: And Jess and Will.

SENATOR CARPER: Jess and Will, would you

guys raise your hands. Thank you so much.

This is a team that works together. We're workhorses. We're proud to be able to serve all of you, our states, and the rest of this country. And with that, this hearing is adjourned. Thank you.

(The hearing concluded at 12:59 p.m.)