NEAL R. GROSS & CO., INC.

RPTS MORRISON

HIF075180

REINVESTMENT AND REHABILITATION OF OUR NATION'S SAFE DRINKING WATER DELIVERY SYSTEMS

THURSDAY, MARCH 16, 2017

House of Representatives,

Subcommittee on Environment,

Committee on Energy and Commerce

Washington, D.C.

The subcommittee met, pursuant to call, at 10:00 a.m., in Room 2322 Rayburn House Office Building, Hon. John Shimkus [chairman of the subcommittee] presiding.

Present: Representatives Shimkus, McKinley, Barton, Murphy, Blackburn, Harper, Olson, Flores, Hudson, Walberg, Carter, Tonko, Ruiz, Peters, Green, DeGette, McNerney, Cardenas, Dingell, Matsui, and Pallone (ex officio).

Staff present: Grace Appelbe, Staff Assistant; Mike Bloomquist, Deputy Staff Director; Jerry Couri, Senior

Environmental Policy Advisor; Wyatt Ellertson, Research Associate, Energy/Environment; Adam Fromm, Director of Outreach and Coalitions; Giulia Giannangeli, Legislative Clerk, Digital Commerce and Consumer Protection/Environment; Tom Hassenboehler, Chief Counsel, Energy/Environment; A.T. Johnston, Senior Policy Advisor/Professional Staff, Energy/Environment; Alex Miller, Video Production Aide and Press Assistant; Chris Sarley, Policy Coordinator, Environment; Dan Schneider, Press Secretary; Jacqueline Cohen, Minority Senior Counsel; David Cwiertney, Minority Energy/Environment Fellow; Rick Kessler, Minority Senior Advisor and Staff Director, Energy and Environment; Alexander Ratner, Minority Policy Analyst; and Tuley Wright, Minority Energy and Environment Policy Advisor.

Mr. Shimkus. If I could ask all our guests today to please take their seats, and if we can get that door closed, which it is being, the Committee on Environment will now come to order. The chair now recognizes himself for five minutes for an opening statement.

Today's hearing gives our panel a chance to look broadly at our nation's drinking water infrastructure and examine questions about what is necessary for the federal government to do in the way of reinvestment and rehabilitation of these systems to meet future needs.

Currently, more than 51,000 community water systems treat 42 billion gallons of water for use by 299 million Americans daily.

This water, which is used for anything from cooking and bathing in homes, factories, or offices to firefighting is delivered by publicly and privately-owned water utilities stretching over 1 million miles of pipe.

It is really a remarkable feat of engineering that demonstrates our nation's commitment to public health and a high standard of living.

For more than a decade, there have been concerns raised about this system and whether our nation is making the choices it needs to make in order to ensure effective and efficient delivery of safe drinking water in the future.

Many of the pipes now in use were installed in the early and

mid-20th century and have a projected lifespan of 75 to 100 years.

In 2013, the EPA announced that a bit more than $384 million of investment was needed between 2010 and 2030 to improve drinking water infrastructure and ensure the provision of safe tap water.

This report was not a suggestion that the federal government needed to provide all of that funding but it and other reports have served as a wake-up call to the threat facing these systems and begs the question as to whether Congress should be doing more.

Before the Safe Drinking Water Act Amendments of 1996, to the extent that it was needed, Congress' role in financing drinking water infrastructure was confined to line items for specific projects, a practice that has been substantially curtailed.

In 1996, Congress, realizing the biggest economic problem facing drinking water systems was the cost of unfunded mandates, created a State Revolving Loan Fund program to provide low-interest loans that helped address compliance and public health needs.

Last year, the Water Infrastructure Improvements for the Nation Act authorized $600 million between two new programs dedicated to tackling lead pipe replacement and aiding economically disadvantaged and underserved communities.

In addition, this law tried to further invigorate loans not related to Drinking Water Act compliance through the Water

Infrastructure Finance and Innovation Act program.

While I think these are solid steps, we must also reauthorize funding for the Drinking Water Revolving Loan Fund program. This has been a very successful and important program whose purpose is synergistic in view of other infrastructure programs, having provided more than $20 billion in funding to over 12,400 projects since 1997.

We must also explore other avenues that not only leverage investments in these utility infrastructures but also do it in a way that promotes American workers and protect consumers' health and pocketbooks.

We need to be smart about our investments. This is not going to be an easy discussion, but to be successful it is one we must have.

I believe we must not be afraid to spend more federal money on this issue, but we must maintain local fees as the primary generator of funds for daily operation and maintenance of public water systems as well as their long-term capital investment needs.

That said, we must acknowledge that not only as a percentage of household income, U.S. households pay less for water and wastewater than other developed countries and that water rates have dropped 3 percent more recently.

We also must remember that some systems have taken the very unpopular step of raising rates.

But not everyone can do that, whether due to population contraction or local economic condition, because their rate bases aren't able to handle capital improvements as well as others do.

So long as we focus on trying to increase overall purchasing power for communities, our constituents can enjoy their drinking water for the next 75 to 100 years.

Before I relinquish my time, I want to thank our witnesses for being here today, especially in view of the crazy weather and travel schedules that you and we have had.

I also want to welcome the board members of the Association of State Drinking Water Administrators. We appreciate all the work you do and how important you are to the success of the Safe Drinking Water Act.

With that, I yield back the balance -- well, I don't want to do that yet. I'd like to yield one minute to my colleague, Congresswoman Blackburn, for one minute.

Mrs. Blackburn. Thank you. I think that one of the things we can all agree on is that we are for clean air and we are for clean water. And as the chairman has said, we know that there are account abilities that need to be met.

There is money that is going to have to be expended. We want it to be done in the right way and we know that contaminated water is not acceptable.

Of course, sometimes it can hit close to home, as it did right

here on our campus with the Cannon Office Building and anybody that has worked there knows those stories.

So, you know, I just want to welcome you all. I want to thank you for being here and I want to thank you for working with us on this important issue, and I will yield back.

Mr. Shimkus. Gentlelady yields back her time and I yield back my time.

The chair now recognizes the ranking member, Mr. Tonko, for five minutes, who has an interest in this issue.

Mr. Tonko. Thank you, Chair -- Mr. Chair. Thank you, and Chair Walden for holding this hearing.

I know I sound like a broken record requesting a drinking water hearing for the past four years but I am truly grateful to you for bringing us together today.

I also want to thank our witnesses -- experts here for being in attendance. We will hear from all of them, from water utilities to engineers to environmental stakeholders that our national drinking water infrastructure needs our -- that the needs are immense.

I also understand that they will present formally their report card on infrastructure. I can tell you, if I received a report card like that my parents would have had a response immediately.

They would have had an improvement plan in place immediately.

So let's get going, nation.

The facts are startling. We lose over 2 trillion gallons of treated water each year from leaking pipes. There are more than 240,000 water main breaks each year, which causes service disruption and property damage.

Nearly 100 mid-size cities across our great country are facing shrinking populations, meaning a smaller taxpayer base, to support repairs and to support maintenance.

As Mr. DiLoreto will explain, the American Society of Civil Engineers recently released their report card and have given our systems a grade of D.

It is clear we are not making the progress necessary to tackle this issue. If anything, we are going in the wrong direction. EPA has estimated some $384 billion is needed over the next 20 years to keep our systems running.

And as we deal with aging systems, often with century-old pipes and an alarming number of unregulated and under regulated contaminants, this estimate can only be expected to grow.

The bottom line is I do not see how the needs can be met without significantly greater federal investments. I feel the need to say that the proposed cuts to EPA outlined in President Trump's budget are not only senseless, they are dangerous.

While funding levels for the SRFs appear to be maintained, the status quo is simply not good enough. We need additional

funding.

For example, in my home state of New York, we receive a generous allotment from the Drinking Water SRF -- about $40 annually. That money is leveraged with state funds which may allow for about $700 million in projects this year.

The problem is there were over $4 billion worth of projects requested, according to this year's intended use plan. Projects that are not funded will continue to be deferred, putting more stress on already struggling systems.

So even for a state that is committed to addressing this issue, there is still a tremendous gap between available funds and needs.

We cannot fool ourselves into thinking local and state governments can do this on their own. There is a federal responsibility. This infrastructure is too important to continue to be neglected.

And let us may no mistake, there are real consequences -- health and economic -- when these systems fail. Flint should have been a wake-up call to Congress that we must do more.

The investments we can make now are minuscule when compared to the cost of inaction. And Flint is not alone. These problems lurk below the surface throughout our country.

Here are just a few headlines from this past week. From NPR: Kentucky community hopes Trump infrastructure plan will fix water

systems. From the Clarion Ledger: Weekend water emergency ripples across Jackson. From the Associated Press: Six Madison schools test positive for lead in drinking water.

This is a national issue, and had this hearing been delayed until next week I am sure we would have found plenty of new stories from different states.

Last year's water resources bill, the WIND bill, took a few steps to address this issue. It created two great programs, grant programs, one for lead-lined replacement and one for small and disadvantaged communities.

Congress should fully fund these programs, but that is only the start. Members of this subcommittee have good ideas on how to update the Safe Drinking Water Act, which has not been significantly changed for some 20 years.

Many of these ideas are supported by stakeholders from industry -- labor and the environmental community. The AQUA Act would reauthorize the drinking water SRF for the first time since its inception at significantly higher levels.

Ranking Member Pallone's bill, the SDWA amendments, incorporates a number of ideas from our members including mandating new standards for lead and other emerging contaminants while making it easier for EPA to set science and health-based limits and treatment techniques in the future.

It also would give grants to schools to replace water

fountains that contain lead. Mr. Peters is working on a bill to provide grants to systems for resiliency, security and source water protection in the face of hydraulic changes and other emerging threats.

These are good bills that deserve consideration by this committee. Also, we must ensure water is included in any potential infrastructure package that will be considered by Congress.

We can no longer ignore our hidden infrastructure. I would encourage all members of our committee to visit a water system in your district. Go speak to your mayors, your system managers, your departments of public works.

It is likely you will hear what I heard in my district. This is a real and vastly overlooked issue and Congress can help provide relief for financially-burdened local governments and ratepayers.

Every life in this country depends on access to safe drinking water. Every job in this country depends on access to safe drinking water. The needs are great and the cost of inaction is even greater. It's immensely high.

So I look forward to hearing from our witnesses on the role that our federal government should play to rebuild, maintain and protect this infrastructure which is vital to our constituents' lives.

With that, Mr. Chair, I yield back and again thank you for the opportunity of the hearing.

Mr. Shimkus. Gentleman yields back his time.

Chair now looks to the majority side to see if anybody wished to make an opening statement. Seeing none, anyone on the minority side? Seeing none, we will turn to our panel.

So we appreciate you all being here. I'll introduce you as you are prepared to make your statement. Otherwise, I'll go through it and then I have to go through it again.

So we want to first recognize Randy Ellingboe from the Minnesota Department of Health on behalf of the Association of State Drinking Water Administrators. Your full testimony has been submitted to the committee. You are recognized for five minutes.

As you can see, this is an issue that we all find are very interested about and want to kind of move forward. So we are not going to be militant on time. But if I do hit the gavel, you have gone way over, okay.

So you are recognized for five minutes. And I think you should press a button there in the middle and pull it, if you can, as close as you can. All right.

STATEMENTS OF RANDY ELLINGBOE, MINNESOTA DEPARTMENT OF HEALTH, ON BEHALF OF THE ASSOCIATION OF STATE DRINKING WATER ADMINISTRATORS; JOHN J. DONAHUE, CEO, NORTH PARK PUBLIC WATER DISTRICT IN MACHESNEY PARK, IL, ON BEHALF OF THE AMERICAN WATER WORKS ASSOCIATION; RUDOLPH S. CHOW P.E., DIRECTOR, BALTIMORE, MD DEPARTMENT OF PUBLIC WORKS, ON BEHALF OF THE AMERICAN MUNICIPAL WATER ASSOCIATION; GREGORY E. DiLORETO, CHAIRMAN, COMMITTEE FOR AMERICA'S INFRASTRUCTURE, AMERICAN SOCIETY OF CIVIL ENGINEERS; MARTIN A. KROPELNICKI, PRESIDENT AND CEO, CALIFORNIA WATER SERVICE GROUP, ON BEHALF OF THE NATIONAL ASSOCIATION OF WATER COMPANIES; ERIK OLSON, DIRECTOR, HEALTH & ENVIRONMENT PROGRAM, NATURAL RESOURCES DEFENSE COUNCIL

STATEMENT OF RANDY ELLINGBOE

Mr. Ellingboe. Good morning, Chairman Shimkus, Ranking Member Tonko and members of the subcommittee.

Thank you for the opportunity to talk about our nation's drinking water systems and how state drinking water systems support them.

Again, my name is Randy Ellingboe and I am with the Minnesota Department of Health but I am also president of the Association of State Drinking Water Administrators whose members include the 50 state drinking water programs, five territorial programs, the District of Columbia and the Navajo Nation.

Our members and their staff help all public water supply systems provide drinking water that meets all the Safe Drinking Water Act standards through monitoring of their water quality, financial and technical assistance to public water supply systems, and when needed, enforcement to help systems prioritize taking care of deficiencies and violations.

Today I'd like to talk with you about how states play a role in public health protection and sustaining the economic health of communities by implementing three critical components of the Safe Drinking Water Act: the Public Water Systems Supervision, or PWSS program, the Drinking Water State Revolving Loan Fund program and the Revolving Loan Fund set asides.

Sufficient federal funding for these components is essential for maintaining the safety of drinking water across the country. Under the Safe Drinking Water Act, states have accepted primary enforcement responsibility for federal drinking water standards and technical assistance efforts for over 151 public water systems.

These regulations are for contaminants such as nitrate, bacteria, arsenic, lead and many carcinogens. A person can go virtually anywhere in the country and drink water from a public water system and be confident that the water meets federal health standards because of the work that public water supply system operators do with the assistance and oversight of state and

federal drinking water programs.

However, since the Safe Drinking Water Act was passed in 1974, we have come to understand much more about drinking water contaminants and what it takes to manage and treat drinking water to prevent illness.

This has led to increased challenges for both public water supplies and state and federal drinking water programs. But safe water is crucial for protecting people's health and communities' and businesses' economic well-being.

When we polled citizens in Minnesota about water resource issues, drinking water consistently rises to the top. Safe drinking water for all is one of the community conditions that supports health.

However, state drinking water programs and many public water supplies are extremely hard pressed financially as costs and the funding gap continues to grow.

With the advent of the Drinking Water State Revolving Fund in 1996, states could provide low-cost loans to utilities to help them upgrade their treatment plants and water mains, install more protective technologies and improve their aging infrastructure.

Many states have also used no-interest loans and principal forgiveness to assist disadvantaged communities with their infrastructure needs.

Approximately $18 billion federal capitalization grants

since 1997 have been leveraged by states into over $29 billion infrastructure loans to communities across the country.

Such investments are now being paid back and loaned out again and pay tremendous dividends both in supporting and growing our economy and in protecting our citizens' health.

States have leveraged the federal dollars with state contributions to provide assistance to more than 10,000 projects to enhance and sustain public health protection for millions of Americans.

However, the most recent drinking water infrastructure needs survey identified $384 billion in investment needed across the country in the next 20 years, as already noted.

With that great need we would recommend expanding the Revolving Fund to help increase infrastructure investment. It has a track record for successfully funding a wide range of drinking water infrastructure projects critical for the economic well-being of communities as well as protecting public health.

Set asides are unique to the drinking water program. States are allowed to set aside a portion of the Revolving Loan Fund for source water protection, program administration, small system technical assistance and water operator training and certification.

Set asides are an essential source of funding for states' core public health protection programs and these efforts work in

tandem with infrastructure loans. These proactive strategies and initiatives increase the effectiveness of many state programs in their ability to support drinking water systems.

In summary, sustaining or increasing the PWSS grants is critical, to protecting public health and our economy. Expanding the Revolving Fund will improve the nation's infrastructure and create jobs, and the set asides are key resource to ensuring safe drinking water.

Thank you for the opportunity to provide this testimony about these critical drinking water issues.

[The prepared statement of Randy Ellingboe follows:]

**********INSERT 1**********

Mr. Shimkus. And the gentleman yields back his time and we appreciate those comments.

And I should have said a couple -- another thing I should have said the Chair would like to remind members that pursuant to committee rules all members' opening statements could be put -- placed into the record.

And I also wanted to mention that you all are on the front lines of these battles. We do really appreciate you being here and your testimony, and I think as the questions will follow up to show because you're really trying to deliver the goods.

So I'd now like to recognize Mr. John Donahue, CEO of the North Park Public Water District in Machesney Park, Illinois, way far away from Collinsville, on behalf of the American Water Works Association.

You're recognized for five minutes. Thanks for being here.

STATEMENT OF JOHN J. DONAHUE

Mr. Donahue. Good morning, Chairman Shimkus, and members of the subcommittee. My name is John Donahue, the chief executive officer at North Park Public Water District in Machesney Park, Illinois, north of I-80.

I am also the former president of the American Water Works Association on whose behalf I am speaking today. I appreciate this opportunity to offer AWWA's input on reinvesting and rehabilitating our nation's drinking water systems.

As you will hear and see in my written testimony, building and maintaining sound water infrastructure includes addressing not only water infrastructure, which includes pipes and treatment plants, but addressing issues such as cybersecurity and the protection of source waters.

One innovative tool to help address this is a new credit program known as a Water Infrastructure Finance and Innovation Act, or WIFIA.

We are optimistic that once WIFIA really gets running and fully funded it could become a valuable tool for financing projects beyond the size and scope of those funded by other tools.

Just as in the transportation program called TIFIA, Congress only has to appropriate funds for the risk factor to those loans. Based on calculations from OMB, WIFIA appropriations could be

leveraged at a ratio of about 60 to 1.

For example, if the WIFIA program were to receive the fully authorized $45 million for Fiscal Year 2018, it could provide more than $2 billion in loan money.

Since a WIFIA loan will only support up to 49 percent of eligible project costs, this funding could result in more than $4 billion in infrastructure investment.

Other key federal programs for infrastructure finance like the State Revolving Loan Fund programs, or SRFs, are also designed to provide water and wastewater systems access to lower cost financing for infrastructure projects, typically smaller than those that can be funded through WIFIA.

While the SRFs are excellent programs, their efficiency could be improved by working with stakeholders to streamline those process.

We realize that this next issue is outside the jurisdiction of this committee but we need to mention and need to preserve the tax-exempt status of municipal bonds as Congress considers comprehensive tax reform. More than 70 percent of U.S. water utilities use muni bonds to help finance infrastructure improvements.

The decision to issue bonds is determined and approved by either the local residents, the referenda or by their elected officials. These bonds provide substantial savings for the cost

of projects and consequently to the ratepayers.

These are our recommendations to Congress regarding water infrastructure finance: provide fully authorized funding for WIFIA and at least $1.8 billion for the drinking water SRF program; preserve the tax-exempt status of muni bonds, reauthorize the safe drinking water SRF program and work with stakeholders to utilize the lessons learned since its creation to make it more efficient.

Cybersecurity is an increasing component in upgrading and protecting infrastructure and our written testimony contains our thoughts on that issue. The protection of source waters are also critical to the mission of any drinking water utility.

However, many drinking water systems have limited control over upstream activities that may present risks to water. The Revised Toxic Substances Control Act does contain provisions for requiring consideration of impacts on drinking water sources for certain substances.

However, there are policy gaps in the form of inadequate information sharing policies and a lack of notification protocols to alert a utility of incidents that could impact a water supply.

The chemical spill on the Elk River in West Virginia in 2014 illustrates the need for such notification and alerts. In addition, improved collaboration between agriculture producers and water providers can have measurable results in reducing sediment and nutrient pollution.

Nutrients from agricultural runoff do impact drinking water quality, as we saw in Toledo, Ohio, in 2014 when the water system had to be shut down.

The federal farm bill is a key vehicle for agricultural land conservation efforts. We recommend that Congress support the designation of drinking water utilities as first responders in various state and federal emergency response laws in regulation to facilitate information sharing.

We also recommend that Congress sustain and expand conservation programs in the farm bill that support collaboration between agriculture producers and community water systems to improve source water quality.

EPA's 2012 integrated planning framework and related documents on affordability provided important new flexibilities for wastewater utilities to provide regulatory obligations and infrastructure investments.

Representative Bob Gibbs' Water Quality Improvement Act would help put the integrated planning framework in statute for clean water mandates.

However, this legislation only deals with wastewater projects and does not allow for integrated planning to fully acknowledge the cost implication of drinking water mandates.

With that, I will conclude my remarks and look forward to your questions.

[The prepared statement of John J. Donahue follows:]

**********INSERT 2**********

Mr. Shimkus. Gentleman yields back his time.

Chair now recognizes Mr. Rudolph Chow, professional engineer, director of the Baltimore, Maryland Department of Public Works on behalf of the American Municipal Water Association.

Welcome. You're recognized for five minutes.

STATEMENT OF RUDOLPH S. CHOW, P.E.

Mr. Chow. Good morning, Chairman Shimkus and Ranking Member Tonko and honorable members of the Energy and Commerce Committee Environment Subcommittee.

My name is Rudy Chow and I am the director of the Department of Public Works with Baltimore City. It is my honor to appear before you this morning

As director of the Baltimore City Department of Public Works, I'm responsible for safe delivery of the highest quality drinking water to 1.8 million people living and working in our metropolitan region.

I have over 30 years of experience in the public water industry from the operational, engineering and administrative perspectives. It is a field I both love and respect.

I'm here today to speak on behalf of the Association of Metropolitan Water Agencies, AMWA, an organization representing the nation's largest public drinking water utilities which collectively serve more than 130 million Americans with quality drinking water. I serve on the AMWA board of directors with other dedicated professionals from all over the country.

While our home jurisdiction may be different, I assure that our challenges are not. We are all challenged by the effects of aging infrastructure and the costly capital projects that protect

and improve the quality of water we deliver to our customers.

It is a delicate balancing act we perform to prioritize and fund these expensive investments that are borne locally. But the time of kicking the can down the road are long over.

Through organizations such as AMWA and serious discussion of these challenges in Congress through committees and subcommittees such as yours, we hope to seize the moment the momentum of this national conversation and forge a national commitment to protect our drinking water.

The scale of this challenge cannot be done solely on our own. It is too important. We do not want communities forced to choose between investing in necessary infrastructure and the safety of their water. But here are the cold hard facts.

The EPA's most recent drinking water and clean water needs surveys identify more than $655 billion of needed water and wastewater infrastructure investments over the next 20 years just to maintain the status quo.

AMWA and the National Association of Clean Water Agencies project that water and wastewater utilities could spend a similar amount over 40 years just adapt to extreme droughts, more frequent and intense storms and rising sea levels.

In my own city of Baltimore, my annual capital program for water and wastewater project can comprise 80 percent of the city's total capital investments. My six-year capital program for just

water infrastructure exceeds $2 billion.

The work of this subcommittee and Congress may take the difference -- make a difference between our success or failure as a nation to protect our most basic need -- clean safe drinking water.

Congress passed the Water Infrastructure Improvements of the Nation Act last year. It created a new program in funding to remove and replace outdated lead service lines and help low-income customers absorb their share of replacement costs.

We need more programs like this to help support affordable financing and assistance to communities in need. AMWA is asking to continue this momentum to support the following efforts in programming.

We need to renew commitment in the Drinking Water State Revolving Fund, SRF. The Drinking Water SRF is an effective national funding mechanism providing critical funding assistance and that is a lifeline to many communities large or small struggling to fund their capital programs. We ask a doubling of SRF to $1.8 billion.

The Water Infrastructure Innovation Act, or WIFIA, is a new federal pilot program that AMWA believes will provide innovative funding to help communities nationwide pay for large-scale water and wastewater projects.

WIFIA will complement, not compete, with SRF funds and WIFIA

can help communities with large-scale investment that some SRFs cannot provide. Support the use of tax exempt municipal bonds as they are the most prevalent water infrastructure financing mechanism with at least 70 percent of U.S. water utilities relying on them to pay for infrastructure improvements.

By reauthorizing the Drinking Water SRF, Congress will have an opportunity to update and streamline the program. AMWA would like to codify water facility security enhancements as well as allowing a portion of the metropolitan service areas to qualify as a disadvantaged community use of these funds.

AMWA also supports the framework of the Safe Drinking Water Act and its careful balance of public health protection and local cost and feasibility considerations. Congress should consider options for targeted low-income water rate assistance programs. They are greatly needed.

Finally, AMWA believes water utilities should be recognized in providing preference under SRF for taking steps to improve efficiency and adopting best industry practices via sound water utility asset management plan or who formulate cooperative water utility partnerships.

On behalf of AMWA, I appreciate the opportunity to testify on the importance of investing and rehabilitating our nation's drinking water infrastructure. Thank you again, and I am happy to answer any question you might have.

[The prepared statement of Rudolph S. Chow, P.E. follows:]

**********INSERT 3**********

Mr. Shimkus. Gentleman's time has expired. We thank you for your testimony.

The chair now recognizes Mr. Greg DiLoreto, chairman of the Committee for America's Infrastructure, American Society of Civil Engineers and nothing.

So we will -- we will recognize you for five minutes.

STATEMENT OF GREGORY E. DiLORETO

Mr. DiLoreto. Thank you very much, Chairman Shimkus, Ranking Member Tonko and members of the subcommittee.

Good morning. My name is Greg DiLoreto and I'm a past president of the American Society of Civil Engineers and the current chair of the ASCE Committee for America's Infrastructure, responsible for the 2017 report card for infrastructure.

Prior to my retirement, I served as the chief executive officer of the publicly-owned Tualatin Valley Water District in Portland, Oregon. It's the second largest water utility in Oregon.

I am honored to be here today to testify on behalf of ASCE on the state of America's drinking water infrastructure as the subcommittee examines reinvestment and rehabilitation of our nation's safe drinking water delivery systems.

You're hearing a recurring theme from the comments by the chair, by the comments from the ranking members as well as the four people that have testified before me.

You're hearing this theme that we need to invest in our infrastructure. Every four years since 1998, ASCE has published the report card for America's infrastructure which grades the current state of 16 national infrastructure categories on a scale of A through F.

Last week, we released our 2017 report card, which we'd like to have entered into the official record. In this report card --

Mr. Shimkus. Without objection, so ordered.

[The information follows:]

**********COMMITTEE INSERT 4**********

Mr. DiLoreto. Thank you. In this report card, we gave the nation's drinking water infrastructure systems a grade of D. Unfortunately, that is the same grade it received in our 2013 report card.

But the good news from this year's report card is that water conservation efforts through wise use of water seem to have paid off.

Municipal water consumption in the United States has declined by 5 percent this decade, marking the first time in nearly 40 years that water use at home has decreased.

Total freshwater withdrawals this decade continue to decline in almost every sector including agriculture, industry, domestic and thermal electric. This is primarily due to efficiencies and the reduction in withdrawals from retired coal-fired plants.

The bad news is that every day nearly 6 billion gallons of treated drinking water are lost due to leaking pipes with an estimated 240,000 water main breaks per year occurring in this country.

It's estimated that these leaky pipes are wasting 14 to 18 percent of each day's treated water, the amount of clean water -- drinking water that could support 15 million households.

While drinking -- excuse me, to address these programs and bring the grade up to a B -- good condition, which we recommend -- EPA has estimated, as you've heard, we need to invest, at a

minimum, $384 billion over the next 20 years from all levels of government.

Importantly, EPA's numbers do not account for population growth and an estimate is limited in its scope of projects so it could be higher. While drinking water infrastructure is funded primarily through a rate-based user system, the investment has been inadequate for decades and will continue to be underfunded without significant changes as the revenue generated will fall short of the needs grow and as water utilities strive to meet safe drinking water standards.

Additionally, many U.S. cities are losing population. This poses a significant challenge to utility managers. Fewer ratepayers -- a declining tax base -- make it difficult to raise funds for capital investment plans.

To respond, utilities must raise rates often in cities where jobs and pay have not kept pace with the economy, putting a burden on those who can least afford rate increases.

Conversely, in areas of the country that are growing, such as the West and Southwest, utility managers must respond to an increased overall demand.

So we'd like to offer the following recommendations. First, as you've heard from my colleagues, reinvigorate State Revolving Loan Fund program under the Safe Drinking Water Act through permanent reauthorization. And we are going bold, tripling the

amount of the annual appropriation. This is the amount that the president has called for.

Second, fully fund the Water Infrastructure Finance and Innovation Act. Three, as with my colleagues, preserve tax-exempt municipal bond financing. Low-cost access to capital keeps lending for water upgrades strong and accessible for communities large and small.

And fourth, eliminate the state cap on private activity bonds for water infrastructure to bring an estimated $6 billion to $7 billion annually in new private investment.

Finally, the federal government cannot be the bank of last resort. We understand and recognize that individual water utilities must consider the need to increase the price of water to local users.

Water must be appropriately priced, however, to ensure investments to rebuild the infrastructure.

Thank you, Mr. Chairman. That concludes our testimony and at the appropriate time I'd be happy to answer your questions.

[The prepared statement of Gregory E. DiLoreto follows:]

**********INSERT 5**********

Mr. Shimkus. Thank you very much, John.

The chair now recognizes Mr. Martin Kropelnicki, president and CEO of the California Water Service Group on behalf of the National Association of Water Companies.

You are recognized for five minutes. Thanks for being here.

STATEMENT OF MARTIN A. KROPELNICKI

Mr. Kropelnicki. Good morning, Chairman Shimkus and Ranking Member Tonko and members of the subcommittee.

As the chairman mentioned, I'm Marty Kropelnicki, president and CEO of California Water Service Group. We provide water service to approximately 2 million in the state of California, Hawaii, New Mexico and the state of Washington.

I'm also the current sitting president for the National Association of Water Companies, or NAWC, which represents private water companies across the U.S.

NAWC members have provided water utility services for well over 100 years and today serve nearly a quarter of the population.

Before discussing how private water sector can help address the nation's infrastructure challenges, I want to start with a story, a true story, of what happened in the state of California and what the possibilities can be.

There are 400 residents in West Goshen, which is a small town in Tulare County. The residents of West Goshen had two small wells that had chronic water quality issues including nitrates and bacteria contamination.

In 2012, the two wells failed. Then a portion of the their water system pipes actually collapsed and we had people in this small town that actually had sand flowing through their pipes

instead of water.

With the residents having to travel to nearby cities and towns to take showers in portable shower stands, a timely solution had to be found.

CalWater worked with several nonprofits in the local area, the county and state to secure funding to connect the water system to our existing system, which was a mile down the road.

Today, the residents are enjoying something they haven't had in a long, long time -- a supply of safe, reliable and high-quality water. This example illustrates how private water companies are already helping overcome water infrastructure challenges.

NAWC estimates that its six largest members, of which we are one, will invest nearly $2.7 billion annually in our water systems. This is significant, given that the federal appropriations for the State Revolving Fund program is about $2 billion annually. It illustrates the shortfall.

Federal funds alone will not fix the nation's infrastructure problems, especially given that many are the result of poor decision making and not necessarily the absence of funding.

Let me highlight for you several recommendations for Congress to consider. First, we must ensure that any federal dollars are effectively and efficiently deployed and used. NAWC and its members support EPA's 10 attributes of effective utility management, which include things such as financial viability,

infrastructure stability and operational optimization.

Applicants for public dollars should demonstrate that they are managing their assets so that adequate repair, rehabilitation and replacement are fully reflected in management decisions including water pricing.

Second, failing systems that are seriously compliant with water quality standards must be held accountable. If a system is plagued with a history of serious noncompliance it should be given an option to pursue a partnership that will lead to compliance or to be consolidated with an operator or owner who can bring them into compliance.

Finally, as Congress considers future funding of drinking water programs, NAWC recommends that private -- the private water sector not only have equal access to federal funding but also that steps be taken to further enable and incentivize private water sectors' involvement in solving the nation's infrastructure problems.

Apart from the obvious tax base measures, these incentives should include providing a safe harbor provision to shield would-be partners from legal and financial liabilities associated with serous noncompliant systems.

Quite simply, private water companies like CalWater have the financial, managerial and technical expertise to help ensure that all Americans have safe, reliable and high-quality utility

services.

I sincerely appreciate your invitation to be here today. Along with my many colleagues in NAWC, I look forward to working with you to address the nation's water infrastructure challenges.

Thank you, and I'd be happen to respond to any questions that the committee may have.

[The prepared statement of Martin A. Kropelnicki follows:]

**********INSERT 6**********

Mr. Shimkus. Thank you very much.

Chair now recognizes Mr. Erik Olson, director of the Health and Environment Program with the Natural Resources Defense Council, NRDC. You're recognized for five minutes.

STATEMENT OF ERIK D. OLSON

Mr. E. Olson. Thank you, Chairman Shimkus, and Ranking Member Tonko and members of the subcommittee.

You know, I think we all take for granted where the water -- this water that is sitting here comes from. It's, in many cases, comes through water systems that have been there for over a century.

For example, I've seen the DC original plans for the water supply in Washington, DC signed by guess which president? Pierce. Started to be built during the Lincoln administration.

Mr. Shimkus. One of my favorites.

(Laughter.)

Mr. E. Olson. We still get our water through lead pipes in much of the city through lead service lines. We still have a brick aqueduct that is used for some of the water that is delivered into the city.

And DC is not unique. We have got I think a situation where we take for granted where our water is coming from and it is out of sight and out of mind.

But I'd liken this very much to an old house that is 100-plus years old. It's got a leaking roof. It's got termites. It's not a crumbling foundation. It's got broken windows. It sort of reminds me maybe of the house that Jimmy Stewart had in "It's

a Wonderful Life" that was falling apart and about to collapse, and without some tender loving care and real investment, unfortunately, in a lot of cities and small towns across the country we are really at risk of collapse.

It's not just the small town in West Goshen, California. There are a lot of other cities and towns that have this problem. You know, and these have very real public health implications.

So CDC estimated a few years back that about 19.5 million people -- 19.5 million people per year get sick from drinking tap water from municipal water supplies in the U.S.

Now, some of those people get really sick. There are deaths and some of them get over the illness. But if you have -- if you're elderly, if you have an immune system problem, if you're on chemotherapy, they are very real, very serious health risks.

And that is just from the microbiological risks. We are not talking about lead. We are not talking about some of the carcinogens and the other contaminants.

I will say that the U.S. has made enormous strides in the last hundred years. Our water is a heck of a lot safer than it was before World War I.

But, unfortunately, we haven't made the kind of progress we need and we haven't been investing to keep our water infrastructure up.

And I think we are sort of like ostriches with our head in

the sand. We don't want to think about this problem. It's yet another problem to worry about.

But this s the one infrastructure issue that touches every American and their -- and their health every single day. We take a shower in the morning. Do we give it a second thought what's in that water?

We drink it. We use it for our cooking. We use it for making our coffee in the morning. What's in that water? We need to really be thinking about this and the deferred maintenance that we continue to see across the country, unfortunately, because of resource constraints is a very real problem that is affecting communities all over the U.S.

And this has real implications. I mean, I was recently in Flint, Michigan, where we are representing the citizens and I know you heard from Melissa Mays about a month ago. She's one of the citizens in Flint, and we visited with Melissa.

We visited with other people in the community and, you know, you can imagine what it is like. What if you didn't feel like you could bathe your kids in the water?

What if you felt like the water coming out of your tap was unsafe and that you were being told for a long time that it was perfectly safe -- don't worry about it -- and then it comes out that it wasn't safe and you find out your kids are lead poisoned? How does that make you feel?

It certainly erodes your confidence in government. It also erodes your confidence in water systems and I will say that a lot of people in Flint that we are working with I don't they are ever going to feel confident about their water and I am very worried that as this problem escalates across the country we are going to see more and more of those kinds of situations where people are not confident in the water that is coming out of their tap. That's a very real risk.

Another example that I cite in my testimony is East Chicago, Indiana. We just filed a petition similar to the petition we filed in Flint months before it became a big issue in Flint.

We recently filed a petition for East Chicago, Indiana. They've got serious lead contamination problems in their drinking water as well as in their soil. I cite a woman named Crystal that is one of the people that is affected by this. She's got two kids under the age of five who are lead poisoned.

What's going to happen to that community? How are we going to restore confidence in the water supply in East Chicago and a lot of other communities across the country?

So where do these problems come from? Well, certainly, first of all, there is a lack of investment in our infrastructure. There has been for decades. I don't think this is a partisan issue. It's something where we haven't been putting the money we need to put into it and unless we take some action we have got

a really serious problem.

Secondly, we have had weak enforcement. We have deteriorating lead pipes in a lot of communities, a lack of source water protection, and I just -- I have to mention that the budget cuts that were announced last night I would call it a bloodbath budget.

The costs -- we are seeing huge cuts, although the state revolving fund is protected huge cuts in Superfund, huge cuts in enforcement, huge cuts in Great Lakes Chesapeake Bay program, the water programs.

We are very concerned that the effect of this is going to be more problems, more health risks and it is not just EPA. I noticed also that U.S. Department of Agriculture's entire program for rural drinking water and sewers is zeroed out -- almost $500 million zeroed out.

The HUD programs, a lot of which pay for drinking water and sewer --

Mr. Shimkus. I am being very kind.

Mr. E. Olson. That's a serious problem. Thank you.

[The prepared statement of Erik D. Olson follows:]

**********INSERT 7**********

Mr. Shimkus. Thank you very much. I think we were getting your point. I would just -- I would just add that since you mentioned the budget includes $2.3 billion for the State Revolving Funds, a $4 million increase over the 2017 annualized level, the budget also provides $20 million for the -- for Water Infrastructure Finance Innovation program equal to the funding provided in 2017.

So we will get to those points and we will have those debates. But let me now just recognize myself for five minutes for opening questions.

And before I do that, I want to -- Mr. DiLoreto, I was in Portland with Congressman Schrader two weekends ago and we were -- all the cool things that this committee gets to do we were observing the Willamette Superfund site.

So I was just interested, does the water systems there use the Willamette or they -- how do -- they've got retaining ponds from the mountains or how do they --

Mr. DiLoreto. The water system in Portland comes from the Bull Run. It was originated in 1895 under a grant by President Harrison and so it is up in the Mount Hood Forest. It has no human activities, no farmland activities. It's completely protected.

But it used to be the Willamette River in the 1870s and 80s and, of course, it wasn't treated and people got sick. The joke is that the governor at the time, after they did Bull Run, said,

"I am not drinking any water that I can't see," and so he objected to it. But the Bull Run is their source, not the --

Mr. Shimkus. Yeah, it is interesting and I would encourage my colleagues -- that is another issue I really look forward to working with in a bipartisan manner to start trying to bring some closure and movement on Superfund sites. So it was a -- it was a great trip.

Mr. Kropelnicki, you have mentioned the problem of fragmentation in the nation's water industry. What recommendations can you give to this committee to address that problem you've identified?

Mr. Kropelnicki. Sure. There are approximately 52,000 to 54,000 small rural water systems out there and just compare that to what you have on the electric and gas side.

You know, you have 4,000 electric producers in the U.S. You have 1,600 natural gas, you know, producers in the U.S. and so enforcement with numbers of that size become very, very complicated.

Mr. Shimkus. It's very hard. I mean, I represent rural America and actually USDA rural water grant program has been very helpful. But you really have to talk to the local communities who are so small that they really can't sustain their own water infrastructure and you have to really lovingly encourage them to get into a regional system and I think that is what you're

addressing, right?

Mr. Kropelnicki. Yeah, absolutely, Chairman. You know, one of the things we just did in the state of California is we have consolidated a couple districts where we took rural systems where you have a small number of people, where you have complex water supply issues and we merged them with larger districts.

So essentially you spread that marginal cost over a larger base and the end result for the customers in the smaller district is a significant reduction in the water bill and our ability to go in and make and continue to make the capital improvements to keep them into compliance.

Mr. Shimkus. Staying with you, what is one obstacle in the water industry -- water industry the federal government could remove that would draw in more private engagement and investment into industry?

Mr. Kropelnicki. Mr. Chairman, that is a great question. I mentioned the safe harbor provision. One of the problems being a private water company or an investor in a water company is when we fall out of compliance the fines we get are amazingly substantial, whether it is from the state health department, a local or regional water board or EPA.

So we are held to a very, very high standard and I am very proud of the record. NAWC members have nearly a flawless record at compliance with water quality standards.

However, when we take over a system that is challenged and out of compliance, we run the risk of getting fined right away.

And so having a safe harbor provision or an amnesty period that allows us to ramp that system up to compliance would certainly go a long way in terms of incentivizing private water to come in and take over smaller systems.

Mr. Shimkus. And I am sure this will be asked by my colleagues as we start talking about the Water Infrastructure Finance Innovation Act, which you've all testified about, and the Safe Drinking Water Act and how they may interact or how they may help or harm each other.

So if we just go through the whole panel -- should the Safe Drinking Water State Revolving Fund and the Water Infrastructure Finance Innovation Act -- I hate acronyms so that is why -- loan program not just coexist but also complement each other?

And let's just go Mr. Ellingboe and then we will just go down real quickly.

Mr. Ellingboe. Thank you, Mr. Chair, and members of the committee.

Yes, I think having them complement each other would provide additional resources needed in order to be able to sustain this infrastructure and I think that is really important, given the need across the country. And so both programs are important.

Mr. Shimkus. Mr. Donahue.

Mr. Donahue. They do complement each other, Mr. Chairman. The main differences from our perspective --

Mr. Shimkus. Someone might have -- I think if you can turn your mic off once you're done.

Mr. Donahue. The main differences between SRF and WIFIA -- sorry about the acronyms but WIFIA is designed to fund projects that are typically greater than $20 million where SRF is substantially less than that.

And historically, when a large project needed low interest funding or desired low interest funding they might have to split that project into smaller pieces in order for it to fit into an SRF program, and that took away resources for the smaller projects.

So low interest funding for large and small projects in the manner of SRF programs and WIFIA is a vital portion of our plan to move forward on infrastructure.

The only other thing I would add is that with the larger projects through WIFIA the repayment opportunities for communities are up to 35 years where typically in the SRF program you're somewhere closer to 20.

Mr. Shimkus. Thanks, and because of my colleagues and out of respect for them, we will just stop there. I am sure they will have questions and I'll turn to the ranking member, Mr. Tonko, for five minutes for his questions.

Mr. Tonko. Thank you, Mr. Chair, and to the panelists again, thank you and thank you for reinforcing and strengthening the message of investment.

Many of you discussed the needs estimates for the next few decades. Is it fair to say that there is agreement on this panel about the scale of need in this country?

We can debate the precise remedy to meet that need -- how much should come through the SRF, how much through tax-exempt bonds, how much through increased water rates and local government spending, et cetera.

But does everyone agree that it is going to take more federal dollars to make any serious effort to bring down the national need if we that across the board? Need for new additional federal dollars?

Mr. Ellingboe. Thank you, Ranking Member Tonko and members of the committee. Yes, we do need additional federal dollars.

Mr. Tonko. Okay. If I could just get a yes or no because I am on limited time here. So Mr. Donahue.

Mr. Donahue. Yes.

Mr. Chow. Yes.

Mr. DiLoreto. Yes.

Mr. Kropelnicki. Yes.

Mr. E. Olson. Limited, yes.

Mr. Tonko. Okay. And Mr. Donahue, AWWA represents all

types of water systems. Can you discuss the importance of the drinking water SRF for small and disadvantaged systems that may not have the credit rating, the ratepayer base or capacity to fix their systems or bring them into compliance with the law?

Mr. Donahue. Thank you. That's a great question. Small systems in particular -- and I have experience in that regard where I've used SRF program money for a number of capital financing projects -- the main -- the main advantage to smaller systems using SRF is the cost of money is much less.

They have to go through higher hoops to get that money so we are hoping that we can make that process a little bit more efficient for the -- especially for the smaller systems who have fewer technical staff to help them. I think that would be advantageous.

I also think that using SRF money for smaller systems who have a little bit of a tough time with their credit rating, normally the conventional bond market is very good at supporting credit ratings and municipalities that are AA to AAA bond -- or AAA rated and some of those smaller systems that may not necessarily have such a high credit limit or credit rating would benefit from a little bit of an easier process through SRF.

Mr. Tonko. Thank you. And there are obvious problems when dealing with so many pipes at the end of their useful lives.

In my district alone there are pipes that go back to

Rutherford B. Hayes, if we are going to cite administrations. Water main breaks disrupt service and the local economy. We saw some of those coming at the worst weather moments of the year, the coldest weather.

They also make the finances of these systems even more difficult. Mr. DiLoreto or any of our other witnesses, can you compare the cost of doing emergency repairs with planned replacement and how much more expensive is it to react? I know that -- to be reactive -- I know that a number of engineers have recommended or suggested it is 10 times more expensive at times to do these after they break than to have some sort of mechanism that pinpoints weakness.

So Mr. DiLoreto.

Mr. DiLoreto. Well, I don't have an exact number. That sounds approximate. You're absolutely right. If we can do a maintenance program where we schedule it out, particularly using asset management, I know a number of colleagues here are introducing that into their water systems.

We get all the data from all the systems -- from all our water pipes we can then do a modeling that says here's where we ought to be at certain times so that we can avoid the break. It's not so much -- the cost is important. More importantly is your business shuts down. People have to get sent home. You lose wages, and that is the real effect you have on the customers and

people.

Mr. Tonko. Anyone else on that issue?

Okay. The -- oh, we do? Oh, Mr. Chow. I am sorry.

Mr. Chow. So I will comment on that. So running a city, a public works department, you know, we often encounter emergencies rather than what we call the preventive maintenance work, and I would say the emergency calls is a heck of a lot more than if we program that out and go through a normal procurement process where we bid it and we certainly couldn't get a much better favorable pricing comparing to emergency calls.

Mr. Tonko. Mm-hmm. Thank you.

The problem is that many systems don't have the necessary capital asset management practices to be proactive when operating on shoestring budgets.

Therefore, a lot of that maintenance is reactive, which ends up costing local government and ratepayers more.

Mr. Donahue, would you say that is a fair characterization for some of your AWWA members?

Mr. Donahue. Absolutely, sir.

Mr. Tonko. And the core mission of this statute is to protect public health. So Mr. Olson, I want to ask what it means for our country to achieve success with the safe drinking water law that talked about the long -- the lifelong impacts and I'd like to hear some of your assessments in that regard.

Mr. E. Olson. Well, I would say that both on the microbiological side I mentioned that there are over 19 million people that get sick a year. Addressing these problems could reduce that.

In addition, the lead contamination problem we did a report recently that found very widespread contamination with lead across the country, something in the neighborhood of 4 million served by water systems that exceeded the lead action level, for example, and there are plenty of other contaminants out there.

Mr. Tonko. Thank you very much.

I yield back, Mr. Chair.

Mr. Shimkus. Gentleman yields back his time.

Chair now recognizes the gentleman from Texas, Mr. Olson, for five minutes.

Mr. P. Olson. I thank the chair for calling this very important hearing.

Welcome to our witnesses, and a special welcome to you, Mr. Olson. You are one of the few, the proud, the rare Olson with two O's, not O-L-S-E-N. So get a welcome.

Contaminated water has had national focus because of the tragedy that happened in Flint, Michigan. That was a failure of infrastructure. Lead leached out of the pipes and got in people's drinking water.

It was in the water they drank, they bathed in, they prepared

food with, and only years will tell us the damage that is been done to bodies with that lead exposure. It will take a long time.

But infrastructure doesn't just fail over years. It can happen overnight in a flash. It happened in Corpus Christi, Texas, the day -- the week before Christmas this past year.

They lost all their drinking water for three and one half days because they had a spill. A chemical from an asphalt plant leaked into their water.

Corpus Christi has a special place in my heart. I got my first hour flight time at Corpus Christi Naval Air Station. The first one was 1400 hours. I got my wings of gold their -- a naval aviator. I know that town like the back of my hand.

They have 320,000 residents. Flint had about 100,000. So three times bigger than Flint. The local grocery stores were swarmed buying bottles of water. Schools were shut down for the better part of a week.

The mayor resigned after 37 days in office, just over one month. He beat a long-term mayor on the issue of water. During her reign, they had boiled water alerts three times in the last few years.

Against that background, I'd like to open my questions and talk about my home, Fort Bend County, Texas -- Texas 22. It's about two-thirds suburban and one-third rural.

It is exploding with growth. When a school opens, it is

overcrowded on day one. They have trailers come in. That puts a huge burden on infrastructure and water.

If you drive away from a house one mile, go on University Avenue, there is these big blue pipes probably three feet in diameter -- water pipes, to try to get ahead of the growth we have to have.

My first question is for you -- let's see -- Mr. Chow. How with our existing resources can we help growing committees like Fort Bend County and Brazoria County and Harris County manage that growth and serve new customers in a cost-effective way with clean reliable drinking water?

Mr. Chow. Yeah. Any cities undergoing growth is going to be facing the challenges, first of all, you know, with the infrastructure in the current state it is and you're talking about expansion and that is the reason why you got these above ground pipes trying to deliver the water the best they can.

So the -- what I'll call the planning in terms of the growth of the -- of the city or the township and so on, all that, the planning exercise is a lot more important in terms of forecasting, projecting the population growth and that is where it really comes down to sound asset management that we mentioned earlier.

Only through sound asset management you can project and from projection you can be one step ahead in terms of have the infrastructure in place in advance of the growth coming to your

front door. I mean, that is something that you just have to anticipate through --

Mr. P. Olson. Mr. Donahue, your comments on that issue, sir.

Mr. Donahue. Certainly asset management is a key factor and when you're trying to balance growth with failing infrastructure that you might already have it is a very challenging process for water managers to try to deal with.

One of the things that AWWA is supporting is allowing the SRF program to be used for growth related issues. Right now it is limited only to reinvesting in the existing infrastructure and primarily those communities who have experienced some type of a compliance issue and being able to expand those programs to allow for growth to accommodate some of those needs.

And I've had experiences with schools as well that are bursting at the seams in trailers in the playground. So it is a very challenging process to have.

Mr. P. Olson. Sounds like a job for Congress. I yield back.

(Laughter.)

Mr. Shimkus. Gentleman's time is expired.

Chair now recognizes the gentleman from California, Mr. McNerney, for five minutes.

Mr. McNerney. First, I want to thank the chairman and the ranking member for having this hearing.

Mr. Shimkus. You're welcome.

Mr. McNerney. It's a good time. And I want to thank the panelists. All your testimony was very good and you came in here so I really appreciate that.

My first question goes to all of you. A simple yes or no would be appreciated.

Do you believe that the State Revolving Fund increases are needed and we need to enhance the ability of cities to get municipal bonds done for this project?

Mr. Donahue. Yes.

Mr. McNerney. Starting with Mr. Ellingboe.

Mr. Ellingboe. Yes.

Mr. Chow. Yes, sir.

Mr. DiLoreto. Yes, sir.

Mr. Kropelnicki. Absolutely.

Mr. E. Olson. Yes, sir.

Mr. McNerney. Mr. Chairman, I think we have unanimity here.

Mr. Shimkus. Amazing.

Mr. McNerney. Mr. DiLoreto, you indicated improvements in water conservation. How can we continue to improve in that -- in that way?

Mr. DiLoreto. Well, you know, the fact of the matter is we kind of reached a point now, if you look at the replacement of fixtures in your homes, most of them have been turned down now so we have reached that point where we've got low flow toilets,

low flush showers.

We have reached that tip -- that point now where we have probably reached. There may be some little things we can do. Now we have got to move on to encouraging people in outdoor water conservation, as your state is well aware of -- the kinds of materials we plant for our residence, you know, to make them natural to the area that we live in.

Mr. McNerney. So there is more room that can be -- thank you.

Also, you mentioned leakage. Could you elaborate a little bit on the technology detecting leaks? Are you the right one to ask?

Mr. Donahue. Water loss control is a significant part of the municipal utilities action plan. There are a variety of options. Acoustical leak detection is available and it is traditional and it has been around for probably a good 15 years or so and it is very accurate.

They can come out and pinpoint a leak. But there is also new technology that I am just becoming aware of where there are companies that can view via satellite your geographical region and have some level of accuracy in the determination of where leaks might be so that it focuses your energy and your money in going in to find those leaks. So I am encouraged by the technology.

Mr. McNerney. So we can invest more in developing that

technology?

Mr. Donahue. Absolutely.

Mr. McNerney. I will bite on your cybersecurity remarks. Could you elaborate on that a little bit?

Mr. Donahue. Certainly. You know, cybersecurity is a growing concern for municipal agencies. I can tell you, as an example in my own town we were attacked and our utility billing system was frozen out by a cyberthreat from outside the country.

We had to pay a ransom to get our -- basically to get our computer system back. So one of the things that AWWA promotes is working not only with agencies that develop those tools -- those computer tools for utilities.

But working with the agencies that developed the software programs that prevent those threats from coming in I think a tremendous amount of investment is needed in that regard.

Mr. McNerney. That's horrifying that you would be ransomed.

Mr. Donahue. Well, we were just glad we could buy it back.

Mr. McNerney. Wow. Could you elaborate, Mr. Donahue, on some of the way the federal money is leveraged?

Mr. Donahue. Oh, sure. So one of the things that are -- that has been spoken about quite a bit here this morning is the SRF programs and WIFIA as a new financing tool.

And for every one dollar that is invested in the WIFIA program or in the budget -- is put in the president's budget or in the

Congress budget you could get $60 in loans for those utilities.

So using low-interest money from the treasury and being able to leverage that is something that will be very valuable to utilities going forward as we continue with our infrastructure investment.

Mr. McNerney. Thank you.

Mr. Olson, could you talk a little bit about the weak enforcement problem?

Mr. E. Olson. Sure. We have been concerned about this for some time and, frankly, the budget cuts are going to make it worse. The problem is that there are literally tens of thousands of violations every year of the Drinking Water Act and a lot of those are not major violations but there are a lot of health standard violations, literally thousands of health standard violations ranging from lead to microbiological.

And unfortunately a lot of those are never enforced against. There is no formal enforcement. We found that 3 percent of the violations actually faced any penalties.

And we are not saying that every single violation requires a penalty or something like that. But what we do need is a cop on the beat, a clear signal that if there is a violation that there will be consequences, especially if it is an ongoing serious one and EPA's own data shows that even the highest priority violations they are not getting around to enforcing nor are the states in

many, many cases.

Mr. McNerney. Simple yes or no -- do you think it is a matter of over regulation?

Mr. Donahue. I think it is a matter of under regulation and under enforcement.

Mr. McNerney. Thank you.

Mr. Chairman, I yield back.

Mr. Shimkus. Gentleman yields back his time.

Chair now recognizes the gentleman from West Virginia for five minutes.

Mr. McKinley. Thank you, Mr. Chairman and DiLoreto.

I was there speaking -- I am a fellow of the American Society of Civil Engineers. Fifty years now I've been a member and --

Mr. Shimkus. How long? Can you say that again? Just for -- get the mic. Get it closer so we can hear that. How long?

Mr. McKinley. That's 50 years.

But anyway, having said all that, I am fascinated with a lot of this presentation and you all have done a great job on that.

But I get into some other issues that I want to follow back up with that with the -- the SRF program has been something that is been, you know, much dear to me and I know a few years ago, about three years ago the administration slashed that by half. They had to transfer that money to educational processes rather than -- so I am glad we were able to get that restored.

But the AGC is still putting out in its literature that Congress is still cutting back on the money to the SRF. So my question in part is if we can restore it and, Mr. Chow, I particularly like you saying double the amount of money goes to SRF.

You don't get objection from me on that. But my concern I would have and voiced over the years has been how do we do a better job allocating the SRF money to rural communities?

Because when I go back to my area, I hear that time and time again it is the larger cities getting the money and everything we have been able to do confirms that.

So what would be the steps we should take here in Congress to put our foot down a little harder on getting this SRF money to rural communities?

Mr. Chow. Well, certainly. I mean, the SRF fund, I mean, it's really more focused on the smaller municipalities and I will answer it this way -- that many of these rural areas or small towns and all that they are lacking what I call the technical assistance. So that means, you know, unlike the Baltimore City where we have a good number of engineers that --

Mr. McKinley. Isn't that what we did just a couple years ago? We provided more technical assistance but we didn't increase the budget. So all we did was put more people in the queue to get the same amount of money.

Mr. Chow. Right. But the thing is that I think we as utilities, as colleagues, and then I think there is a responsibility of us, meaning utilities -- large utilities providing assistance to those smaller municipalities and smaller communities from the technical assistance perspective for experience, lessons learned.

I think that will go a long way. I mean, if you don't have a project plan designed, what good is SRF? You got to get to that stage so you can tap into that.

Mr. McKinley. Let me see how it goes. I've got a couple other quick questions as well.

We know they've had the problem in the West and it's been the lack of water in the West -- the drought they've been doing for four to five years out there.

Would it -- I know it's not quite your testimony that you all were talking about but is the AWWA or the ASCE -- is anyone out there talking about ways that we could replenish the aquifers in the West?

Is there anyone talking about that? Because I know there have been some reports in the past and we are ready to work on that if by putting some water lines out and just replenishing the aquifers in the West by using the Missouri or the Mississippi.

Mr. Kropelnicki. Yeah.

Mr. McKinley. Thoughts, please.

Mr. Kropelnicki. Good question, Congressman.

A couple thoughts on that. One, we have had a lot of rain this last year. It's been actually one of the wettest and largest amount of snow possibly in the last four decades.

The other thing I would say to when we talk about conservation we did a -- California's done a great job with conservation. I know for our customers we reduced consumption 27 percent in about a three-month period and then we have been able to maintain that.

The real problem in California is the fact that you have a population of almost 40 million people and a backbone that the state owns was put in place in the '50s and '60s when the population was about 11 million people.

So the drought highlighted the need for more storage. Right now in California the reservoirs so you have a lot of runoff happening where that water is running off into the ocean.

So it's really a long-term planning scenario. I think you've heard that theme about asset management. It's the same thing I think with the state.

California has taken some big steps in terms of ground water adjudication. What you --

Mr. McKinley. Okay. I'd like you, if you could -- again, running out of time here -- if you could get back I'd like to know more about it because I think the idea of replenishing aquifers could be very good --

Mr. Kropelnicki. Yeah.

Mr. McKinley. -- for other than California. The less California can get to all of them -- is the desalinization. I know we just had a hearing yesterday about graphene is a product that could very well be part of the solution in desalinization of water to give us more of a supply. Any of your -- in your associations dealing with the graphene as part of a filtration process? I am seeing no, it looks like, on that.

I've got one more question. I'll put it in the record. Thank you all very much. I appreciate it.

Mr. Shimkus. I thank my colleague. Gentleman's time has expired.

Chair now recognizes the gentleman from California. I was looking at my list. We have got McNerney, Matsui, Peters, Ruiz -- like, four Californians right in a row.

So but it is Mr. Peters, and you're recognized for five minutes.

Mr. Peters. Thank you, Mr. Chairman.

I guess I wanted to -- first, I'd like to say thanks for having the hearing today. We have heard from witnesses about aging infrastructure, wasted water due to leaking pipes and water main breaks, overall risks to the quality of drinking water.

We have seen that in Flint. I had the opportunity to travel there last year and see it up close. In my -- near my district

in San Ysidro, California, we saw similar types of lead, copper, metal contamination in the drinking water and a lot of concern in our communities.

Actually, to help community water systems be better prepared to protect drinking water from a variety of threats, aging infrastructure, industrial activity, the effects climate change or security threats, I introduced a bill today with some of my colleagues on the committee, the Secure and Resilient Water Systems Act, and that bill will direct water systems to assess these kinds of threats with guidance from the EPA, then establish grants to provide communities who are at risk and develop more innovative solutions to use water more efficiently and to support the need to keep our community safe.

Parenthetically, my own community is involved in a aggressive recycling effort to use -- to keep water from going into the ocean from our households.

My I want to ask Mr. DiLoreto, because in all of this we think very much about how we measure success, and you did a report card and gave us a bad mark.

And we would like to know kind of how would -- how should -- how do you think we should frame our remediation plan? How do you think we should -- is there some sorts of priorities you have, measurements you have that would tell us we are doing well and also that would help us with accountability to our

constituents?

Mr. DiLoreto. Right. Well, if you look at our report card we come out with these eight categories that we graded in. Part of it's funding and let's be real, the biggest area is that we are under investing in our water system at all levels.

Mr. Peters. And there seems to be -- I don't want to spend too much time on that -- there seems to be a consensus about that here.

Mr. DiLoreto. So the fact is we need to invest greater, at your level, to things that we are going to do as a nation --

Mr. Peters. Right.

Mr. DiLoreto. -- that cover whether you're in Alaska or whether you're in Florida. At our level, we need to do things that take care of the pipe system.

If you talk to one of our colleagues that runs the water system here, the first dollar he gets goes for water quality and if he has any money left over he replaces the pipes.

Mr. Peters. So thinking about that from a national standpoint, are we -- do we have sufficient information from water testing to know where risks are that we would have to address first?

Mr. DiLoreto. We have information from the contaminants that we know about through the EPA program. That's how we provide safe drinking water. Emerging contaminants continue to occur and

then we work through a way to do that.

Right now, we meet -- our goal to meet the Safe Drinking Water Act from EPA.

Mr. Peters. Do you believe that that particular part of the program -- the testing part -- is sufficiently funded?

Mr. DiLoreto. Well, we do that at our own agency. So I can only speak for my own.

Mr. Peters. Okay.

Mr. DiLoreto. And we believe that it was sufficiently funded to do the testing we were required to do and then some above and beyond that so we can ensure our customers --

Mr. Peters. When we think about under funding, we are thinking mostly about pipes, it seems like.

Mr. DiLoreto. Well, our -- yes, exactly. Our report card doesn't look at the source water. It looks strictly at the physical infrastructure. So the under funding that we report talks about under funding in pipes, under funding in any physical assets at a water treatment plant, pumps and so forth.

Mr. Shimkus. Would my colleague -- I won't take time off -- can I --

Mr. Peters. Yes, sir. I'll yield.

Mr. Shimkus. Mr. DiLoreto is with the -- with the engineers. I think some of these questions are good questions to ask the operators -- Mr. Donahue, Mr. Chow and Mr. Kropelnicki -- because

I think you're on to a point. What other things need to be used, and so I just want to throw that in there. I am sorry for interrupting you.

Mr. Peters. Oh, no. Thank you, Mr. Chairman.

I guess -- and just to clarify -- I am thinking systemically from our perspective as a federal government. Suppose we gave these folks and their affiliates the money that they said that they needed. I am not sure that will be easy. But let's -- that only took two seconds to say.

What would we expect to see? How would I measure in five years that you're doing the right things -- that the systems are doing the right things with the money? I am asking you, Mr. DiLoreto, because you're the -- you're the teacher.

Mr. DiLoreto. Well, clearly, what we would say is a grade of B means condition is good. Okay. You don't see the 240,000 water main breaks a year anymore. You're going to see some. That's inevitable.

Mr. Peters. Yeah.

Mr. DiLoreto. But you're not going to see that anymore. We start seeing our water quality and our pipe systems are both in that good condition. Condition's good. Funding is good. Capacity is good.

Mr. Peters. So you'd look at the number of water main breaks, maybe miles --

Mr. DiLoreto. Or measurement.

Mr. Peters. -- miles of pipes replaced?

Mr. DiLoreto. That's right. We'd also be looking at the -- we don't make this data up in the report. We get published data.

Mr. Peters. Yeah.

Mr. DiLoreto. It's from somebody else. We analyze it. We would start seeing that number that EPA talks about going down. We know that we fund it. You'd see reports from these agencies that would say yeah, I've got enough revenue.

Mr. Peters. How about -- how about, like, numbers of people exposed to metal contamination? Would that be kind of a -- would that -- that would, to me, would seem like a priority, too.

Mr. DiLoreto. It would be, although we don't measure that in our report --

Mr. Peters. Oh, okay.

Mr. DiLoreto. -- because, again, we are looking strictly at physical assets.

Mr. Peters. Okay. So for me, I think, I understand the -- we did a whole sewage and water replacement thing in San Diego when I was on the city council.

We used miles of pipes. It seems to me that there has to be some sort of accounting for contamination and, you know, as a way to calculate where you'd start.

I did -- and I won't take much more time, Mr. Chairman, but I would just say that when I went to Flint I think the thing that amazed me was the level of indifference to it from the Congress -- that this amazing contamination -- and I -- you know, I've dealt with a lot of contamination issues and some are worse than others but about the worst is metals and children -- heavy metals in children under six is about the worst contamination you can have because it's so deleterious and so permanent, and I would just suggest to my colleagues that starting with that kind of contamination would be the place where we'd start to focus on replacing pipes. And I thank you very much for being.

Mr. Shimkus. Gentleman's time has expired. Chair now recognizes the gentleman from Michigan, Mr. Walberg, for five minutes.

Mr. Walberg. I thank the chairman and thank the panel for being here. Mr. Ellingboe, let me ask you for your thoughts on how we incentivize integrated asset management across roads, drinking water, sewer, storm water management, streamline investments and ensure proper planning investment and maintenance over the life of infrastructure.

Mr. Ellingboe. Thank you, Mr. Chair and member, for that question. I think one of the most critical aspects is supporting training for water systems and for water operators and that really is a critical part of the job.

In Minnesota where we see difficulties with asset management it's often the smallest systems, the medium-sized systems where there may be -- where water operators may have multiple duties even and having the time and attention to be able to think about asset management, think about what sorts of financial investments are needed, what sorts of technical changes might be needed to their system.

Mr. Shimkus. If the gentleman would yield, I think someone's got their mic on that is bleeding into -- can -- Mr. Donahue maybe?

Mr. Ellingboe. I'll sit back just a little bit.

Mr. Shimkus. I don't know. Yeah, yours is a problematic mic. I don't know what the answer is.

Mr. Ellingboe. Okay. At any rate, that support for operators and systems to have the training needed to really identify and recognize what it takes to manage their systems adequately, financially and technically is crucial and that is where things like the set asides have been important for providing support to training efforts from rural water systems or associations for operators, et cetera, and where the states can have the opportunity also to work with operators and provide technical assistance to help them with that. So --

Mr. Walberg. Would there be any reason to make integrated asset management a requirement to receive funding?

Mr. Ellingboe. I think the merits -- certainly, that would not only promote it and provide interest for operators in doing that but it would provide the states with the backing, so to speak, to require that of the systems as they develop these plans. And so, certainly, this asset management piece is so important for the long-term life of the systems that that could be part of support for seeing that done.

Mr. Walberg. Thank you.

Mr. Chow, how can we ensure transparency in rates and system needs in order to determine investments?

Mr. Chow. Well, thank you for the question.

First of all, maybe I'll circle back and address some of your first questions about integrated planning framework because that sort of threads into your second question.

Mr. Walberg. You've got the mic. I'll take the answer.

Mr. Chow. Well, I think the integrated planning framework, first of all, you know, it's understanding your assets to ensure that you are looking at things more holistically.

You mentioned about water. You mentioned about the sewer. You mentioned about the storm water and so on, all that.

And, you know, Baltimore is very fortunate. We are -- I mean, I am probably one of the first that actually came up with a EPA integrated planning framework document where we look across not only the sewer versus storm water under the current EPA, you

know, integrated planning framework definition.

We expanded that to water as well. So you got to look at things holistically. So when you talk about funding you got to make sure you provide the funding to the -- to the ones that yield the most benefits.

And, clearly, you don't have enough money to do all of it. You have to start from somewhere and one of the things we talk about how do we reduce the water main breaks over time is that you can't just go out and start replacing water mains. You got to sort of identify where is the most vulnerable piece and then go after those.

And through those sound asset management methodology and looking at things holistically you begin to have a good planning framework in terms of how do you attack this so-called infrastructure crisis that we are facing because you can't bite on this elephant all at one time. You got to take one bit at a time.

Mr. Walberg. Thank you. Yield back.

Mr. Shimkus. Gentleman yields back his time.

The chair now recognizes the other gentleman from California, Dr. Ruiz, for five minutes.

Mr. Ruiz. Thank you. Thank you, Chairman.

I want to follow Mr. Peters and his concerns for the public's health. As a physician, I understand the direct link between our

nation's drinking water quality and the health and well-being of the people that I serve and that we all serve.

Water is a fundamental element that everyone regardless of political party, regardless of social status needs to survive. So improving our nation's water delivery infrastructure is crucial to improving our nation's health.

In California, 85 percent of the community water systems tap groundwater sources to supplement their drinking water supply and deliver water to more than 30 million people.

But many ground water basins throughout my state and across the country are contaminated, as we all know, by both naturally occurring toxins like arsenic and hexavalent chromium as well as human causes such as leaky septic systems.

The State Revolving Fund, or SRF, is a critical tool that enables water agencies to build treatment systems or remove aging septic systems.

In my district, the Mission Springs Water District has utilized more than $10 million in SRF funds for its groundwater project -- protection project to remove more than 2,800 septic tanks and install more than 33 miles of sewer line.

This project is critical to protecting the groundwater supplies across the Coachella Valley and may not have been possible without the SRF.

But not all communities even have access to treated water

systems. Families in many vulnerable and rural communities like Mecca and Thermal, which I represent, where I grew up, rely on private wells that can have levels of arsenic more than 10 times the national legal limit.

These families are forced to buy bottled water because they can't drink the water from the tap and this is simply unacceptable.

So we owe the American people more than just debate on this critical issue. Clean drinkable water should be a priority for every community across America because it affects everyone regardless of your political party or politics.

So we must act to ensure our water delivery infrastructure is not only up to date but also reaches every community in America. In terms of the public health, the septic tanks are above ground.

With a little rain even in the desert where I live and represent and grow up, those septic tanks can overfill and overrun onto the unpaved dirt area where children and the elderly and everybody else play and walk and going to school. So you can imagine we have a lot of under developed areas in our nation all across rural America.

This is for Mr. Olson. You mention in your testimony that deferred maintenance of our drinking water systems is a ticking time bomb that threatens the public's health.

So what are the health impacts of drinking water contaminants such as arsenic and chromium and can you elaborate on the reduced

treatment costs for people if we protect water sources?

Mr. E. Olson. Yes. Well, there are several contaminants that are fairly common. You mentioned two of them -- arsenic and chromium, especially chromium. Hexavalent chromium is one that we are worried about.

Arsenic is fairly widespread. EPA reduced the standard down to 10 parts per billion a little over a decade ago, I guess it was.

It's widespread in California and many other communities. The health impacts of a lot of these are cancer is one of the risks. We are, obviously, worried about lead being a widespread contaminant that is affecting a lot of communities.

It's not just Flint or East Chicago, Indiana. There are many other communities that have a lead problem. And we believe that it's really important to invest in this.

You mentioned rural communities. We are seeing very significant proposed cuts to deal with rural community water. For example, a $500 million cut was proposed in this budget for the USDA rural water program.

Mr. Ruiz. So those residents in the central part of America, in rural America, are going to feel the biggest burden of this budget --

Mr. E. Olson. Exactly, and --

Mr. Ruiz. -- -in terms of their drinking water?

Mr. E. Olson. That's right, and then obviously they are also proposing cuts in the Mexico border program to zero that out for water. Also, the Alaska native village program, zeroing that out and many other programs.

Mr. Ruiz. So rural communities are going to get duped once again?

Mr. E. Olson. We are very concerned.

Mr. Ruiz. Yeah.

Mr. E. Olson. Those are where the health risks often are worse.

Mr. Ruiz. Yeah. I mean, you know, it's unbelievable but it's true and I see it in my rural communities as well.

I got 10 seconds so I'll refrain from asking another question and go ahead and give the mic back.

Mr. Shimkus. I thank my colleague and Chair now recognizes the gentleman from Texas, Mr. Flores, for five minutes.

Mr. Flores. Thank you, Mr. Chairman, and I thank the gentlemen for joining us for this important hearing today.

I'd like to start with Mr. Chow. Mr. McNerney started with a question for the entire panel where each of you said that municipal financing tax exemptions were very important.

And so, Mr. Chow, I'd like to dig into that a little bit. A lot of us, at least on this side of the aisle, would like to see a comprehensive tax reform package passed this year and what

I'd like to ask you is what tax reform components are important to drinking water infrastructure financing and why.

Mr. Chow. Well, I mean, certainly, maintaining the muni bonds being tax exempt is going to go a long way. I mean, I mentioned in my testimony that, you know, our six-year program is about $2 billion and most often is going to be funded by bond markets and we are going to have to go to the bond market and borrow that money.

Now, we do get some SRF from our state. But in relatively comparing to the overall needs in the SRF it just doesn't go far enough.

Now, certainly, with the complement of WIFIA, it's looking -- you know, it's going to be another tool that we are exploring in terms of availability to us on larger projects. When we talk about the 1.8 million customers and so on all that, our projects generally are larger in nature and the WIFIA is going to go be very helpful from that perspective.

Mr. Flores. Thinking outside the box for a minute, I mean, we talked about muni finance and WIFIA and SRF. Is any -- I mean, just think outside the box for a minute. Is there anything else that would -- that would help?

Mr. Chow. Well, I mean, certainly, you know, no one has mentioned P3, which is public-private partnership. I mean, this is --

Mr. Flores. I know where I am trying to go, yeah.

Mr. Chow. That is -- that is an area that is clearly -- is a tool in our toolbox. I mean, so in terms of financing our infrastructure, we go for state grants.

Then we go for SRF. Then, you know -- now WIFIA is available to us and, ultimately, you know, leveraging the private dollars in terms of our infrastructure needs because the fact that, you know, we can't continue to raise water rates at the pace that we have been raising water rates, particularly in Baltimore with the population -- you know, 40 percent is under so-called the national meeting household income level.

So leveraging the private dollars, negotiate terms more perhaps more favorable in terms of length of the payback periods, and so on and all that. Those are the out of the box sort of thinking and has to be an avenue for us.

Mr. Flores. Thank you. That's helpful.

Mr. Kropelnicki -- I hope I got close on that -- ASCE has talked much about the true cost of water in past reports and we know that water rates generally not only pay for operation and maintenance but long-term upgrades and expansion of the water system, or at least they are intended to do that. How do you set your rates to cover all of those costs?

Mr. Kropelnicki. Sure. That's a very good question, Congressman. Thank you.

We practice full cost for service rate making. So our state regulator, the public utilities commission and our largest operations in California does a very good job where we basically put costs in the bucket.

So you have operating costs -- things that are expense. You have investment costs -- things that go into rate base. There is an authorized rate of return that we are allowed to earn those investments.

So you add those things up. Cost of service plus your investment gives you a revenue requirement. That revenue requirement divided by your number of units sold gives you a price per unit.

And the state regulator regulates those things that are in those buckets. So it allows us to forecast our costs and they come back and then check our costs.

So all our capital is approved on a project by project basis. They review our health results. I am very proud to say our company for the last five years has met the primary standards, the secondary standards and all the UCMR, which is unrelated contaminants for the systems that we operate.

And it's all under the purview of our regulator who does a very, very good job at climbing through our drawers and seeing how we operate as a company.

Mr. Flores. How do your rates generally compare with others

in your area?

Mr. Kropelnicki. That's also a very good question and that is where it gets a little more complicated, and it does for the following reasons.

One, each water source is different and each water source will have a different type of treatment requirement and the price of that treatment varies dramatically.

So that'll cause variation in rates. The other thing that causes variation in rates are things like for a investor-owned utility we pay taxes. We don't really rely on tax-exempt financing.

We are required, under generally-accepted accounting practices, to fund our health and welfare plans, including our pension. So it's really full absorption costing, wherein municipal systems they -- you know, they follow a government or a GASB standard for accounting, which is really different than ours.

So when you normalize all those things out, our rates are very competitive. But when you don't have them normalized out, they could sway dramatically. But it all starts with that water source and looking at what's required for the treatment.

Mr. Flores. Thank you. Sorry I've gone over, Mr. Chairman. I will say as a CPA, our government accounting standards leave much to be desired.

Mr. Shimkus. Texas and California. So now we will turn to the other Texan, Mr. Green, for five minutes.

Mr. Green. Thank you, Mr. Chairman, and I have a lot of questions. I won't have five minutes to do them all in but be glad to submit the questions.

My first one is Mr. Olson. In your testimony you mentioned the need to pay special attention to the needs of lower income and disproportionately affected communities as part of your water infrastructure rebuilding program.

I represent a district that has significant amount of unincorporated area. The city of Houston, we try to partner with these unincorporated areas. We have in Texas what we call municipal utility districts and this provides water to tax based on that.

But we also have private water companies -- I know someone on the panel represents those -- who some of their rates are those in unincorporated are extremely high.

So we try to partner with the state to pay the infrastructure costs and then they will hook up to the city of Houston's systems and pay the monthly bills. Could you describe the characteristics of a disproportionately affected community?

Mr. E. Olson. Yes. It's a big issue because we are seeing this across the country. Flint is not the only place that has this problem. There are a lot of small towns and rural areas that

have the problem as you're suggesting in your district, Mr. Green.

We definitely -- there is a definition that is in the Safe Drinking Water Act for disadvantaged community. The states will then put a finer gloss on that as to what it means exactly.

But, basically, if you've got a fairly low income community that is where you want to target those resources most because they can least afford it and as we have heard full cost accounting for water can cause rates to go up and that is where, I think, you want to make sure you're dealing with the lower income folks and making sure that you're targeting resources to them and to the infrastructure there.

Mr. Green. Well, in this case, neighborhoods that are covered or maybe surrounded by the city of Houston and they will not annex them because, one, it would be such a drag because their property tax base is not near enough to pay for the infrastructure and that is one of our -- and low income, which are throughout the country including Houston, Harris County, it's not as bad as some of the parts of Texas where we have colonias. People actually bought houses. There was no septic systems, no water systems and they ended up drilling their own wells and they become really a problem. South Texas and even parts of east Texas does that. Is the Safe Drinking Water Act something available for those type of communities?

Mr. E. Olson. Well, I actually mention the colonias in my

testimony. It's a serious -- it's a serious concern in Texas and a lot of other areas but especially acute there.

The Safe Drinking Water Act does actually have a colonias program that has -- it needs a lot more attention, a lot more resources.

I think the cut in the rural utilities service budget of $500 million that was just proposed is really going to hurt efforts to try to deal with that as well the cut -- elimination of the Mexico border program that is been proposed in the EPA budget.

Mr. Green. In your testimony you mention an idea of creating a low income water assistance program similar to LIHEAP, which also took a hit in the president's budget.

Can you go into greater detail on how this program would work and do we need to do authorizing legislation to do that?

Mr. E. Olson. A quick answer is it would -- it could -- there are a couple ways you could do it. One is much like LIHEAP, which would be essentially federally funded with some state matching money.

That would be a preferable way to do it. You would certainly need federal authorization for that.

Other ways -- local utilities have done this. EPA did a very interesting review of what some of the states and localities are doing. Some have been very progressive in dealing with these issues -- the affordability issues -- and I can provide that for

the record if that would be of interest.

Mr. Green. But, again, it would be a partnership similar to federal government, state government, even the local community pay --

Mr. E. Olson. Exactly.

Mr. Green. -- a share but pay something they can afford.

Mr. E. Olson. That's right.

Mr. Green. Mr. DiLoreto, I want to start with does your investment in drinking water infrastructure compare to the D? Is it safe to say that there are more projects in need of funding and what kinds of projects are these?

Mr. DiLoreto. Well, it's absolutely true that there are more projects in need of funding. We look -- it appears we have about one-third of the money that is needed to make -- to bring our water system up to a grade of B.

Now, we don't look at individual projects. We are looking at the state of the industry. But throughout the industry we find city -- the special district like I used to work for, every one of them, having water infrastructure projects that are not getting built with us.

Water mains being replaced and repaired, whether it's pump stations that aren't getting repaired and replaced. We have about a third of the money between what we are getting now in SRF, between money we are generating as utilities to make that happen.

Mr. Green. Thank you, Mr. Chair, and thank you for holding these hearings.

Mr. Shimkus. Yeah, this hearing is making me thirsty so I am been drinking a lot of water.

The chair now recognizes the gentleman from Georgia for five minutes.

Mr. Carter. Thank you, Mr. Chairman, and thank all of you for being here. I appreciate this very much.

I have to share a personal story with you. I was a mayor of a city way back when and I was mayor from 1996 to 2004. I started when I was 10 years old.

But anyway, fascinating. When I was in pharmacy school I never realized that I would know so much about water and sewer because when you're the mayor of a growing city like I was -- I refer to this as the nuts and bolts of municipal government and it is.

You know, for most people, they turn on the faucet and the water flows. They flush the toilet and the water goes away and that is all they know.

But when you're the mayor you got to know everything about it. In 1996, our population was 4,500. When I left in 2004, our population was 19,000.

You can imagine the challenges that we had, and we did it -- in hindsight I think it may have been easier for us in a sense

because we had, if you will, a private-public partnership with the developers.

We said yeah, we will extend water and sewer lines and we will go through the state revolving fund and we will get that loan on the city but we need letters of credit from you to cover that.

It was a win-win situation because we were able to get low rates that they took advantage of. We were able, a municipality, to be able to be assured we were going to get a return on it. Otherwise, we'd call in those letters of credit.

And I was just wondering, have you tried any innovative ways like that? I suspect it's going to be a lot different when you're talking about repairing water and sewer lines because, you know, we were growing and it was -- we had a different set of challenges that we had to deal with.

But that, in some ways, I think, was advantageous to us. I mean, that we could do. But when you've got existing infrastructure that seems to me like it would be more difficult.

I want to ask you, Mr. Donahue, you represent kind of a smaller municipality. What challenges do you face there in getting -- in getting the funding and the -- that you need in order to do these kind of projects?

Mr. Donahue. That's a very good question and thank you. It's a rather loaded question too, I might say. As a small utility manager, trying to keep rates so that they are affordable to our

lower income, lower socioeconomic customers and still provide the type of resources that we need to provide to maintain our capital is a difficult balance to try to maintain.

Back in the day when I had extensive growth we had developers and we would put the burden on building that capital on the back of the developer and then they would turn that capital over to us.

But now, in trying to reinvest and rebuild that infrastructure, that falls solely on the backs of the ratepayers and trying to maintain rates so that they are manageable is a challenge.

Now, water rates are still a bargain in most areas and I think most of us on the -- on the dais here would be hard pressed to argue against that.

But we can't leave the low income folks behind and we have to come up with strategies that will help support them while we are still growing our infrastructure or maintaining our infrastructure.

Mr. Carter. Okay. I've got limited time with so many questions.

I've talked to some of our -- some of the water managers, if you will, in my district and they are telling me a lot of their costs right there are with the -- are with the unregulated contaminants, having to test for those.

Are you having that same -- are you all having that same experience?

Mr. Donahue. We have a ground water system where I am from and we test for unregulated contaminants every two or three years as required by our state agency.

It's not a real burden for us. We manage that pretty easily. Now, if we had to -- if we had issues with it -- we are fortunate that we have good ground water but if we had contamination issues then it would be a significant cost burden for us.

Mr. Carter. I want to ask anyone who wants to jump on this and this is -- I apologize, this may be off a little -- off of the beaten path. But one of the problems we have in my area is that we draw most of our water from the Florida aquifer.

Well, we are right on the edge and we are having saltwater intrusions so we are having to use treated surface water. Aquifer storage and recovery -- any opinions on that?

Mr. DiLoreto. The agency that I ran for 14 years uses aquifer storage and recovery and we would take water in the winter time and we were able to inject it into the ground there and then we pulled it out in the summer time. So it became another reservoir, if you will, for water in the summer time.

Mr. Carter. Any problems with it, though? I mean, we had -- you know, it's tough to get them to take that step to do it because you feel like they are going to contaminate our -- you

know, our pure system.

Mr. DiLoreto. Right. It started out that way but I am from Oregon. So, you know, we don't have some of those problems that you have perhaps in other parts of the country.

Mr. Carter. Right.

Mr. DiLoreto. And so after we worked with our Department of Environmental Quality and Health Division we were able to actually to a pilot project that showed that it worked quite well in --

Mr. Carter. Okay. Can I have one last question real quick?

Mr. Shimkus. No.

Mr. Carter. No.

Mr. Shimkus. Yeah. I mean --

Mr. Carter. One last -- seriously.

Mr. Shimkus. Just a -- just a statement. We have got two colleagues that have been waiting for a long time. So why don't we just no? You can submit it for the record.

Mr. Carter. Okay. All right. I will.

Mr. Shimkus. Chair now recognizes the very patient gentlelady from Michigan, Ms. Dingell, who I know had some questions for five minutes.

Ms. Dingell. Thank you, Mr. Chairman, and I thank you for holding this hearing because as somebody who comes from Michigan, the Flint water crisis obviously stays in everybody's hearts and

minds every single day.

And I strongly support increased investment in our drinking water infrastructure. That should help our communities replace lead pipes and fixtures quickly and safely.

I am actually even going to ask a question in a minute that is unscripted, God forbid we ever go unscripted in these hearings.

But Mr. Olson, first, let me ask you how can federal infrastructure investments be used to protect communities from lead?

Mr. E. Olson. Well, there are a couple of urgent needs. One is there are about 6 to 10 million lead service lines across the country, according to industry estimates, and we are going to need to replace those. American Water Works Association and others have said we need to replace those. So that is a huge need.

There are also needs for treatment in many communities that corrosion control treatment is not up to snuff and we need to address that as well.

Ms. Dingell. You know, one of the issues that we really haven't talked about but I am really seeing in our communities, and I want to build on the tax question of my colleague from the Republican side, is because I had an idea that I am wondering if it's something we should pursue.

Many hopes still have lead pipes in my communities and nobody's talking about that, and that isn't the system's

responsibility. But until we get rid of those lead pipes that is going to continue to be a crisis and we are trying to map.

Is there -- maybe, Mr. Chow, I'll ask you this. This is an unscripted question so staff's probably having a heart attack behind me. But is there something we should be doing to help homeowners be able to replace these pipes as well?

Mr. Chow. Absolutely. I mean, on the public side we can have the best water bringing to the -- to the sort of property lines and then once it gets into homes if they have contaminant pipes such as lead pipes and so on and all that it's not going to be helpful in terms of water quality.

So we sort of have to think outside of the box. So, for example, I'll just introduce an example that we have in Baltimore. So we have aging infrastructure just like everybody else and we recognize when we have aging infrastructure it's likely the homes who are tapping into our system are equally aged.

So we are actually looking at our extended warranty companies out there. They are looking at -- which are private -- they are looking at replacement of pipes when there is a failure or something like that.

Low cost -- in our case, we pay -- our residents pay about less than $10 for water and sewer protection on a monthly basis. Now, that is an avenue.

But then, now, if you sign up a whole community, recognizing

there is lead pipe in there, again, these private companies are going to have to take on the risk. So, again, it's become a business decision they are going to have to make. But we, on the government side, certainly can bridge that conversation.

Ms. Dingell. And it's real. Take Flint, for example, where there are many homes that have lead pipes and there is no money for those homeowners to replace it.

They are walking away from their homes because they simply can't afford to replace the pipes. So it's a -- it's a community issue.

Let me go -- as we are talking about Flint there is also an issue of confidence by consumers. So we just had an incident down river, which is part of my community, where the water was brown and smelled and a thousand other things. So you can imagine in Michigan what any discolorization and foul smelling does to people and confidence in their water.

And, quite frankly, the official communication was poor that left many questions unanswered and I ended up calling the head of Great Lakes Authority with all the mayors and saying, this is unacceptable and what happened wasn't good enough.

Mr. Ellingboe, what are states doing to provide more and better drinking water quality information to customers?

Mr. Ellingboe. Thank you, Congresswoman. The communication part -- I need to remember to sit back -- the

communication part is really --

Ms. Dingell. I don't either. I am always in trouble.

Mr. Ellingboe. -- is really a critical part of our job as state drinking water programs. And so --

Mr. Shimkus. Yeah, why don't we do this? Just turn yours off and use Mr. Donahue's.

Mr. Ellingboe. Okay. Thank you.

Ms. Dingell. It's the mic. It's not you.

Mr. Ellingboe. All right. So thanks again. The question is what are state drinking water programs doing to help people understand some of the aspects or risks associated with their drinking water.

Well, first of all, what's really critical is that we work with our communities as they need information to provide to their citizens.

For example, in the issue of lead, I think one of the major aspects is helping people understand what they might be able to do in their homes to avoid problems or provide filtration.

We need to have the resources available that are important through the set asides from the State Revolving Fund in order to be able to provide that technical assistance to provide better information from the state level to have as a resource for utilities to be able to access.

And so it's an ongoing challenge to provide effective

communications.

Ms. Dingell. And I am out of time. I would like to do more questions for the record because I think having just experiences there are a lot of issues.

Mr. Shimkus. You are allowed to do that, without objection. So the chair now recognizes the gentlelady from Colorado, Ms. DeGette, for five minutes.

Ms. DeGette. Thank you very much, Mr. Chairman.

I am really -- I am really pleased you are having this hearing and I hope we have more like this. Several of our colleagues on both sides of the aisle have pointed out that our constituents all just assume that when they turn on the faucet that the water will come out and it will be safe and that it will -- and that there won't be a problem.

And I think we all agree that you really can't have stable communities without safe drinking water. We saw this in Flint when the whole system collapsed, when the drinking water collapsed.

And this committee has a long and cherished tradition of making sure that safe drinking water is a reality for most Americans.

And while the Safe Drinking Water Act is not perfect and we have to update it, it really has been a tremendous success over the years because it established national drinking water

regulations for toxic contaminants.

It funded urgent drinking water infrastructure projects in all 50 states through the revolving fund and it set up a framework of federal-state collaboration to protect drinking water resources under the underground injection control program.

So I think it's been really a success. It has been a model for collaboration with the state and federal government, which I think has really been helpful.

And, you know, I have got this bill called FRAC Act and what my bill would be to -- would be to ensure that when we do fracking -- hydraulic fracturing, which is a big issue in Colorado and many other states -- that we also comply with the Safe Drinking Water Act to make sure that fracking is not contaminating our drinking water. That was, for some reason, in the Energy Act of 2005 exempted and I think that the Safe Drinking Water Act should cover everything.

Now, having said that, I just want to ask you folks about a few of the elements of the Safe Drinking Water Act as we start to think about how we are going to update and modernize it, and most of these should involve yes or no answers.

Do you support preauthorizing the Drinking Water State Revolving Fund, Mr. Ellingboe?

Mr. Ellingboe. Yes.

Ms. DeGette. Mr. Donahue?

Mr. Donahue. Yes.

Mr. Chow. Yes.

Mr. Kropelnicki. Yes.

Mr. E. Olson. Yes.

Ms. DeGette. Thanks. Do you think that, given what we have heard today at this hearing, do you think Congress should put greater focus on getting low income or small water systems into compliance?

Mr. Ellingboe. Yes.

Mr. Donahue. I agree with that as well.

Mr. Chow. I agree.

Mr. DiLoreto. Certainly.

Mr. Kropelnicki. Absolutely.

Mr. E. Olson. Yes.

Ms. DeGette. Now, do you think Congress should provide more resources for water systems to improve resiliency and security from threats like climate change and terrorism?

Mr. Ellingboe. Yes, absolutely.

Mr. Donahue. Yes, ma'am.

Mr. Chow. Yes.

Mr. DiLoreto. Yes, it's one of our solutions.

Mr. Kropelnicki. Congresswoman, I go back to cost of service rate making and making sure costs are fully reflected in the rates and to the extent it's an under privileged community

that you use a rate support fund or other mechanism to help true that up but it --

Ms. DeGette. So is that yes?

Mr. Kropelnicki. It's a conditional or a qualified yes.

Ms. DeGette. Okay.

Mr. E. Olson. Yes.

Ms. DeGette. And do all of you support new financing options to leverage federal dollars and lower interest rates?

Mr. Ellingboe. Yes.

Mr. Donahue. Yes, I do.

Mr. Chow. Absolutely.

Mr. DiLoreto. Yes.

Mr. Kropelnicki. Yes.

Mr. E. Olson. Yes.

Ms. DeGette. Thank you. Mr. Chairman, I know I could come up with some more provisions that we could all come to consensus around but I really think what this shows with this wonderful and diverse panel here is that we really can come to consensus around changes to the law so that the EPA can issue new and common sense standards for contaminants and we also need to work on ways to improve compliance versus effective enforcement.

And so with that, I really want to thank all of you. I am cognizant that I am the last questioner so I'll yield back. Thank you.

Mr. Shimkus. The gentlelady yields back her time and I appreciate her comments. I would just caution be careful not to ask for too much.

I do think there is a lot of areas in which we can agree and I am pretty excited. Great hearing. Appreciate your testimony. I have -- we will be submitting some additional questions to you. If you'd get those back we'd appreciate it.

I ask unanimous consent to the following items being inserted into the record: a letter from the National Groundwater Association, a statement from the mayor of Syracuse, New York, Stephanie Miner, a letter from American Rivers and an article from the New York Times dated December 24th, 2016 on drinking water.

Is there objection? Hearing none, so ordered.

[The information follows:]

**********COMMITTEE INSERT 8**********

Mr. Tonko. Mr. Chair?

Mr. Shimkus. Yes.

Mr. Tonko. The letter submitted by the mayor of Syracuse is responding to some of the advice that was provided today by the panel including making use of predictive analytics models so as to best understand where the leaks may be, where the frequent reoccurrences have been so as to have a better master plan, and then sensors also that they are applying for their water leaks -- a vibration system that then identifies.

So I think they are doing innovative things in Syracuse and it's the kind of message I think I heard here today -- to be able to use those innovative concepts to be able to stretch the dollars required and to best manage with most efficiency as the outcome.

So I thank you for entering it into the record.

Mr. Shimkus. Can the gentleman tell me whose congressional district that is in?

Mr. Tonko. It is not mine.

Mr. Shimkus. It is not?

Mr. Tonko. No, it is in, I think, Mr. Katko's.

Mr. Shimkus. What a good guy.

All right. So we appreciate you all attending and I will call the hearing adjourned.

[Whereupon, at 11:59 a.m., the subcommittee was adjourned.]