H.R. _____, ASSISTANCE, QUALITY, AND AFFORDABILITY ACT OF 2010

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND ENVIRONMENT

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

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THURSDAY, MAY 13, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 9:35 a.m., in Room 2322, Rayburn House Office Building, Hon. Edward J. Markey [chairman of the subcommittee] presiding.

Present: Representatives Markey, Inslee, Butterfield, Capps, Baldwin, Barrow, Waxman, Upton, Shimkus, Shadegg, Pitts, Burgess, Scalise, Griffith, and Barton.

Staff Present: Greg Dotson, Chief Counsel, Environment and Energy Subcommittee; Tracy Sheppard, Senior Environmental Counsel; Peter Ketcham-Colwill, Special Assistant; Jacqueline Cohen, Counsel; Melissa Cheatham, Professional Staff; Caitlin Haberman, Special Assistant; Mitchell Smiley, Special Assistant; Lindsay Vidal, Press Assistant; Jerry Couri, Minority Professional Staff; and Garrett Golding, Minority Legislative Analyst.

OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Good morning. Welcome to the Subcommittee on Energy and Environment.

We have a very important hearing today. Because when people turn on their bathroom or kitchen faucets, they often take for granted that an abundant supply of clean water flows freely into their taps. It is only when the water stops flowing due to a catastrophic failure that attention is given to the complexities of providing clean, safe drinking water.

A prime example of such a catastrophic failure occurred just over a week ago in Massachusetts when a breach in a 7-year-old pipe caused a water supply emergency that affected over 2 million residents of Boston and its surrounding areas, including a large portion of my congressional district. A boil water advisory lasted for several days. People swarmed the Stop and Shop and other grocery stores to stock up on bottled water. Restaurants and diners had to close because they had no water to serve or to wash dishes with. And people had to go through Monday without their morning cup of Dunkin' Donuts coffee, which resulted in a near riot at the Dunkin' Donuts across from my district office in Medford Square.

In the Boston papers, the entire incident became known as "Aquapocalypse".

Although the MWRA, the agency in charge of this water project, could not have anticipated this incident because the pipe that broke was so new, public attention immediately turned to the need for increased Federal funding for infrastructure projects that ensure a safe drinking water supply for years to come; and the MWRA did an excellent job in restoring service in a very short period of time.

The reality is that the country's drinking water infrastructure is aging rapidly. EPA estimates that over the next 20 years water systems will need to invest nearly $335 billion on infrastructure improvements to ensure safe water to our Nation. Water systems simply can't afford to do this on their own, and people who are already struggling to pay their water bills can't absorb their cost either. We cannot turn off the flow of Federal funding for this essential infrastructure at a time when our water systems need it most.

The Assistance, Quality, and Affordability Act that Chairman Waxman and I introduced will reauthorize the Safe Drinking Water Act State Revolving Fund for the first time since its creation in 1996 and will make a number of changes to invest in our future. The bill increases water project funding from $1.5 billion in 2011 to $6 billion in 2015. This will mean that more drinking water projects can be completed and that more jobs are created for people who need them. A December, 2008, report from the U.S. Conference of Mayors estimated that every million dollars of drinking water and wastewater infrastructure investment directly creates 8.7 jobs. Over the next 5 years, our legislation would therefore lead to more than 100,000 more jobs.

We have also included a new emphasis on cutting-edge projects to allow funding priority to be granted for projects that will make drinking water safe and affordable for years to come. We will also encourage projects that increase water and energy efficiency and projects that anticipate future problems and propose repairs before a crisis occurs.

We have ensured that we are directing resources to those who need it most so that water systems serving communities that can't afford to pay for the upgrades necessary to comply with Safe Drinking Water Act standards are given what they need to do.

We have also included a change in drinking water enforcement requirements that will ensure that systems that have violated drinking water standards in the past are inspected to ensure they stay compliant.

I would like to thank Congressman Bobby Rush for his work in this area following a truly horrific case in the village of Crestwood, Illinois, in which people were literally and knowingly poisoned by the water they were drinking for decades.

And, finally, this bill also includes my language to strengthen EPA's Endocrine Disruptor Screening Program. Endocrine disrupting chemicals are like computer viruses that over time can severely disrupt our body's operating system, and it is vital that EPA have a more robust and transparent program that screens drinking water contaminants to identify the chemicals that pose such concerns.

So I thank all of the witnesses for being here today.

Let me turn now and recognize the ranking member of the subcommittee, the gentleman from Michigan, Mr. Upton.

Mr. UPTON. Thank you, Mr. Chairman.

I ask unanimous consent that all members put in their opening statements as part of the record.

Mr. MARKEY. Without objection, so ordered.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Thank you for calling this hearing today.

Certainly, access to clean and safe drinking water is one of the most basic environmental issues. Changes in the Safe Drinking Water Act funding allocations and uses must be measured not just to what our suggested needs are but also what we as Americans can afford. We need to focus our attention on those items that help drinking water systems address immediate threats, comply with the law, and avoid the unfunded mandate issue that bedeviled States and municipalities and drove changes to the Safe Drinking Water Act back in 1996.

In looking at the proposed reforms, we should be particularly sensitive to the rate base of various communities, particularly rural communities and their ability to afford the mandates required of the Act. We need to make sure evaluations of cost for feasible treatment, technologies, and techniques are appropriate and meaningful when drinking water contaminant regulations are issued.

At a time when increasing debt is a major national and global issue, we need to be very careful about overspending and overexpanding eligible uses of the Drinking Water State Fund. The legislation in front of us authorizes nearly $15 billion over the next 5 years. This amount for only 5 years represents the entire amount appropriated for Congress for the Drinking Water State Revolving Fund over the last 14 years.

Finally, we need to understand what the new Endocrine Disruptor provisions in section 16 mean for EPA's existing programs. Program changes should be focused based on good science and complement the ongoing public and private investments in that effort.

I yield back my time.

Mr. MARKEY. The gentleman's time is expired.

The chair recognizes the gentlelady from California, Mrs. Capps.

OPENING STATEMENT OF HON. LOIS CAPPS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mrs. CAPPS. Thank you, Mr. Chairman.

I poured this glass of water, and I am assuming everything is safe to drink. It is an essential resource that we take for granted.

When Congress passed the Safe Drinking Water Act, the EPA gained the authority to regulate chemicals in our drinking water. But even with that authority there is troubling evidence that chemicals and other substances are polluting the Nation's water supply. Right now, there are more than 140 chemicals in our drinking water that EPA does not regulate. These pollutants include gasoline additives, pesticides, and even rocket fuel. They have prov-

en negative effects on people's health, indeed, some can even cause cancer; and we know that infants and pregnant women are especially vulnerable to their toxic effects.

Treating these and other emerging pollutants in our drinking water is extremely costly. The best way to keep them out of the water is to prevent them from getting there in the first place; and that is why I am pleased, Mr. Chairman, that you have convened this morning's hearing on the Assistance, Quality, and Affordability Act, AQUA.

As others have stated, our drinking water infrastructure is aging and in desperate need of upgrading. Unfortunately, it may take some serious money to do that. As you mentioned, Mr. Chairman, in 2007, EPA estimated $335 billion needed over 20 years to protect public health and ensure compliance with the law.

AQUA would authorize a much-needed increase in funding for the Drinking Water SRF. AQUA also provides incentives for public drinking water systems to ensure that they can better provide safe and affordable drinking water to their customers well into the future.

Greater weight is given to applications for funding that include, for example, measures to improve a system's energy and water efficiency or reduce its environmental impact. These are the types of projects that many water systems are already investing in as they prepare for the impacts of climate change.

I know there are many more topics that we could bring up in my opening statement, and I am looking forward to hear our witnesses talking about this in greater detail.

The legislation before us begins to make the steps and changes that we need to do, giving EPA the tools needed to protect our children and our communities across the country from dangerous water contamination. So I thank you, Mr. Chairman, for convening this hearing. I look forward to hearing from our witnesses, and I yield back.

Mr. MARKEY. I thank the gentlewoman.

The chair recognizes the gentleman from Pennsylvania, Mr. Pitts.

OPENING STATEMENT OF HON. JOSEPH R. PITTS, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. PITTS. Thank you, Mr. Chairman. Thank you for convening this hearing today on legislation to amend the Safe Drinking Water Act.

Like all of us, I believe it is essential to assure the quality of our public water supplies. Here in the United States, public water systems must meet extensive regulations, and water utility management has become a much more complex and professional endeavor. In 2007, the number of community water systems reporting no violations of drinking water standards was 89.5 percent, yet some issues and challenges remain despite this progress. It is imperative that we focus our attention on matters that help drinking water systems address immediate threats and comply with the law.

As we consider this bill before us, we need to be sensitive to the rate bases of various communities and their ability to afford the

mandates required in the legislation. We also need to make sure evaluations of cost for treatment, technologies, and techniques are appropriate and meaningful when drinking water contaminant regulations are issued.

Finally, we need to be extremely careful about spending and expanding eligible uses of the Drinking Water State Fund. The proposed authorization of $14.7 billion over the next 5 years is the entire amount appropriated by Congress for the Drinking Water State Loan Fund over the last 14 years.

I look forward to hearing from our witnesses today, and I yield back.

Mr. MARKEY. The gentleman's time has expired.

The chair recognizes the gentleman from Georgia.

Mr. BARROW. I thank the gentleman. I waive an opening.

Mr. MARKEY. The gentleman waives his time for an opening statement.

The chair recognizes the gentlelady from Wisconsin, Ms. Baldwin.

OPENING STATEMENT OF HON. TAMMY BALDWIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Ms. BALDWIN. Thank you, Mr. Chairman. I appreciate your work on this very important piece of legislation.

The Safe Drinking Water Act is a critical measure that helps to ensure the quality of Americans' drinking water. Our Nation's water system serves over 272 million people; and, as such, maintaining drinking water infrastructure, improving the sustainability and long-term viability of water systems, and enforcing drinking water violations are of utmost importance.

Among the concerns I have as we ensure a safe water supply is the presence of prescription drugs and other personal care product residues in our water supply. In 2008, the Associated Press in a study found pharmaceuticals in the drinking water supplies that serve approximately 46 million Americans. A vast array of pharmaceuticals, including antibiotics, mood stabilizers, and hormones were found in this examination. In my district, in particular in Dane County, Wisconsin, traces of acetaminophen and hormones have been found in some of the water systems. I am concerned that this problem will only increase as prescription drugs are used more frequently in American society.

While the concentrations of these pharmaceutical products are reportedly quite tiny, little is known about the effect these drugs and other personal care product residues have on health and the environment. The Federal Government currently does not require any testing and has not set safety limits for prescription drugs and personal care product residues in water. Much research still needs to be done to identify the sources of these elements so that we can effectively limit and prevent their presence. This bill provides an opportunity for us to investigate this further.

I look forward to hearing from our panel today and their thoughts on how we can address prescription drugs in our water through this AQUA bill.

Thank you, Mr. Chairman. I look forward to this hearing.

Mr. MARKEY. The gentlelady's time has expired.

The chair recognizes the gentleman from Louisiana, Mr. Scalise.

OPENING STATEMENT OF HON. STEVE SCALISE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. SCALISE. Thank you, Mr. Chairman. I appreciate the opportunity to discuss the Safe Drinking Water Act. Obviously, a clean water supply that is both safe and affordable is critical to the public health of our Nation, and I look forward to working with this committee as we work to ensure the integrity of our drinking water supply.

I do have concerns with the proposed legislation as it stands today, however. Particularly, it is important that we make sure that any legislation that we pass is both workable and avoids creating duplication of existing efforts. I look forward to working with the chairman as we continue to discuss the issues of this bill.

Also, as our unemployment rate hovers near 10 percent, I would like to encourage the Democrats who are running Congress to focus on finding ways to improve the job outlook in the private sector. While government seems to be the only part of our economy that is growing and more Federal spending continues to reign the day and we see continued growth in the size of the Federal Government, families and small businesses in our districts are cutting back. So, as Congress refuses to pass any kind of budget, American families are having to tighten their belts and make tough decisions on how to keep their household budgets fiscally responsible and manageable.

So I would hope as we talk about this legislation and other areas where government spending seems to be increasing we need to make sure that we are not duplicating efforts and not doing things that are going to hurt families out there even more than they are already hurting. We need to focus on creating jobs.

Thank you, and I yield back.

Mr. MARKEY. The gentleman's time has expired.

We move to our first witness. Cynthia Dougherty serves as the Director of the Environmental Protection Agency's Office of Ground Water and Drinking Water. As Director, Ms. Dougherty oversees the Drinking Water State Revolving Fund, which provides drinking water systems with funds to finance infrastructure improvements that protect human health and ensure the safety of our drinking water.

We welcome you, Ms. Dougherty. Whenever you are ready, please begin.

STATEMENTS OF CYNTHIA DOUGHERTY, DIRECTOR, OFFICE OF WATER, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; ROGER CROUSE, DIRECTOR, DRINKING WATER PROGRAM, MAINE DEPARTMENT OF HEALTH AND HUMAN SERVICES; STEPHEN ESTES-SMARGIASSI, DIRECTOR OF PLANNING, MASSACHUSETTS WATER RESOURCES AUTHORITY; SARAH JANSSEN, STAFF SCIENTIST, NATURAL RESOURCES DEFENSE COUNCIL; STEVE LEVY, EXECUTIVE DIRECTOR, MAINE RURAL WATER ASSOCIATION; AND TERRY QUILL, QUILL LAW GROUP, LLC

STATEMENT OF CYNTHIA DOUGHERTY

Ms. DOUGHERTY. Thank you, Chairman Markey, Congressman Scalise, and members of the committee. As you said, I am Cynthia Dougherty, the Director of the Office of Ground Water and Drinking Water at the U.S. EPA. Thank you for inviting me to testify today.

Administrator Jackson has expressed her commitment for ensuring the safety of our drinking water as a fundamental element of EPA's overall mission. Strong and reliable drinking water infrastructure is an essential component of public health protection.

For more than a decade, the Drinking Water State Revolving Fund has supported investment, upgrade, and improvement to maintain the Nation's drinking water infrastructure by offering public water systems, including small systems, access to financing for infrastructure improvements.

Implementation of the Endocrine Disruptor Screening Program is also part of one of Administrator Jackson's top priorities to make significant and long-overdue progress in assuring the safety of chemicals in our products, our environment, and our bodies. Issuing test orders for the generation of data to better understand potential endocrine effects is an important step in improving our ability to protect the public health and the environment from chemicals.

Under the Drinking Water SRF program, States provide low-cost loans and other types of assistance to public water systems to finance the cost of infrastructure projects needed to achieve or maintain compliance with drinking water requirements and otherwise improve public health. Since its inception, the Drinking Water SRF has provided over $16.2 billion of Federal and State assistance to over 6,600 projects that have improved public health protection for millions of people, with almost 40 percent of the assistance and more than 70 percent of the loans provided to systems serving fewer than 10,000 people.

To be sustainable in the long term, a water system must have the capacity to address existing needs as well as to be prepared for the future so it can continue to provide safe water today, tomorrow, and into that future. EPA recognizes our responsibility to ensure that all Americans, including those served by small water systems and in disadvantaged communities, receive safe drinking water.

The Safe Drinking Water Act currently provides tools to support sustainability through the SRF. These include the flexibility that States have to use optional set-asides that support capacity development and technical assistance. The Act also allows States to use

up to 30 percent of their capitalization grant to provide additional subsidized assistance for communities that meet affordability criteria established by the State. All but 14 States have used this authority at some level over the years for an estimated 19 percent of the Drinking Water SRF funds.

Given the accomplishments of the Drinking Water SRF to date and funding drinking water infrastructure improvements, there is some room to enhance aspects of the program to allow States to make better progress in key areas. We need to make sure we do that without diminishing the attractiveness to water systems of Drinking Water SRF funding. We appreciate the efforts of the committee to consider improvements in the program that focus on support for small systems and long-term sustainability.

The proposed legislation would also amend provisions of the Act related to the Endocrine Disruptor Screening Program. Public health protection from contaminants that may be in drinking water is of the highest priority for the EPA. By providing information to help us better understand potential endocrine effects of these chemicals, test orders issued through the screening program will be an important step in improving our ability to protect public health and the environment.

Under the requirements of the Food Quality Protection Act, we have already issued test orders covering 67 different pesticides chemicals; and, as instructed by the House Appropriation Committee this past year, EPA is preparing a second list of no less than 100 chemicals that will be drawn from the National Primary Drinking Water Regulations, the Contaminant Candidate List, and pesticides that are on the re-registration schedule for 2007 through 2008. We expect to begin issuing those test orders shortly and have that list out as well.

We look forward to working with the committee to continue our efforts to more effectively implement the screening program. Thank you very much.

[The prepared statement of Ms. Dougherty follows:]

TESTIMONY OF
CYNTHIA C. DOUGHERTY
DIRECTOR,
OFFICE OF GROUND WATER AND DRINKING WATER
OFFICE OF WATER
U.S. ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE
ENERGY AND ENVIRONMENT SUBCOMMITTEE
HOUSE ENERGY AND COMMERCE COMMITTEE
UNITED STATES HOUSE OF REPRESENTATIVES

MAY 13, 2010

Chairman Markey, ranking member Upton, and members of the committee, I am Cynthia Dougherty, Director of the Office of Ground Water and Drinking Water at the United States Environmental Protection Agency. Thank you for inviting me to testify today about the Drinking Water State Revolving Fund (DWSRF) and the Endocrine Disruptor Screening Program (EDSP).

Administrator Jackson has expressed her commitment to ensuring the safety of our drinking water as a fundamental element of EPA's overall mission. Strong and reliable drinking water infrastructure is an essential component of public health protection. One of the means EPA has to assist public water systems in achieving compliance with the Safe Drinking Water Act is the Drinking Water State Revolving Fund. For more than a decade the DWSRF has been helping to meet the need that exists for investment, upgrade and improvement to maintain the nation's drinking water infrastructure by offering public water systems, including small systems, access to financing for infrastructure improvements. The Fund's success secures the provision of safe drinking water for millions of Americans for years to come.

Also, implementation of the Endocrine Disruptor Screening Program is part of one of Administrator Jackson's top priorities: to make significant and long overdue progress in assuring

the safety of chemicals in our products, our environment and our bodies. Issuing test orders for the generation of data to better understand potential endocrine effects is an important step in improving our ability to protect the public health and the environment from chemicals.

I appreciate the Committee's interest and I welcome continued dialogue on these issues.

Success of the Drinking Water State Revolving Fund Program

The DWSRF program helps to ensure that the nation's drinking water supplies remain safe and affordable and that public water systems that receive funding are properly operated and maintained. The DWSRF program was established under the Safe Drinking Water Act (SDWA) Amendments of 1996 which authorize the Agency to award capitalization grants to States, which in turn are authorized to provide low-cost loans and other types of assistance to public water systems to finance the costs of infrastructure projects needed to achieve or maintain compliance with SDWA requirements. At their discretion, States may also use a portion of their capitalization grants to fund a range of set-asides designed in part to help small systems and disadvantaged communities. In addition, two percent of DWSRF appropriations are for tribal infrastructure improvements.

Since its inception, the DWSRF has provided over 16.2 billion dollars of federal and state assistance to over 6,600 projects that have improved public health protection for millions of people. 49 percent of the total funding has been provided through federal capitalization grants. Since 1997, almost 40% of DWSRF assistance has been provided to systems serving fewer than

10,000 people, and almost 19% of the funds have gone to disadvantaged communities, as defined by the States. [1]

One of the keys to the DWSRF's success is the considerable flexibility that states have to decide how funds are used to protect public health under varying state-specific circumstances. In addition to setting priorities among eligible projects, states are also able to choose how much money should be given to water systems in the form of subsidies and how much should revolve to provide for capitalization of the fund.

As of February 17th, the one-year anniversary of the American Recovery and Reinvestment Act (ARRA), EPA and its partners succeeded in placing 100 percent of available ARRA funding into contracts and into the economy, placing more than 1,300 projects under contract in all 50 states and Puerto Rico, totaling more than $1.8 billion. More than $500 million of this was in green infrastructure projects, exceeding the 20% Green Project Reserve requirement.

Sustainability

Water system sustainability, especially for small drinking water systems, is an ongoing challenge for the States and EPA. To be sustainable, a system must have the capacity to address existing needs as well as be prepared for the long term, so it can continue to provide safe water today, tomorrow and in the future. We at EPA particularly recognize our responsibility and the continuing work ahead of us to ensure that all Americans, including those served by small water systems and in disadvantaged communities, receive safe drinking water. Many small systems

[1] All numerical facts are from the DWSRF National Management System (DWNMS).

need help to achieve sustainability – 96% of health-based violations occur at systems serving less than 10,000 people. Small systems often face unique financial and operational challenges in providing safe drinking water. Many are not in business to provide drinking water as a primary function and lack the technical, financial, and managerial capacity necessary for successful operation in the long term.

The Safe Drinking Water Act currently provides some tools to support sustainability through the DWSRF. These include the flexibility that states have to use optional set-aides that support capacity development and technical assistance. In addition to the set-asides, the SDWA allows states to use up to 30% of their capitalization grant to provide additional assistance for communities that meet affordability criteria established by the state. In these disadvantaged communities programs, additional subsidization can be provided through principal forgiveness, negative interest rates and extended loan repayment terms. All but fourteen states have used the disadvantaged community provision at some level over the years, accounting for an estimated 18% of DWSRF funds.

DWSRF Authorities

The accomplishments of the DWSRF to date in funding drinking water infrastructure improvements have been remarkable. However, there is room to enhance aspects of the program to allow states to make better progress in key areas without diminishing the attractiveness to water systems of DWSRF funding. We appreciate the efforts of the Committee to spur improvements in the program. The proposed legislation, The Assistance Quality and Affordability Act of 2010, focuses on issues of fundamental importance to achieving the goals of the DWSRF, including support for small systems and long-term sustainability. We look forward to working with you on this recently released bill.

Endocrine Disruptor Screening Program

The proposed legislation would also amend provisions of SDWA related to the Endocrine Disruptor Screening Program (EDSP). Public health protection from contaminants that may be in drinking water is of the highest priority for the EPA. By providing information to help us better understand potential endocrine effects of these chemicals, test orders issued through the EDSP will be an important step in improving our ability to protect public health and the environment.

The Food Quality Protection Act of 1996 (FQPA) required that EPA develop and implement a program to screen all pesticides for any "effect in humans that is similar to an effect produced by a naturally occurring estrogen and such other endocrine effect" as EPA may designate and we have been working across programs to make this happen. EPA has already issued test orders covering 67 different pesticide chemicals and as instructed by the House Appropriations Committee[2], EPA is preparing a second list of no less than 100 chemicals. The List 2 chemicals will be drawn from three sources: National Primary Drinking Water Regulations, the Contaminant Candidate List 3 (CCL 3), and pesticides that are on the reregistration schedule for 2007 through 2008. The CCL3 List is a list of contaminants that are currently not subject to any proposed or promulgated national primary drinking water regulations, that are known or anticipated to occur in public water systems, and which may require regulation under SDWA. The CCL3 list includes pesticides, other chemicals used in commerce, and disinfection byproducts and degredates. We anticipate releasing the second list

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[2] H. Rep. No. 180, 111th Cong., 1st Sess. 105 (2009), http://frwebgate.access.gpo.gov/cgibin/getdoc.cgi?dbname=111_cong_reports&docid=f:hr180.111.pdf#Page=105

of chemicals shortly and expect to begin issuing test orders for the first 25 chemicals from the second list later this year.

The proposed legislation would expand the Agency's Endocrine Disruptor Screening Program by focusing on the testing of drinking water contaminants for endocrine disrupting activity. We will work with the Committee to continue our efforts to more effectively implement the EDSP.

Mr. MARKEY. Thank you, Ms. Dougherty, very much.

Our next witness, Roger Crouse, serves as the Director of the State of Maine Drinking Water Program, overseeing field inspection, operator licensing, and administration of the Drinking Water State Revolving Fund. Mr. Crouse is a licensed professional engineer with a master of science degree in civil engineering from Brigham Young University.

Welcome, sir.

STATEMENT OF ROGER CROUSE

Mr. CROUSE. Thank you, Mr. Chairman and members of the committee.

I am Roger Crouse, the Drinking Water Administrator from the State of Maine with responsibility for both the State's Drinking Water Program and the State's Drinking Water State Revolving Fund. I am representing the Association of State Drinking Water Administrators and appreciate this opportunity to offer testimony today on this important subject.

We applaud the efforts of the committee to reauthorize the SRF portions of the Safe Drinking Water Act. The basic provisions of the Act have served us well for the past 13 years, but we appreciate many of the proposed changes the committee has included in this draft bill. Our reaction to the package, taken as a whole, is quite positive. However, several of the provisions will be challenging and resource-intensive for States to implement. Our perspectives on key provisions of the bill are as follows:

Competitive Contracts: We believe that changes contemplated should take place at the national level and believe the bill needs to be clarified in this regard. We would object to this provision if it is intended to apply to technical assistance contracted issued by States, because such a restriction could take away the State's ability to hire the best qualified third-party technical assistance providers.

Davis-Bacon Provisions: States are split on this element of the draft bill. States with comparable provisions in their State laws recommend adding a phrase acknowledging that a State may satisfy Davis-Bacon requirements by implementing comparable and equivalent State prevailing wage rate laws. Other States feel that Davis-Bacon provisions unnecessarily inflate the cost of drinking water infrastructure projects.

Lists of Systems with Variances, Exemptions, or Persistent Enforcement Violations: It doesn't serve a practical purpose to include a system with a variance exemption or persistent violation in a State's Intended Use Plan if the system has not expressed an interest in participating in the SRF. We recommend that this provision be changed to only require this information for systems wishing to participate in the loan fund.

Priority for Disadvantaged Systems Out of Compliance: We support the approach of allowing States, rather than EPA, to make and apply disadvantaged system definitions. However, the evaluation criteria provision will be challenging for States to implement because of the need to determine the affordability of new standards. While some States have longstanding disadvantaged system

programs, this will be a new requirement for many that will need to be carefully administered.

Weight Given to Applications—General Observations: We believe the various weighting factors listed in the draft bill are a sound and appropriate set of considerations. Nonetheless, States will be challenged to develop new methods of assessing managerial and financial stability and to adjust the SRF scoring systems accordingly.

Weight Given to Applications—Green Projects: States support energy and water conservation projects and continue to seek those projects in SRF applications. We appreciate that green projects would be considered in the bill in terms of a weighting factor, rather than as a mandatory percentage, as was the case under ARRA.

Four Percent for Disadvantaged Communities: States generally agree with this requirement to use 4 percent of their funds on disadvantaged communities, and many are doing so now.

Changes to State Set-Asides: States very much appreciate that the bill would increase the administrative set-aside from 4 to 6 percent. We also appreciate removal of the 100 percent match for 10 percent State Program Management Set-Aside.

Although not a feature of the current version of the proposed bill, we recommend that States be allowed to use the 15 percent Set-Aside on State source water protection activities in addition to the assessment activities, as the Safe Drinking Water Act currently provides.

Realloted Funds for Disproportionally Impacted Systems: States generally support this provision. However, many States don't currently have staffing, tools, or expertise to evaluate, identify, and track the impact on each disadvantaged system.

Prescriptive Inspection Requirements: States generally do not support this provision and prefer the existing framework of escalating enforcement responses, including inspections, where appropriate, to return facilities to compliance. The requirement envisioned will have resource implications in terms of additional staff time and documentation and not necessarily produce the intended results.

Definition of Lead Free: States believe manufacturers have already adjusted to the proposed new definition. Some States' laws would need to be changed. However, revisions to State laws are not expected to be a major undertaking.

These are our views on selected provisions. We have provided a more detailed version of these comments to committee staff. This committee is on the right track with this draft bill.

I would be happy to answer any questions you may have about our perspective on the bill or how States administer the Drinking Water State Revolving Fund program.

Thank you.

[The prepared statement of Mr. Crouse follows:]

Association of State Drinking Water Administrators

Testimony on
Assistance, Quality, and Affordability Act of 2010
Before the
House Energy and Commerce Subcommittee on Energy & Environment
May 13, 2010

I am Roger Crouse, the drinking water administrator for the state of Maine, with responsibility for both the state's drinking water program and the state's drinking water State Revolving Fund (SRF). I am representing the Association of State Drinking Water Administrators and appreciate this opportunity to offer testimony today on this important subject.

We applaud the efforts of the committee to reauthorize the SRF portions of the Safe Drinking Water Act. The basic provisions of the Act have served us well over the past 13 years, but we appreciate many of the proposed changes the committee has included in this draft bill. Our reaction to the package, taken as a whole, is quite positive. However, several of the provisions will be challenging and resource-intensive for states to implement. Our perspectives on the key provisions of the bill are as follows:

Competitive Contracts: We believe the changes contemplated should take place at the *national level* and believe the bill needs to be clarified in this regard. We would object to this provision if it's intended to apply to technical assistance contracts issued by states -- because such a restriction could take away a state's ability to hire the best qualified 3rd party technical assistance providers.

Davis-Bacon Provisions: States are split on this element of the draft bill. States with comparable provisions in their state laws recommend adding a phrase acknowledging that a state may satisfy Davis-Bacon requirements by implementing comparable and equivalent state prevailing wage rate laws. Other states feel that including Davis-Bacon provisions unnecessarily inflates the cost of drinking water infrastructure projects.

List of Systems with Variances, Exemptions or Persistent Enforcement Violations: It doesn't serve a practical purpose to include a system with a Variance, Exemption or persistent violations in a state's Intended Use Plan -- *if* the system has not expressed an interest in participating in the SRF. We recommend that this provision be changed to only require this information for systems wishing to participate in the loan fund.

Priority for Disadvantaged Systems Out of Compliance: We support the approach of allowing states, rather than EPA, to make and apply disadvantaged system definitions. However, the evaluation criteria provision will be very challenging for states to implement because of the need to determine the affordability of new standards. While some states have longstanding programs; this will be a new requirement for many that will need to be carefully administered.

Weight Given to Applications – General Observations: We believe the various weighting factors listed in the draft bill are a sound and appropriate set of considerations. Nonetheless, states will be challenged to develop new methods of assessing managerial and financial stability and to adjust the SRF scoring systems accordingly.

Weight Given to Applications – Green Projects: States support energy and water-conservation projects and continue to seek those projects in SRF applications. We appreciate that green projects would be considered in the bill in terms of a weighting factor, rather than as a mandatory percentage (as was the case under ARRA).

4% for Disadvantaged Communities: States generally agree with the requirement to use 4% of their funds on disadvantaged communities and many are doing so now.

Changes to State Set-Asides:

- States very much appreciate that the bill would increase the administrative set-aside from 4-6%.

- We also appreciate removal of the 100% Match for 10% State Program Management Set-Aside.

- Although not a feature of the current version of the proposed bill, we recommend that states be allowed to use the 15% Set-Aside on state source water *protection* activities, in addition to assessment activities, as the SDWA currently provides.

Realloted Funds for Disproportionately Impacted Systems: States generally support this provision. However, many states don't currently have the staffing, tools, or expertise to evaluate, identify, and track each disadvantaged system impacted.

Prescriptive Inspection Requirements: States generally do *not* support this provision and prefer the existing framework of escalating enforcement responses (including inspections, where appropriate) to return facilities to compliance. The requirement envisioned will have resource implications, in terms of additional staff time and documentation, and not necessarily produce the intended results.

Definition of Lead Free: States believe manufacturers have already adjusted to the proposed new definition. Some state laws would need to be changed; however, revisions to state laws are not expected to be a major undertaking.

These are our views on selected provisions. We've provided a more detailed version of these comments to Committee staff. The Committee is on the right track with this draft bill. I'd be happy to answer any questions you may have about our perspectives on the bill or how states administer their DWSRF programs

Mr. MARKEY. Thank you, Mr. Crouse, very much.

Our next witness is Steven Levy. He is the Executive Director of the Maine Rural Water Association and the Atlantic States Rural Water Association, which serves Rhode Island and Connecticut. He has over 30 years of experience in the financing and organization of water systems.

Welcome, sir.

Mr. LEVY. I am not very good with technology.

Mr. MARKEY. With the exception of water technology, hopefully.

STATEMENT OF STEVEN LEVY

Mr. LEVY. Well, I am better with money than technology.

Good morning, Mr. Chair and committee members. Thank you for the opportunity to testify.

As said earlier, I have worked for over 30 years for the Maine Rural Water Association and Atlantic States Rural Water Association, and I focus more on funding than on technology.

I am here today representing over 24,000 community members in the National Rural Water Association. As you know, when it comes to providing safe water and compliance with Federal standards, small and rural communities have a difficult time due to their limited customer base. This is compounded by the fact that these communities often have low or medium household incomes and higher water rates compared to larger communities. As a result, the cost of compliance is dramatically higher for small systems on a per-household basis. However, the vast majority of U.S. water supplies are small. Ninety-two percent of the country's 52,000 community water supplies serve less than 10,000 people.

We want to thank the committee for the important new policy directions in the Assistance, Quality, and Affordability Act, your SRF authorization bill that, if enacted, will improve the current program.

The proposed bill increases the role of technical assistance in the Nation's drinking water safety program. Its reliance and recognition of technical assistance will ensure small communities will have access to technical resources needed to operate and maintain water infrastructure, comply with standards in an economical way, and obtain assistance in applying for State Revolving Loan Funds.

The NRWA technical assistance effort is truly unique in the Federal system to protect public health because it accomplishes progressive environmental protection with the support of the local community. Without these initiatives, the effective implementation of the Safe Drinking Water Act in our rural and community water supplies would be nearly impossible.

The need for rural water systems continues to increase with the expansion of Federal water regulations. The bill includes new provisions for solving two of the most pressing and intractable issues in the current drinking water program: affordability of the rules in disadvantaged communities and ensuring SRF funding is targeted to the most needy communities.

Communities exhibiting the greatest need should receive funding first. Commonly, low-income communities do not have the ability to pay back a loan, even with very low interest rates, and require

some portion of grant or principal forgiveness funding to make a project affordable to the ratepayers.

The proposed bill retains key elements that ensure targeting of funding to the most needy communities, including a minimum set-aside for small systems, a disadvantaged community subsidy, and a prioritization for the most serious risk to human health.

The 1996 Act grants States considerable discretion in the operation of their revolving loan fund with regard to providing principal forgiveness and defining disadvantaged communities and in targeting funds. As a result, there is a great variety in their programs throughout the country.

The proposed bill recognizes small system funding constraints in the newly drafted provisions contained in section 8 and section 7.

The Priority and Weight of Application section includes a process for States to consider affordability of new standards, which we support. We urge you to consider applying this provision to all existing standards because many of the current standards are resulting in affordability problems.

The new Disadvantaged Communities section targets SRF funding to the systems identified in a new IUP approach. We support these innovative provisions.

We urge the committee to reconsider a provision in section 8 regarding the proposal to allow funding a portion of the system under the Disadvantaged provision of the SRF. This fundamentally changes the relationship between a primary agency and a regulated water system. This proposal could also serve as a disincentive for water systems to view their systems as a whole and may in fact generate reverse cherry-picking for infrastructure replacement.

Finally, we ask the committee to please consider including an Etheridge bill type provision to attempt to direct technical assistance funding to be most beneficial to small communities.

As currently written, the bill would retain the current process where EPA chooses not to fund the most effective and beneficial drinking water safety assistance initiatives for small communities but instead fund other EPA priorities. Representative Etheridge's bill requires EPA to weigh what small communities believe is most beneficial when making decisions on providing assistance to them. This seems only reasonable in making assistance the most beneficial.

Thank you again, Mr. Chairman, and members of the committee, for this opportunity to testify today. I look forward to answering any questions.

And in my last two seconds, I want to thank Maine for being such a strong advocate for rural water systems. They have done a fabulous job.

[The prepared statement of Mr. Levy follows:]

TESTIMONY OF STEVEN LEVY
EXECUTIVE DIRECTOR, MAINE RURAL WATER ASSOCIATION
ON BEHALF OF THE
NATIONAL RURAL WATER ASSOCIATION
REGARDING THE
"THE ASSISTANCE, QUALITY, AND AFFORDABILITY ACT OF 2010"
MAY 13, 2010

National Rural Water Association

"Grassroots Environmental Protection in Rural and Small Communities"

The country's largest community based environmental association, representing over 24,000 small and rural communities' water supplies.

Good morning Mr. Chairman and Committee Members – and thank you for the opportunity to testify today on behalf of small and rural communities on this important public health issue.

As you know, when it comes to providing safe water and compliance with federal standards, small and rural communities have a difficult time due to their limited customer base. This is compounded by the fact that small and rural communities often have lower median household incomes and higher water rates compared to larger communities. As a result the cost of compliance is often dramatically higher per household. However, the vast majority of U.S. water supplies are small, 92 percent of the country's 52,000 community water supplies serve less than 10,000 persons.

I am Steven Levy, the Executive Director of the Maine Rural Water Association and the Atlantic States Rural Water Associations in Connecticut and Rhode Island. I am familiar with the financing programs in these three states. I work directly with small and rural communities' water infrastructure funding – securing about 20 million dollars a year for specific communities over the past 30 years. I am here today representing over 24,000 community members in the National Rural Water Association.

We would like to thank the committee for the important new policy directions in the "Assistance, Quality, and Affordability Act of 2010," your SRF reauthorization bill that, if enacted, will improve the current program.

The proposed bill increases the role of technical assistance in the nation's drinking water safety program. Rural and small communities want to ensure quality drinking water and wastewater. After all, local water supplies are operated by people who are locally elected and whose families drink the water every day. However, they need common-sense technical assistance in a form they can understand. Many small communities rely on volunteers or part-time administration to operate their local water supplies. The bill's reliance and reorganization of technical assistance should allow small communities to have access to technical resources needed to operate and maintain water infrastructure, comply with standards in the most economical way, and obtain assistance in applying for state revolving loan funds.

With a significant turnover in water operators and board members, and the ever-increasing regulatory burden, the need for training and technical assistance remains constant. A typical on-site contact could include ensuring the water service is protected from terrorism, discovering and repairing a faulty gas chlorination system, assisting a community remove and replace the filtration media, training a new operator to run that particular treatment system, finding engineering and construction errors in a new sewer system, implementing a non-point pollution prevention plan, solving lead and copper rule problems, or completing all the paperwork for funding programs including the SRFs . Often the assistance saves thousands of dollars for the community and keeps the systems in long-term compliance with EPA rules.

The NRWA technical assistance effort is truly unique in the federal system to protect public health because it accomplishes progressive environmental protection with the support of the local community. Having local community support for environmental protection is essential to its long-term success. Without these initiatives effective implementation of the Safe Drinking Water Act and Clean Water Act in our rural areas would be nearly impossible. The need for rural water assistance continues to increase with the expansion of federal water regulations including arsenic, radon, operator certification requirements, disinfection by-products, and the ground water treatment rule - in addition to the over 80 EPA rules that are currently on the books.

The bill includes new and innovative provisions for solving two of the most pressing and intractable issues in the current drinking water program; affordability of the rules on disadvantaged communities and ensuring SRF funding is targeted toward the most needy communities.

Communities exhibiting the greatest need should receive funding first. A significant portion of the funding should flow toward small systems because, generally, they need it more. Rates are often much higher per household in small communities – often from compliance requirements. It only makes sense that federally subsidized funding would flow toward the communities with the greatest need. Commonly, the most needy communities will not have the ability to pay back a loan – even with very low interest rates – and require some portion of grant (or principle forgiveness) funding to make a project affordable for the ratepayers.

The proposed bill retains the key elements that ensure targeting of funding to the most needy communities including:

- A minimum set-aside for small systems.
- A disadvantaged community subsidy.
- Requirements to prioritize funding address the most serious risk to human health; to ensure compliance; and assist systems most in need on a per household basis.

The 1996 Act grants states considerable discretion in the operation of their revolving loan funds with regard to providing principal forgiveness, in defining disadvantaged communities, and in targeting funds to the most needy communities. As a result, there is great variety in programs, with some states providing no forgiveness, with other states targeting significant resources to needy systems.

The proposed bill recognizes small system funding constraints in newly drafted provisions contained in **Priority and Weight of Applications (Section 7) and Disadvantaged Communities (Section 8).**

The new **Priority and Weight of Applications** section includes a new process for states to consider affordability of new standards related to SRF funding by *"evaluating whether capital improvements required to meet the new standard are affordable for disadvantaged communities... [and] If the state finds that such capital improvement do not meet affordability criteria for disadvantaged communities, the state's IUP shall provide that priority use of funds... by giving priority to systems affected by the standards and serving disadvantaged communities."* Please consider applying this provision to all standards not just new standards because many current standards are resulting in affordability problems that this provision could assist (arsenic, disinfection by-products, ground water rule, SWTR, lead/copper, etc). The new **Disadvantaged Communities** section targets SRF funding to the systems identified in the new IUP approach. We support these new and innovated ideas/provisions and believe they would be helpful in ensuring the intent of the SRF is accomplished.

We urge the Committee to reconsider a provision in Section 8, regarding the proposal to allow funding a "portion" of a system under the "disadvantaged" provision of the SRF. This fundamentally changes the current relationship between a primary agency of the EPA, and the regulated water systems as a whole. This proposal could serve as a disincentive for water systems to view their systems as a whole, and may in fact generate reverse "cherry picking" for infrastructure replacement. It could also complicate loan/forgiveness relationships with SRFs given that these could be multiple deals within one loan. Finally, the current Community Development Block Program under HUD already has the expertise and funding to target infrastructure dollars to needy portions of larger communities.

It is already more difficult for small communities to access SRF funds than large communities, this provision would likely compound this problem – and large communities' economies of scale put them in a much better position to access the low-interest loans available from the SRFs to provide assistance to the disadvantage portions of their communities and still remain financially viable.

Finally, please consider including an Etheridge bill (HR 2006) type provision to attempt to direct technical assistance funding to be most beneficial to small communities. As currently written, the bill would retain the current process where EPA chooses not to fund the most effective and beneficial drinking water safety assistance initiatives for small communities – but, instead, fund other EPA priorities. Representative Etheridge's bill requires EPA to weigh what small communities believe is most beneficial when making decisions on providing assistance to them – this only seems meritorious in making assistance the most beneficial.

Thank you Mr. Chairman and Members of the Committee for your assistance, and the opportunity to testify today – and I look forward to answering any questions.

Initial Comments (5/9/2010) – Mike Keegan, Analyst
Section 2: Technical Assistance
Reauthorizes current technical assistance authorization without significant changes. Increases authorization from $15 million to $20 million. Does not include Etheridge bill (HR 2006) type provision to attempt to allow technical assistance funding to be provided in the manner most beneficial to small communities. As currently written, the bill would retain the current process where EPA chooses not to fund the most effective and beneficial drinking water safety assistance initiatives in small communities – but, instead, fund other EPA priorities. Also, we are concerned that the earmarking provision in this section may result in Congress limiting its authority to direct technical assistance funding that is the most effective within their Districts if the Congress determines that EPA is not funding the preferred initiatives. Under the FY2007 Continuing Resolution, EPA utilized their one-year discretion to choose not to continue funding for the existing technical assistance initiatives that had been prioritized by Congress.

Section 3: Prevailing Wages
The recent Davis-Bacon requirements are diminishing the advantages that subsidized interest rates provided to SRF borrowers. Currently, some SRF projects are rejecting the SRF and issuing bonds as these borrowers prefer not to comply with prevailing wage requirements. Prevailing wage requirement increases the cost of projects and decreases the amount available for construction and providing public health and environmental projects/services at lowest cost. Recognizing there is a (greater) public welfare benefit to prevailing wage requirements, we do not take a position on the issue, and recognizing the funding is from the federal government with federal objectives, we defer to Congress on merit of including the requirement in the SRF.

Section 4: Use of Funds
Expands use of funds to be eligible for planning, designing, pre-construction, aging infrastructure, capturing sustainable energy, etc. – in addition to compliance expenditures. This does not seem to be a dramatic change in use of funds as many of these expenditures have been funded in the past – and the new expenditures would still be awarded based on need. Allows states greater flexible on use of SRFs for financing state GO bonds. This could serve as a disincentive for increased use of the grant authorities in the SRF; however, it will be at the discretion of the states.

Section 5: Data on Variances, etc.
Requires that states report additional information in the process of developing their intended use plans such as systems with variances, exemptions, and "persistence" violations. These systems, ostensibly, should be the priority for funding for SRF funding (and perhaps have not been), and this disclosure can only help direct the SRF funding toward its enumerated/meritorious priorities.

Section 6: Assistance for Restructuring
Expands or clarifies the definition of restructuring under the act. It does not provide any additional authorities to the federal governmental to require restructuring. The new definition only clarifies what is commonly understood to mean restructuring.

Section 7: Priority and Weight of Applications
Expands the criteria/priority for awarding SRF beyond the current three priorities (risk health, compliance, and most in need) to include affordability compliance in the future. This new criterion seems ambiguous and subjective compared to the current criteria – however, it doesn't appear to

significantly redirect the current priorities for funding. Also this section includes a new process for states to consider affordability of new standards related to SRF funding by "evaluating whether capital improvements required to meet the new standard are affordable for disadvantaged communities... If the state finds that such capital improvement do not meet affordability criteria for disadvantaged communities, the state's IUP shall provide that priority use of funds... by giving priority to systems affected by the standards and serving disadvantaged communities. This new provision would be helpful and should be applied to all standards not just new standards because many current standards are resulting in affordability problems that this provision could assist (arsenic, disinfection by-products, ground water rule, SWTR, lead/copper, etc). This subsection also includes a new series of reporting requirements/topics (what are commonly referred to as sustainability elements) for SRF applicants. This new provision seems redundant to current limitations in the current SRF: *"Except as provided in subparagraph (B), no assistance under this section shall be provided to a public water system that— (i) does not have the technical, managerial, and financial capability to ensure compliance with the requirements of this subchapter; or (ii) is in significant noncompliance with any requirement of a national primary drinking water regulation or variance."*

The new reporting could overwhelm many smaller communities' (and the most worthy) ability to apply for funding – as is the case now with some states capacity development reporting criteria. This potential problem would be ameliorated by mentioning in the bill that the reporting should be scaled to various system sizes and by ensuring technical assistance is available to small communities to assist with the funding process.

Section 8: Disadvantaged Communities
It is unclear where this new 4 percent provision is in the current law and its intent. It seems that all (100 percent) of the states' grant should be used to target the systems identified in the new IUP process because they are the most needy and economically disadvantaged. Regarding the new provision to allow for the funding of a "portion" of a water system under the SRF, this fundamentally changes the current federal program/relationship of requiring compliance from the regulated water system, as a whole organization, and providing funding to the community as a whole. It will serve as a disincentive for a community to function as a holistic social/public welfare institution and encouraging civic responsibility for the welfare of the entire community water supply. Also it could lead to a moral hazard where the wealthier portion of the community has an interest in sequestering funds from lower-income portions of the community because (under this proposal) the lower-income portions of the community could apply for subsidized federal funding – that much of which was contributed from communities, as a whole, are less affluent than the community receiving the subsidy. Also it would seem de facto that every community that would apply for this funding could otherwise afford to pay for the project with an SRF loan (or else they would qualify as a disadvantaged community under the status quo). Federal funding programs designed to assist with SDWA should retain the emphasis on providing funds to the entity they regulate (i.e. community water systems). This retains the traditional federal/state/local governing structure. Local governments should be encouraged to be responsible for being the primary source for the entire community welfare. Currently, the Community Development Block Grant program makes such grants, and is a more appropriate agency to administer this type of funding because of its economic development expertise and non-regulatory mission. It is already more difficult for small communities to access SRF funds than large communities, this provision would like compound this problem. And large communities' economies of scale put them in a much better

position to access the low-interest loans available from the SRFs to provide assistance to the disadvantage portions of their communities and still remain financially viable.

Section 9: Administration of State Loan Funds
Allows states a larger set-aside to administer their SRF funds. The main set-aside in the SRF that is achieving compliance, improving water quality, and providing communities assistance to access SRF assistant in the vast majority of water supplies is the 2 percent technical assistance in the SRF. This set-aside provision should be raised to 4 percent. The use of the set-aside is up to the discretion of the state (and it is not mandatory).

Section 10: Authorization of Appropriations
Increase the annual authorization of appropriations

Section 11: Negotiation of Contracts
Applies only to large communities

Section 12: Authorization of Appropriations
Requires the EPA to continually revise list of affordability technologies for small communities. Allows EPA to re-direct additional "pooled' SRF funds to states with greater compliance affordability burdens.

Section 13: Authorization of Appropriations
Changes standard setting provision from "taking cost into consideration" to include taking lifecycle costs, maintenance, replacement, and avoided costs into consideration. Unclear how this would affect the standing setting section. However, it does not appear problematic on its face.

Section 14: Enforcement
Provides EPA with new authority to develop regulations for conducting inspections of systems in violation or post violation. Content, frequency, or degree of inspection not clarified. Problematic because EPA has shown inability to assess or advise systems on operations or even compliance assistance. Unclear what EPA would be inspecting or what enforcement action could be taken in a system in compliance. Inspections are limited to violations and EPA is to consider the severity and frequency of violations in conducting inspections. Perhaps the self-assessment under the recent TCR rule revisions could be looked at as a model for this policy objective? It appears that the inspections would be conducted by state agencies, however, this needs to be verified.

Section 15: Reducing Lead in Drinking Water

Mr. MARKEY. Maine has done a great job. And Massachusetts did a good job in breaking off Maine and making it a State in 1820 as part of the Missouri Compromise, where Maine would have two Senators opposed to slavery and Missouri would have two Senators in favor of slavery. So Maine was part of Massachusetts, and we are very proud of how well they have done since we broke them up.

So let's move to our next witness.

Stephen Estes-Smargiassi is the Director of Planning at the Massachusetts Water Resources Authority, where he has worked for 23 years. I want to note that I have the third-most Italian of 435 congressional seats.

He is an engineer and planner with a bachelors of science in civil engineering from MIT and a masters in planning from Harvard University.

Stephen and the rest of the MWRA team have had their hands full addressing the recent water main break in the greater Boston area and taking all of the corrective actions necessary.

I can imagine how valuable your time is right now, so we very much appreciate your being here. Thank you.

STATEMENT OF STEPHEN ESTES-SMARGIASSI

Mr. ESTES-SMARGIASSI. Good morning. I am Steve Estes-Smargiassi, Director of Planning at the MWRA in Boston.

MWRA is the wholesale water supplier to 61 cities and towns in eastern and central Massachusetts, serving about 2.8 million people. We are an active member of the American Water Works Association and the Association of Metropolitan Water Agencies. MWRA appreciates the opportunity to testify here this morning on the Assistance, Quality, and Affordability Act of 2010.

As Chairman Markey has indicated, MWRA experienced a major water supply emergency 2 weeks ago. While the causes of the incident won't be known for some time, as the full-scale investigation is really just in its infancy, I can certainly say that it galvanized public attention on the value of water supply infrastructure.

We all take for granted, even those of us in the business, that when we open the tap a plentiful supply of safe drinking water will flow. Only when it stops flowing or when we tell people they have to boil it do we stop to think about how much goes into turning rainwater into drinking water.

Two Saturdays ago, a major leak erupted on a 120-inch steel pipe connecting two major tunnels. The pipeline was part of a new project, a new tunnel system built to enable us to take the now 7-decade-old Hultman Aqueduct out of service for inspection and repairs. We, fortunately, were able to reroute water around the break, activate emergency sources and a pump station using facilities and plans developed over the last decade to ensure that our customers had water for flushing toilets, fighting fires, and, with the serious inconvenience of having to boil it, drinking and cooking. In less than 2 days we were able to make the repair to the pipeline, and before 4 days had elapsed Governor Patrick was able to lift the boil water order for our system.

MWRA, like many older urban areas, has a significant amount of older piping. In 1985, when we were created, over half of our pipe was over 80 years old; a fifth of our pipe was over 100 years

old. Aging facilities can contribute to degradation of water quality, including aesthetic concerns, problems with compliance with distribution system water quality rules, and increased frequency of leaks and breaks.

Inclusion of replacement and rehabilitation of aging facilities as an eligible SRF item will assist utilities in maintaining and improving system water quality all the way to the tap, while helping to control costs to our repairs.

MWRA is fortunate that the Commonwealth of Massachusetts has a forward-looking environmental agency overseeing the SRF. Our State Department of Environmental Protection has already added green infrastructure and an emphasis on rehabilitating old water and sewer assets to the program guidelines, and we have been able to fund a significant number of projects through that. We are here today in support of this bill because that increased funding flexibility and focus on aging water assets should be available to systems nationwide.

The SRF program has proven to be an important component of managing the MWRA's cost of capital. We have realized debt service savings of over $700 million since our 1993 program.

It is difficult for any utility to sustain support for yearly rate increases sufficient to fully cover the need to rehabilitate aging infrastructure, and this legislation's expansion of the SRF eligibility will help communities afford well-maintained water systems.

Switching gears, I would like to say lead in drinking water is the number one water quality concern for our customers. While there is no lead in our source water, consumers can have lead leach out of their home plumbing. After the Lead and Copper Rule was issued by EPA in 1991, we moved rapidly to build modern corrosion treatment; and, as a result, our lead levels have dropped by almost 90 percent.

You undoubtedly recall the Washington, D.C., lead issues of several years ago. A common theme which arose out of the efforts to understand and respond to that issue was the fact that common plumbing fixtures, such as faucets and drinking water fountains, could leach excessive amounts of lead and still be available for sale and use under current Federal law. The Safe Drinking Water Act defines lead free as up to 8 percent lead in a brass component. This is simply wrong and should be remedied as soon as possible. However, to date, no Federal action on the allowable amount of lead in brass has occurred, and only two States have taken the necessary legislative action to resolve the outrage that a consumer can walk into a home improvement center and buy a fixture that may poison his or her child. California and Vermont now mandate that no more than one-quarter of 1 percent brass be lead. Making that national would make a big step forward, ensuring sure access to safe products and safe water for all Americans.

In conclusion, MWRA utilities across the country must make difficult choices in determining the best ways to spend limited ratepayer funds because our needs far exceed our ability to raise rates. Adequate funding and flexibility to move forward will help us meet those critical needs.

Thank you.

[The prepared statement of Mr. Estes-Smargiassi follows:]

MASSACHUSETTS WATER RESOURCES AUTHORITY
BEFORE THE
COMMITTEE ON ENERGY AND COMMERCE
U. S. HOUSE OF REPRESENTATIVES

STATEMENT ON
"ASSISTANCE, QUALITY AND AFFORDABILITY ACT OF 2010"
MAY 13, 2010

PRESENTED BY
STEPHEN ESTES-SMARGIASSI
DIRECTOR OF PLANNING
MASSACHUSETTS WATER RESOURCES AUTHORITY
BOSTON, MASSACHUSETTS

INTRODUCTION

Good morning Mr. Chairman. I am Stephen Estes-Smargiassi, Director of Planning, at the Massachusetts Water Resources Authority (MWRA), in Boston, Massachusetts. MWRA is the wholesale provider of water and wastewater services to 61 cities and towns in eastern and central Massachusetts, serving a total of about 2.8 million people and over 5,000 businesses. MWRA has a capital budget of $1.144 billion for the current five year period covering fiscal year 2009 through 2013 and expects to spend $250.6 million on water and wastewater infrastructure this fiscal year.

Many of you are undoubtedly aware of the water supply emergency that MWRA experienced two weeks ago. While the causes of the incident will not be known for some time, as the full scale investigation is in its infancy, I can certainly say that it galvanized public attention on the value of the water supply infrastructure. We all take for granted that when we open the tap, a plentiful supply of safe drinking water will flow; only when it stops flowing or we're told to boil it, do we stop to think about how much goes into turning rain into drinking water.

On the morning of May 1st, a major leak erupted on a 120" steel pipeline connecting two major tunnels. The pipeline was part of a new tunnel system built to enable MWRA to take the now seven-decade old Hultman Aqueduct out of service for inspection, repairs and the construction of interconnections. MWRA was able to quickly re-rout water around the area of the break, and activate an emergency pump station and backup supply using facilities and plans put in place over the past decade, ensuring that adequate water pressure and flow was maintained so our customers had water for flushing toilets, fighting fires, and other uses. However, because of uncertainty as to whether the water met the same high standards, a boil order was instituted. In less than two days, repairs to the pipeline were made, and before four days had elapsed, Governor Patrick was able to lift the boil water order.

BACKGROUND

MWRA appreciates the opportunity to provide testimony here today on the "Assistance, Quality, and Affordability Act of 2010". The proposed legislation includes a number of components that MWRA and other utilities across the nation will find valuable. Increasing the type of projects able to secure revolving loan funds will allow older metropolitan areas to leverage additional critical water system rehabilitation and improvement work while keeping costs manageable to our ratepayers.

MWRA's water system includes its source reservoirs, treatment facilities, transmission lines, and distribution system facilities and pipelines. The system (excluding the source reservoirs) has an estimated asset replacement value of over $6 billion. MWRA's 2006 Water System Master Plan identified water system needs for the FY07-FY48 timeframe at approximately $1.1 billion (in 2006 dollars).

Ongoing capital projects and identified capital needs include significant work to: improve both transmission system and localized distribution system redundancy; provide additional treatment to meet Safe Drinking Water Act requirements; construct additional distribution system storage; rehabilitate and replace old cast-iron mains; ensure system security; and, systematically upgrade and replace other water system assets including facilities, equipment, dams and support systems.

In addition, funds provided through the Massachusetts Department of Environmental Protection 2009 Intended Use Plan have allowed MWRA to expand the use of green infrastructure including the installation of a photovoltaic array at the John J. Carroll Water Treatment Plant, the construction of a 200kw hydro generation plant within the water transmission system, and a wind turbine at our Delauri pump station.

MWRA is fortunate in that the Commonwealth of Massachusetts has a forward looking environmental agency overseeing the State Revolving Fund. Our state Department of Environmental Protection has already added green infrastructure and an emphasis on rehabilitating old water and sewer assets to the program guidelines, under which MWRA has been able to fund a significant number of projects. We are here today in support of this bill because that increased funding flexibility and focus on aging water assets should be available to water systems nation-wide.

Since its creation 25 years ago, MWRA has made significant investments in the reliability of the water system. New tunnels and covered storage tanks, updated pumping stations, emergency facilities and disaster planning, and rehabilitated and interconnected water mains all provide additional flexibility to move water through the system to our customers, even under emergency conditions.

SECTION 4-USE OF FUNDS

MWRA, as is the case with many utilities, particularly those in older urban areas, has a significant amount of older distribution piping. Replacement and rehabilitation of aging facilities is critical to the proper management of all water systems and inclusion of this work as an eligible item will assist MWRA and other utilities in safeguarding the system operations, and maintaining and improving system water quality all the way to the tap while helping to control costs to ratepayers.

MWRA must note that in the development of a Water System Master Plan, it has been able to identify locations or assets in the system where there was insufficient information on asset condition and then consider the most appropriate mechanism for obtaining that information. Master planning over a longer term horizon has also allowed the MWRA to think proactively about future regulatory changes and the need for long-term asset replacement strategies. The language in Section 4 which supports the use of funds for rehabilitation and replacement of aging infrastructure is particularly valuable to those systems such as MWRA where many parts of the system were initially built over 100 years ago and where, for many years prior to MWRA's inception, system reinvestment was limited. For many utilities such as MWRA, aging facilities may contribute to degraded water quality including aesthetic concerns, problems in compliance with distribution water quality rules, and to increased frequency of leaks and pipe failures.

When MWRA was formed in 1985, nearly half of the piping network was installed prior to World War I and the median age of the distribution system was around 80 years. Nearly 20 percent of the water mains were over 100 years old. Most of these older pipes were installed during an era where the modern loads and stresses of heavy truck, bus and car traffic did not exist.

As a new agency created in 1985 to solve serious problems with the water and wastewater systems, MWRA was able to gain support for initial rate increases to rehabilitate the system. However, it is very difficult for any utility, including MWRA, to sustain support for yearly rate increases sufficient to fully cover the need to rehabilitate aging infrastructure and this legislation's support through the expansion of SRF eligibility for such rehabilitation is critical to many older systems across the country.

Although MWRA has made major system reinvestment since 1985, a continued emphasis on programs for rehabilitating or replacing assets such as unlined cast iron pipes remain a critical emphasis for the agency to ensure that catastrophic breaks do not occur but also to ensure high quality water. It is clear that many of the old cast-iron mains also can contribute to water quality degradation and diminished carrying capacities due to the build-up of tuberculation in the pipe. Between the first Water System Master Plan in 1993 and the updated Plan in 2006, MWRA constructed 22 miles of new pipeline and rehabilitated 63 miles of pipe (38 miles which were cast iron) leaving 198 miles to be rehabbed of which 70 miles of work (39 miles cast iron pipes) was either underway or recognized in the FY06 CIP. This left 128 miles of pipeline to be addressed. Of this pipe, approximately 48 miles of pipe was less than 50 years of age in 2006 and 54 miles

were between 50-100 years of age. However, 26 miles of distribution system piping was greater than 100 years old (and 25 of the 26 miles were cast iron mains). The 2006 Water System Master Plan recommended the inclusion in the CIP of an additional 51 miles of cast iron main.

The ability for MWRA and other utilities to obtain low cost financing for these rehabilitation and replacement programs is invaluable. In addition, the targeting of older cast iron pipe for rehabilitation and replacement also allow MWRA to anticipate EPA's potential regulatory direction relative to distribution systems, focusing not just on the customers aesthetic experience of the water, but how the old unlined cast iron mains may increase the public health risk. The support that this bill provides to systems wishing to think proactively about aging infrastructure needs is very encouraging.

Since 1993, MWRA has utilized the Massachusetts' State Revolving Fund (SRF) program administered by the Massachusetts Water Pollution Abatement Trust to finance critical infrastructure projects. Since that time, MWRA has accessed over $1.3 billion in grants and low interest loans for both clean and drinking water projects. The SRF program has proven to be an important component in managing the MWRA's cost of capital and the associated rate revenue requirements to its member communities and ratepayers. Since 1993, the MWRA has realized debt service savings of over $700 million through the SRF program, greatly improving the affordability of delivering quality water and wastewater services to 2.8 million customers.

Section 4 also authorizes the use of revolving funds for the "producing or capturing sustainable energy on site or through the transportation of water through the public water system". As the 2009 stimulus funding package illustrated, inclusion of funding for green infrastructure is tremendously valuable to utilities across the country. MWRA was able to fund a wind turbine, photovoltaic installations and a hydro generation facility as part of that program continuing our state's commitment to maximizing green technologies. While Massachusetts now allows these type projects under the SRF, the expansion nationally of eligibility under this legislation for sustainable technologies will allow other utilities to pursue low cost loan financing improving the affordability of these renewable energy projects and reducing our carbon footprint.

SECTION 7-PRIORITY AND WEIGHT OF APPLICATION

This section encourages utilities to improve the management and financial stability of their systems through such measures as development of asset inventories and condition information, asset replacement schedules, audits of water losses, and use of lifecycle cost analysis. MWRA has found these measures to be useful tools in developing long-term financial projections of system needs. The legislation also encourages utilities to undertake measures to improve system efficiency or reduce the system's environmental impact. Included under these measures are such items as increased energy efficiency and

actions to generate or capture sustainable energy on site or through the transportation of water through the system. As noted above, these types of measures have been extremely valuable to MWRA's ability to mange our costs of service and meet our commitment to green energy technologies.

Additionally under measures to improve efficiency or reduce environmental impact, the legislation also notes water efficiency or conservation, including the rehabilitation or replacement of leaking water pipes. MWRA has long had a program of leak detection and also facilitates leak detection by our 51 water system member communities. The annual goal is for staff to perform leak detection surveys of the entire MWRA system each year. From a high of 92 leaks detected in the MWRA system in 1988 when the program began, leaks have steadily decreased to a low of seven last year. Pipelines with repeated leaks have been prioritized for replacement. MWRA's long-term planning emphasizes the need to assess system piping, particularly key steel mains, to be able to proactively plan the replacement of such infrastructure.

The legislation also notes that actions to protect source water may be another means of improving system efficiency. The source reservoirs for MWRA are highly protected and unlike many systems nation-wide, the reservoirs are not impacted by upstream wastewater discharges. High quality source water means that less treatment is required; reducing the amount of chemicals we need to add to the water and lessening the amount of energy used to treat the water. Thus we can provide a higher quality product to our customers at a lower cost.

SECTION 15-REDUCING LEAD IN DRINKING WATER

I would also like to provide supporting testimony on Section 15 of the bill – Reducing Lead in Drinking Water.

Lead in drinking water is the number one water quality concern of our customers. While there is no lead in MWRA's source water it can enter our customers' water from their home plumbing. MWRA has been an aggressive and active in working to reduce the lead exposure of our own customers, and to work with EPA, Congress and others to reduce lead exposure through drinking water nationally.

After the Lead and Copper Rule was issued by EPA in 1991, MWRA moved rapidly to build modern corrosion control treatment, and as a result our lead test results have dropped by almost 90 percent. After the Washington DC water system lead issue arose in 2004, MWRA staff participated in a number of EPA workshops and working groups to identify opportunities to reduce the chance that consumers would be exposed to lead in drinking water, and one of our staff testified before the House Committee on Government Reform in March 2005 on this issue. MWRA also participated in a number of national research efforts examining causes of increased lead levels in drinking water.

A common theme which arose out of all these efforts was the fact that common household fixture such as faucets and drinking water fountains could leach excessive

amounts of lead – and still be available for sale and use under current federal law. The Safe Drinking Water Act defines lead free as up to 8 percent lead in a brass component. This is simply wrong – and should be remedied as soon as possible. In months of expert workshops and hearings after the 2004 DC incident, water suppliers, environmentalists, health professionals and parents all had a common cry – simply get the lead out.

However, to date, no federal action on the allowable amount of lead in brass has occurred, and only two states have taken the necessary action to resolve the outrage that a consumer can walk into a home improvement center and buy a fixture which may poison his or her child. California and Vermont now mandate that no more than ¼ of one percent of brass content be lead. The 12 percent of US citizens who live in California and Vermont can now purchase real lead-free faucets and other plumbing components, ensuring that the lead-free water that flows from almost all water supplies stays that way all the way to the consumer's glass.

By making the successful efforts of California and Vermont into Federal law by enacting Section 15 of the Assistance, Quality and Affordability Act of 2010, Congress can spread that successful effort nationwide, providing the same sure access to safe products, and safe water to all Americans.

Change, especially, mandated change, always brings charges that it will not work, will be unaffordable or is occurring too fast for manufactures to keep up. With a significant portion of the national plumbing market almost a half a year into implementation, it is clear that the new standards are workable, available, and affordable.

The reduction in lead content may cause a minor increase in the cost of some fixtures, at least for a time. Based on the experience in California we know that in the context of a bathroom or kitchen renovation the increase is almost unnoticeable, but the benefits are clear. Medical care, special education, and lost earnings costs associated with lead in the blood – even at low levels – are significant. Scientific studies estimate the economic and social costs of lead poisoning are almost five times the costs of childhood asthma, cancer, cardiovascular disease and neurological disorders, combined.

Another significant benefit is the potential for reducing unnecessary water wastage. If a consumer is not sure that their home plumbing is not leaching lead into the water, EPA recommends that they run the tap between one and three minutes before drinking or cooking with the water in order to flush out possible lead-contaminated stagnant water from pipes and faucets. It may not seem like much, but it can add up. In the MWRA service area, if every homeowner flushed their taps twice a day, it could add up to almost 10 million gallons of additional usage each day. Now, MWRA has plenty of water due to our aggressive conservation efforts over the past 20 years, but other systems either don't, or are adversely affecting the environment by excessive pumping. Eliminating this currently necessary waste could reduce utility costs for energy and chemicals, and reduce their impact on streams and rivers.

Regardless of the outcome of all the other sections of this Act, MWRA urges this committee to move the effort to "get the lead out" forward by taking favorable action on Section 15.

CONCLUSION

MWRA and utilities across the country are grappling with the issue of aging infrastructure. Communities must make difficult choices in determining the best ways to spend ratepayer funds because needs far exceed the ability of utilities to raise rates on an annual basis. Making additional funds available to the SRF to support replacement and rehabilitation of aging infrastructure provides an additional tool for communities to maintain their systems and act proactively before additional deterioration occurs. Utilities have spent billions of dollars to meet immediate public health priorities; the next critical need is to tackle the issue of an aging infrastructure in order to ensure reliable service and consistent water quality. For MWRA, 80% of the capital funds expended over the past 25 years for water and sewer system work have been for compliance with the regulatory mandates of the Clean Water Act and the Safe Drinking Water Act. This legislation will help MWRA and other utilities to move forward with the next level of high priority system improvements.

The unfortunate events of May 1st to 4th in the Boston area only serve to point out how critical water systems are to the regions they serve. Adequate funding and the flexibility to move forward with the critical needs of our aging systems will go a long way toward ensuring that our citizens get the safe and reliable water service they expect and deserve.

Thank you for this opportunity to testify.

Mr. MARKEY. Thank you very much.

Our next witness is Sarah Janssen, who is a staff scientist in the Health and Environment Program of the Natural Resources Defense Council. She is board certified in preventive medicine, with a subspecialty in occupational and environmental medicine. Dr. Janssen is also an assistant clinical professor at the University of California-San Francisco in the Division of Occupational and Environmental Medicine.

So we welcome you. Whenever you are ready, please begin.

STATEMENT OF SARAH JANSSEN

Dr. JANSSEN. Thank you.

Good morning, Chairman Markey and other members of the committee. My name is Dr. Sarah Janssen. I am a staff scientist in the health program at NRDC, and I am representing NRDC here today. I am also a practicing physician and also trained as a reproductive biologist with expertise in endocrine-disrupting chemicals.

My oral testimony to you this morning will focus on improvements to the Endocrine Disruptor Screening Program, or the EDSP, as proposed in this legislation.

Endocrine disruption was first described in the early 1990s when chemical contamination in water was linked to feminized male fish, alligators with small penises, and impaired reproduction in birds. These abnormalities were caused by endocrine disruption contaminants; and subsequent studies in laboratory animals have confirmed that exposure to some endocrine-disrupting chemicals, especially early in development, can result in a wide range of adverse effects, including reproductive harm, cancer, and altered development of the brain.

The effects described in wildlife and laboratory animals, coupled with observations of reproductive harm, including birth defects of baby boy genitals, poor sperm quality, infertility, and altered development of the brain in humans, have raised concern that endocrine-disrupting chemicals could also be harming human health.

Though EPA has not yet prioritized drinking water contaminants in the implementation of the long-delayed EDSP, recent scientific studies have documented multiple endocrine-disrupting contaminants in our Nation's waterways. A recent USGS surface water study found an average of seven and as many as 38 chemical contaminants in any given water sample. Among the chemicals most commonly detected in this national survey are known and suspected endocrine-disrupting chemicals, including various pesticides, antibacterials, detergents, cosmetics, fragrances, plastics, rocket fuel, and steroid hormones.

In addition, there are potentially hundreds of other chemical contaminants for which we have no information about their endocrine-disrupting potential. This legislation will begin to solve this problem by requiring EPA to expand the EDSP to include water contaminants.

AQUA will strengthen the EDSP by requiring four major and necessary changes. Number one is testing of drinking water contaminants on a reasonable and achievable timeline. Under the proposed legislation, EPA will publish a list of 100 drinking water contaminants within 1 year and require that they be screened within

4 years. This is a realistic time frame since EPA has recently issued test orders for just 67 chemicals with test results expected in 2 years.

The Act further requires EPA to identify and schedule testing of other substances, including all of the chemicals on the preliminary Contaminant Candidate List within 10 years of enactment. Again, this represents an average of less than 60 chemicals a year for issuing test orders and should be easily within EPA's capabilities. The legislation will also prioritize testing of substances that pose the greatest threat to the health of vulnerable populations.

The second improvement is a fast track for substances known or suspected of endocrine-disrupting effects. EPA can place the screening of these substances on an accelerated track by substituting scientifically relevant information, such as scientific studies published in peer-reviewed publications. This provision is necessary to prevent redundancy in testing for known endocrine disruptors such as perchlorate, where the mode of action has already been well described and there is evidence for widespread contamination of drinking water and of people.

Perchlorate is a component of rocket fuel and is known to interfere with thyroid hormone production by inhibiting the uptake of iodide. In fact, perchlorate was once used as a prescription medication to treat patients with elevated thyroid levels. Chemicals as well studied as perchlorate should not be subject to repeat and redundant testing that will cost only more time and money and delays in regulation.

A third improvement is increased transparency and public participation in the EDSP by creating a publicly searchable database, a public petition process for requesting test orders of potential endocrine-disrupting chemicals, and opportunities for public comment, all of which are necessary for informing and engaging the public in the progress and process of testing for endocrine disruptors.

The fourth and final improvement that I want to highlight today is updating and revising the testing protocols to be consistent with our current scientific knowledge. The screening and testing protocols required under the current EDSP are outdated, time consuming, and expensive. EPA should be able to replace these screens with newer, more efficient, and less expensive tests which rely less on the use of animals. EPA should also expand the EDSP to include endpoints beyond estrogen, androgen, and thyroid hormones.

The need to expand and improve the EDSP has been called for by EPA's own science advisory panel and prominent scientific societies, such as the Endocrine Society, the American Medical Association, and the American Chemical Society.

In conclusion, AQUA will provide much-needed improvements to the EDSP by making it more relevant to known sources of exposure of endocrine-disrupting chemicals in drinking water, more transparent and understandable to the public, and more scientifically valid by updating and revising the protocols to be consistent with our current scientific knowledge base.

We commend Mr. Markey for taking a leadership role in protecting the public's health by identifying endocrine disruptors in

our drinking water, and we look forward to working with you and your staff as this bill moves forward.

Thank you for inviting me to testify today, and I would be happy to answer your questions.

[The prepared statement of Dr. Janssen follows:]

TESTIMONY OF
Dr. SARAH JANSSEN, MD, PhD, MPH
STAFF SCIENTIST
NATURAL RESOURCES DEFENSE COUNCIL

ON BEHALF OF:
NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT

ON THE HEARING COVERING LEGISLATION TO

REAUTHORIZE THE SAFE DRINKING WATER ACT STATE REVOLVING FUND, THE "Assistance, Quality, and Affordability Act of 2010" ("AQUA").

May 13, 2010

Testimony of Dr. Sarah Janssen 5/13/10

Good morning Chairman Markey, Ranking Member Upton and members of the committee. Thank you for this opportunity to testify on the "Assistance, Quality, and Affordability Act of 2010" ("AQUA").

I am Dr. Sarah Janssen, a staff scientist in the Health Program at the Natural Resources Defense Council (NRDC). I am a physician, board certified in Occupational and Environmental Medicine and have a clinical appointment at the University of California, San Francisco in the Department of Medicine. I also have a Master's degree in Public Health and a Ph.D. in Reproductive Biology. I have expertise in chemicals that interfere with the natural action of hormones known as "endocrine disrupting chemicals". NRDC is a national, nonprofit organization of scientists, lawyers and environmental specialists dedicated to protecting public health and the environment.

NRDC's Health and Environment program focuses on reducing human exposure to toxic chemical pollutants in air, water, food, shelter, the workplace and our homes. The Program has worked for many years to identify endocrine disrupting chemicals by supporting previous amendments to Food Quality Protection Act (FQPA) and the Safe Drinking Water Act (SDWA) which established the Endocrine Disrupting Screening and Testing Program (EDSP) at the U.S. Environmental Protection Agency (EPA). NRDC participated in the initial expert panel, EDSTAC, which created a set of recommendations for the development and execution of the EDSP, and has taken legal action over delays in the implementation of the EDSP at EPA. We have also led efforts to reduce exposure to endocrine disrupting chemicals found in consumer products such as phthalates found in toys and air fresheners, bisphenol A (BPA) in food cans, "antibacterial" chemicals in hand soaps and flame retardants in home furnishings and electronics. We have also worked for many years to improve the quality of our drinking water, leading the efforts to establish strong health-protective standards for both well-known contaminants, such as arsenic, perchlorate, cryptosporidium and pesticides, and raise awareness about "emerging contaminants" such as pharmaceuticals and personal care products.

A Dependable Water Infrastructure Is Essential for Public Health.

We strongly support increased investment in our nation's water infrastructure which desperately needs to be upgraded and restored. The recent broken water main that left two million Bostonians without clean drinking water for four days is one prominent example of a growing nationwide problem that will only increase in frequency as our aging drinking water infrastructure begins to reach the end of its useful life. Currently, we lose an estimated 7 billion gallons of water each day from leaking pipes.[1] The American Water Works Association estimates that there are more than 200,000 breaks every year in the U.S. causing a loss of $2.8 billion in revenue annually.[2] At the same time, an often overlooked consequence of even small leaks in water distribution lines is that when these lines are placed in close

[1] American Society of Civil Engineers. Report Card for America's Infrastructure. http://www.infrastructurereportcard.org/fact-sheet/drinking-water

[2] U.S. Environmental Protection Agency. Review Draft: Control And Mitigation Of Drinking Water Losses In Distribution Systems. 2009. Available at http://www.epa.gov/safewater/pws/pdfs/analysis_wa-03_water_loss_doc_final_draft_v62.pdf

proximity to sewer lines, a substantial amount of contaminated water can be pulled into pipes resulting in waterborne disease outbreaks.[3]

In 2007, EPA estimated that U.S. municipalities will need $334 billion over the next 20 years to protect public health and ensure compliance with the Safe Drinking Water Act.[4]

Since the 1996 Amendments to the Safe Drinking Water Act, the Drinking Water State Revolving Fund (DW SRF) has been one of the main sources of money for states to distribute to municipalities to fund drinking water infrastructure improvement projects. With continued funding through the SRF program, drinking water utilities can work to improve the availability and quality of drinking water that they provide to their customers.

However, federal funding for the DW SRF has declined since 2002, even without adjusting for inflation. Since 2004, when authorization for the SRF expired, Congress has continued to appropriate monies for the Fund, but with each budget up to 2009, those numbers had been dropping steadily—despite EPA's needs analysis showing that the nation's water systems need much more funding. The Assistance, Quality, and Affordability Act of 2010 (AQUA), if enacted, will authorize a much needed increase in funding for the DW SRF ($1.5 billion in 2011, $2 billion in 2012 and 2013, $3.2 billion in 2014, and $6 billion in 2015.) The 1996 amendments authorized appropriations for the DWSRF program of $599 million for FY1994 and $1 billion for each of FY1995 through FY2003 but funds appropriated by Congress never exceeded $850 million except for the very first year in 1997 and this past year under the stimulus package. We support this much needed increase in authorization for funding and call on Congress for full appropriations up to the authorized level to continue the much needed work on our drinking water infrastructure.

AQUA also provides incentives for public drinking water systems to ensure that they can better provide clean and affordable drinking water to their customers well into the future. Currently, there are three types of applications that receive priority under SDWA: those which address the most serious risks to human health, those that assure compliance with the requirements of the Safe Drinking Water Act, and those that assist systems most in need. AQUA would add a fourth priority – consideration of sustainability and the future of the water utility. As such, if a project will prevent a system from deteriorating to a point where public health is put at serious risk, this project also receives priority for funding. This proactive prioritization of funding could be just as important to protect public health as are projects to fix current public health problems – and potentially costing less in the long-run.

Once priority projects are identified, AQUA establishes other criteria by which applications can be weighted. This provision allows a state to give consideration to applications that include, for example, measures to improve a system's water and energy efficiency or protect the source water. As a result, a

[3] U.S. Centers for Disease Control and Prevention. Panel Summary from the 2000 Emerging Infectious Diseases Conference in Atlanta, Georgia. Panel on Waterborne Diseases. Emerging Infectious Diseases Vol. 7, No. 3 Supplement Jun 2001. http://www.cdc.gov/ncidod/eid/vol7no3_supp/hunter.htm

[4] U.S. Environmental Protection Agency. Drinking Water Infrastructure Needs Survey and Assessment. Fourth Report to Congress. 2007.

project to fix leaking pipes, thereby helping staunch the loss of billions gallons of water every day, could be given more weight than a project that had no such environmental benefit.

Importantly, AQUA also gives special priority to poor communities that may have difficulty affording the system improvements necessary to comply with new drinking water standards. Rather than relying upon a system of variances that would result in some communities drinking water below federal safety standards, the bill ensures that funding is prioritized to these communities so that they can meet the standards without facing severe economic hardship. As a result, all Americans are assured access to both safe and affordable drinking water, regardless of their socioeconomic status.

Reducing Lead in Drinking Water.

Lead is a common environmental contaminant which is known for frequently contaminating older homes because of lead paint. However, lead is also found as a drinking water contaminant due to the use of lead or lead solder in water pipes. Lead is absorbed across the gut after ingestion and builds up in soft tissue -- kidneys, bone marrow, liver, and brain -- as well as bones and teeth. Absorption rates vary; the gastrointestinal tracts of adults typically absorb 10-15 percent of ingested lead, while those of pregnant women and children can absorb up to 50 percent.

New research indicates that no amount of lead is safe for a child; yet according to the U.S. Centers for Disease Control and Prevention, almost one million American children under the age of six have elevated levels of lead in their blood. Even low lead doses are a concern for children, since continuing exposure can add up to a significant dose over time.

Studies show that even low concentrations of lead can cause permanent damage including reduced IQ, learning disabilities, shortened attention span, aggressive behavior and impulsivity. Some scientists believe that low-level chronic lead exposure in childhood can alter secretion of the human growth hormone, stunting growth and promoting obesity. In adults, lead has been associated with the high blood pressure (hypertension), hardening of the arteries (atherosclerosis) and dementia.

Currently, SDWA prohibits the use of pipes that are not "lead free" to install or repair a public water system or plumbing that provides water for human consumption.[5] While on its face, this provision seems health protective, the definition of lead free is not protective at all. "Lead free" refers to any pipes and pipe fittings containing not more than 8.0 percent lead, which is remains an unacceptable and preventable source of exposure, especially for a fetus and young child whose developing bodies are particularly vulnerable to low levels of lead exposure. As such, the change in AQUA to define "lead free" in pipes, pipe fittings, plumbing fittings, and fixtures as "not more than a weighted average of 0.25 percent" lead will bring a significant public health benefit – especially to areas plagued with old pipes that leach lead into the tap water. For an area like Washington, D.C. which faced its own lead poisoning crisis just a few years ago, this provision could prevent future problems and protect unsuspecting families from the detrimental development effects associated with lead poisoning.

[5] 42 U.S.C. § 300g-6.

I've highlighted a few of the improvements that AQUA will bring to the SDWA; the remainder of my written testimony will focus on the improvements to the Endocrine Disruptor Screening Program (EDSP) proposed in Section 16 of the AQUA legislation.

Addressing the Problem of Endocrine Disrupting Chemicals in Drinking Water.

The endocrine system is a complex network of glands and hormones that regulates many of the body's functions, including growth, development and function of organ systems. The endocrine glands -- including the pituitary, thyroid, adrenal, thymus, pancreas, fat tissue, ovaries, and testes -- release carefully-measured amounts of hormones into the bloodstream that act as natural chemical messengers. These messengers travel to different parts of the body where they control and adjust many life functions including reproduction, lactation, energy balance, growth and development of nearly every organ system in the body including the brain and nervous system.

For many decades, scientists have recognized that synthetic chemicals are capable of interfering with the action of hormones produced within the body. This interference scrambles the body's key signaling pathways resulting in a phenomenon known as endocrine disruption. Endocrine disruption was first described in the 1990's when environmental chemical contamination was associated with numerous wildlife abnormalities including observations of male fish with female characteristics, impaired reproduction in birds, and alligators with small penises.[6] Subsequent laboratory animal studies have confirmed that exposure to some endocrine-disrupting chemicals, especially during development, can result a wide range of adverse effects including birth defects of the genitals, changes in sex hormone levels, infertility or increased time to pregnancy, cancer, and altered development of the brain and nervous system. The effects described in wildlife and laboratory animals coupled with observations of an overall decline in sperm counts in adult men, increased rates of infertility in couples, increased rates of birth defects of the genitals including malformed penises and undescended testicles in infant boys, and increased rates of testicular and other hormone-dependent cancers raised concern that endocrine disrupting chemicals were not only affecting wildlife, but also could be harming human health.

In response to these concerns, in 1996, Congress passed in amendments to the FQPA and SDWA that mandated EPA to create an Endocrine Disruptor Screening and Testing Program to

> *"...develop a screening program, using appropriate validated test systems and other scientifically relevant information, to determine whether certain substances may have an effect in humans that is similar to an effect produced by a naturally occurring estrogen, or other such endocrine effect as the Administrator may designate."*[7]

The laws required EPA to develop a screening program by August 1998, to implement the program by August 1999, and to report on the program's progress by August 2000. Unfortunately, EPA has missed every deadline and was over a decade late when it issued the first chemical test orders in October, 2009. This first round of orders will require screening of only 67 chemicals (mostly pesticides) and includes a number of chemicals that are already well-known endocrine disruptors.[8]

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[6] Colborn T, vomSaal FS, Soto AM. Developmental effects of endocrine disrupting chemicals in wildlife and humans. Environ Health Perspect 1993;101:378–84.

[7] 21 U.S.C. §346a(p)(1).

[8] http://www.epa.gov/endo/pubs/edsp_orders_status_050610.pdf

None of the contaminants in this first round of test orders were chosen because they are drinking water contaminants, though Section 136 of the SDWA Amendments states that:

> *In addition to the substances referred to in [the FQPA], the Administrator may provide for testing under the screening program authorized by [the FQPA] of any other substance that may be found in sources of drinking water if the Administrator determines that a substantial population may be exposed to such substance.*[9]

Congress recognized that drinking water was likely to be a significant source of exposure to endocrine disrupting chemicals, yet, EPA has never used the authority granted by Congress under the SDWA, and has not prioritized drinking water contaminants for endocrine disruption testing. Unfortunately, in the 14 years since the amendments were passed, there has been mounting evidence documenting the presence of endocrine disrupting chemicals in drinking water sources. These contaminants are causing further wildlife contamination and deformities and are concerning for their potential harm to human health. This contamination is threat to public health that must be addressed.

EPA must do a better job of testing and regulating drinking water contaminants.

Despite EPA's failure to adequately test drinking water for endocrine disrupting effects, other reliable scientific studies have documented the endocrine disrupting effects of multiple contaminants in our nation's waterways, including in the water that millions of people rely on for drinking. Studies by the U.S. Geological Survey (USGS) have revealed a chemical soup of pharmaceuticals, steroid hormones, unregulated pesticides, flame retardants, rocket fuel chemicals, plasticizers, detergents, fragrance ingredients and stain repellants in drinking water sources (ground water and surface water) and in drinking water itself.[10] [11] [12] Among the chemicals most commonly detected in these national surveys are known and suspected endocrine disruptors, including the antibacterial chemical triclosan, alkylphenols and alkylphenol polyethoxylates, bisphenol A, musk fragrances, and pharmaceutical estrogens. Because conventional drinking water treatment does not eliminate many contaminants, drinking water is likely to be contributing to our daily exposure to these chemicals. Although they are found in low levels in the water, these levels are nonetheless concerning because hormones normally circulate and exert their effects in the body at the parts per billion to parts per trillion level. Water is certainly not the only source of these chemicals, but trace amounts from one source add up with traces from other sources, and the sum total becomes a threat to human health.

The soup of chemicals that has been measured in drinking water sources also exists in the majority of American's tested for chemicals such as triclosan, phthalates, BPA, flame retardants, perchlorate and

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[9] 42 U.S.C. § 300j-17.

[10] Kolpin DW, Furlong ET, Meyer MT, Thurman EM, Zaugg SD, Barber LB, Buxton HT. Pharmaceuticals, hormones, and other organic wastewater contaminants in U.S. streams, 1999-2000: a national reconnaissance. Environ Sci Technol. 2002 Mar 15;36(6):1202-11.

[11] Barnes KK, Kolpin DW, Furlong ET, Zaugg SD, Meyer MT, Barber LB. A national reconnaissance of pharmaceuticals and other organic wastewater contaminants in the United States--I) groundwater. Sci Total Environ. 2008 Sep 1;402(2-3):192-200.

[12] Focazio MJ, Kolpin DW, Barnes KK, Furlong ET, Meyer MT, Zaugg SD, Barber LB, Thurman ME. A national reconnaissance for pharmaceuticals and other organic wastewater contaminants in the United States--II) untreated drinking water sources. Sci Total Environ. 2008 Sep 1;402(2-3):201-16.

other contaminants.[13] Biomonitoring has also confirmed that we are exposed to multiple chemicals at the same time and the impacts of exposure to these chemicals as a mixture are not very well understood but are concerning for additive or multiplicative effects. For example, certain phthalates are well-characterized for decreasing testosterone production and mixtures of these phthalates at relatively low individual doses is capable of lowering of testosterone just as is seen after exposure to one phthalate at a high dose. Therefore, exposure to a mixture of phthalates and other anti-androgenic chemicals in drinking water, even at very low doses, could be harmful because of this mixture effect.

In addition to the known and suspected endocrine disrupting chemicals in water, there are potentially hundreds of other chemical contaminants for which we have no information about their endocrine disrupting effects. The result of the decade of foot-dragging on testing chemicals for hormonal activity means that the vast majority of chemicals in our water supply and environment are "unknowns" when it comes to their hormonal effects. Due to the well-known flaws in the Toxic Substances Control Act (TSCA), almost all chemicals come onto the market with no toxicity information, and older chemicals remain untested too.

Legislation is necessary to mandate testing of drinking water contaminants for endocrine disruption.

Though EPA has had the authority to require endocrine disruption screening and testing of drinking water contaminants, it is not mandated to do so and thus far has not exercised that authority. This is a missed opportunity to identify a number of chemicals to which millions of Americans are exposed and may present a threat to their health. The AQUA will require EPA to expand the EDSP beyond testing only pesticides to include water contaminants.

AQUA will strengthen the EDSP at EPA by requiring four major changes:

1. Require testing of drinking water contaminants for endocrine disruption on a reasonable and achievable timeline.
2. Accelerate the identification of endocrine disrupting substances when scientific evidence already exists, thereby making the EDSP more efficient.
3. Promote transparency and public participation in the EDSP.
4. Create a process for updating and revising testing protocols to be consistent with current scientific knowledge.

Testing of drinking water contaminants on a reasonable and achievable timeline.

The AQUA requires EPA to publish a list of 100 drinking water contaminants within one year of enactment and requires that they be screened within four years. This is a very reasonable timeframe since EPA has just issued test orders for 67 chemicals in one year with the test results due to EPA in just two years. AQUA could, in fact, create a shorter timeline for test results to be submitted since these screening tests can be conducted relatively quickly and the tests have already been validated at

[13] Centers for Disease Control and Prevention. National Report on Human Exposure to Environmental Chemicals. Fourth Report, 2009. http://www.cdc.gov/exposurereport/.

approved contract labs. The Act further requires EPA to identify and schedule testing of other substances with the goal of testing at least all of the 561 chemicals on the Preliminary Contaminant Candidate List within ten years of enactment of the Act. Again, this represents an average of less than 60 chemicals a year for issuing testing orders and should not create an unreasonable work load for EPA.

Accelerated identification of endocrine disrupting substances.

Importantly, for substances known to contaminate drinking water, to which a substantial portion of the population is exposed, and is suspected to be an endocrine disrupter, EPA can put the screening of that substance on an accelerated track which will provide for more timely protection of public health. Under this provision, EPA can identify a chemical as an endocrine disruptor by substituting scientifically relevant information on endocrine disrupting effects. EPA will have the authority to identify equivalent scientific studies published in peer-reviewed publications which meet the criteria of the screening and testing battery. For chemicals where the mode of action has already been sufficiently described, for example, as in phthalates which are known to interfere with testosterone production, the chemical should not be required to undergo repeat and redundant testing that will cost more time and money. Instead the chemical should be quickly identified as an endocrine disruptor and be subject to determination of an appropriate drinking water standard.

One chemical which will qualify for the accelerated track is perchlorate. Perchlorate is a contaminant that comes from rocket fuel, fireworks, road flares, fertilizer, and other sources. It is known to interfere with the normal function of the thyroid gland.[14] Iodine is needed by the thyroid in order to create thyroid hormones. Normally, iodine is transported into the thyroid gland through an energy-requiring mechanism called the sodium-iodide symporter. Perchlorate blocks this transport and prevents uptake of iodine into the gland, thereby interfering with the production of these vital hormones. The mechanism of action for perchlorate has already been well-characterized and perchlorate is known to interfere with thyroid hormone action. Based on this reliable and repeated scientific evidence, perchlorate should not be subject to endocrine disruptor screening and testing but should be identified by EPA as a thyroid disrupting chemical and subjected to a drinking water standard. We don't need any further confirmation of the endocrine disrupting potential of perchlorate, instead EPA must set an enforceable drinking water standard for perchlorate that will protect pregnant women, children, and people with underlying thyroid disease or iodine deficiency. It is unconscionable that millions of people are drinking water contaminated with this known endocrine disruptor and remain unprotected.

Promotes transparency and public participation in the EDSP.

AQUA adds much needed public participation and public information dissemination provisions to the EDSP. One of the most difficult problems for the public is access to information about the potentially toxic chemicals lurking in consumer products, in our homes, and in our drinking water. The AQUA creates a publicly searchable database where information about the EDSP will be posted, including information about the status of a chemical, the schedule, and the testing results. Importantly, the database will also include the data evaluation records, which are the Agency's own evaluation of the

[14] Benjamin C. Blount, James L. Pirkle, John D. Osterloh, Liza Valentin-Blasini, and Kathleen L. Caldwell. *Urinary Perchlorate and Thyroid Hormone Levels in Adolescent and Adult Men and Women Living in the United States.* Environmental Health Perspectives Volume 114, Number 12, December 2006.

testing results and will allow for public access to information about how screening and testing results were evaluated by the Agency.

Another important component for public participation that AQUA incorporates into the EDSP is a petition process by which the public may petition EPA either to add a substance to the list of chemicals that must be tested in the next four years or to identify a chemical to be included in the plan for identifying additional substances for testing in the subsequent ten years. A person may also petition the EPA to issue a test order on an accelerated basis. Most importantly, the petition process requires EPA to make a final determination about whether to grant or deny the petition within 90 days, ensuring that these public requests will not get hung up indefinitely in the Agency with no resolution.

Updating and revising testing protocols to be consistent with current scientific knowledge.

The screening and testing protocols required under the current EDSP are based on scientific knowledge that is outdated and needs to be updated. Some of the screening tests rely on methodology that is cumbersome, redundant, time-consuming and expensive. EPA should be able to replace these screens with newer tests that are based on high-throughput screens which are more efficient, less expensive and do not rely on animals. EPA should also expand the EDSP to include endpoints beyond estrogen, androgen and thyroid hormone disruption. There is emerging evidence that endocrine disruptors are also able to interfere with other hormone systems in the body including those that regulate fat metabolism and glucose (sugar) levels.

The need to expand and improve the EDSP has been recognized by scientific experts and prominent scientific societies have recently issued consensus statements speaking to this issue. The Endocrine Society evaluated the science on endocrine disruptors last year and concluded:

> *"The evidence for adverse reproductive outcomes (infertility, cancers, malformations) from exposure to endocrine disrupting chemicals is strong, and there is mounting evidence for effects on other endocrine systems, including thyroid, neuroendocrine, obesity and metabolism, and insulin and glucose homeostasis."*[15]

The Endocrine Society is the premier professional organization devoted to research on hormones and the clinical practice of endocrinology, comprised of over 14,000 research scientists and physicians from over 100 countries. This statement has since been endorsed by the American Medical Association. The American Chemical Society just issued a similar statement with additional recommendations for "More rapid advancement of the congressionally-mandated effort by the EPA, called the Endocrine Disruptor Screening Program (EDSP)."[16]

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[15] Diamanti-Kandarakis E et al. 2009 Endocrine-Disrupting Chemicals: An Endocrine Society Scientific Statement. Endocrine Reviews 30(4):293-342. http://www.endo-society.org/journals/scientificstatements/upload/edc_scientific_statement.pdf

[16] American Chemical Society. Statement on Testing for Endocrine Disruption. Available at http://portal.acs.org/portal/PublicWebSite/policy/publicpolicies/promote/endocrinedisruptors/CNBP_023441.

AQUA will create a process for EPA to update and expand the EDSP to make it more efficient and consistent with current scientific knowledge. This is necessary to keep the Program scientifically relevant and credible.

In conclusion, AQUA would provide a much needed improvements in the Safe Drinking Water Act so that EPA may more effectively protect the quality of our nation's drinking water. From providing the DW SRF with more funding than it has ever had to improving the EDSP by mandating testing of drinking water contaminants, this bill, if enacted, will help ensure that all Americans continue to have access to some of the safest drinking water in the world.

We commend Mr. Markey for taking a leadership role in protecting the public's health by identifying endocrine disrupting chemicals in our drinking water sources. These provisions are an important step towards improving the EDSP and we look forward to working with you and your staff as this bill moves forward.

Thank you again for inviting me to testify before you today. I would be happy to answer any questions from the panel.

Sincerely,

Sarah Janssen, MD, PhD, MPH

Staff Scientist

Natural Resources Defense Council

Mrs. CAPPS [presiding]. Thank you for your testimony, Ms. Janssen.

For our last witness, we now turn to Terry Quill. Mr. Quill is an attorney and has 15 years of experience representing the chemical and pesticide industries on legal and technical issues related to enactment of endocrine testing provisions of the Food Quality Protection Act and EPA's development and implementation of its Endocrine Disruptor Screening and Testing Program.

In addition to his law degree, Mr. Quill has masters degrees in biology and toxicology from Wayne State University and the University of Michigan, respectively.

And you are now recognized for 5 minutes of testimony, Mr. Quill.

STATEMENT OF TERRY QUILL

Mr. QUILL. Thank you. I want to thank the committee for inviting me to testify today.

I have been involved in endocrine issues, including issues related to development and implementation of EPA's EDSP, for well over 15 years. Much of my legal practice centers on regulatory science, and I often deal with issues concerning statutory interpretation. So when I look at the legislation today, I try to think ahead to issues concerning how this will be interpreted and used in the future.

In that regard, my written testimony lays out a number of improvements that I believe could be made to the legislation. However, I do want to commend the committee for drafting a bill that in many respects is reasonable, calls for the use of scientifically relevant information—although I will mention a few points concerning that—directs EPA to develop a weight of evidence process—we have been asking EPA to do that for years now, and I think that needs to be done soon—directs EPA to assess and update screening assays—EPA intends to do that, we have been also asking them to do that—and provides for cost sharing. EPA has been reluctant to apply those provisions to non-pesticide chemicals.

My written testimony suggests a few ways in which I believe the bill can be improved to best ensure the use of best available science, and I would like to just highlight a few of the issues I raise in my written testimony.

First, I believe that the requirement that EPA publish a list of 100 drinking water contaminants within 1 year and require that EPA order screening of 25 of those chemicals per year appears reasonable. However, I think it could turn out to be more challenging to EPA than many think, but I will leave that to EPA to comment on that.

My only concern with that is the idea of the EDSP, as it currently is, is that, initially, EPA would require testing 67 chemicals that would be assessed to improve the battery. One thing that I think the committee needs to understand is that there is still great uncertainty regarding how the assays will perform and how the battery in general will perform. In many senses, this first round of screening is to validate the assays in the battery. With this bill, we have may have two more rounds of orders before we even have a chance to review the performance of the assays. That is why in my

written testimony I suggest it would be better if additional testing didn't commence for 2 years.

What really needs to happen in the next year is EPA needs to develop the weight of evidence approach, it needs to develop a procedure for updating its screening battery, and it needs to develop procedures for considering other scientifically relevant information. That needs to be done right away.

Second, I outline in my written testimony basic scientific principles that I believe are applicable to endocrine screening. I have tried to point out areas in the bill where those principles are especially applicable. My general concern is that too often in this endocrine debate there has been a failure to, one, consider all the data; secondly, to assess the reliability of the data—and that goes to the three basic scientific principles I outline; and determine the relevance of the data. Too often, we see individuals take just a piece of information, maybe some molecular data or biochemical data, and then apply to that a hypothesis for how this is relevant to adverse effects in humans and then not bother trying to test that hypothesis but instead evoke the precautionary principle to move right to regulation. Well, that is not how we regulate in this country; and I would be greatly concerned if this bill reflected any of that thinking.

Richard Sharpe, one of the leading researchers on endocrine disruptors, has put it pretty well. He says that we should stay true to the scientific method and not to strong convictions. I think that that is what we need to do in this bill and throughout the process.

In regards to the bill itself, let me give just a few examples of how basic scientific principles might be applied.

While I support the bill's call for the use of scientifically relevant information, I am concerned that, unless that information is required to comport with minimum criteria for reliable and relevant scientific information, the term "scientifically relevant information" can mean almost anything. Without some objective measure, you can just basically put anything up as relevant scientific information. That is why I laid out the principles that might be applied.

This concern also applies to otherwise reasonable provisions, such as the provision to accelerate the identification of substances for which it will be necessary to identify suspected endocrine disruptors. Well, what is a suspected endocrine disruptor? What kind of data are we going to rely on to determine that? Well, we need some kind of objective principles applied to that, also. I think the bill would be ideal if it could talk to that point and make sure that it is understood that this science has to be objective. There needs to be a procedure for assessing it.

Finally, I would like to express what was my major concern, that the bill might be interpreted as suggesting that it is appropriate to base chemical regulation on a mode or mechanism of action, such as the interaction with the endocrine system. Chemical regulation in the United States is typically based on the potential for a substance to cause a harm or an adverse effect.

My concern is derived from three things: First of all, the definition of endocrine disruption, which doesn't even address the concept of harm. Secondly, the provision that requires EPA to deter-

mine whether to take administrative action based on testing, and testing in the bill includes screening.

Mrs. CAPPS. Mr. Quill, your time is up.

Mr. QUILL. OK. I will finish then.

So my concern is that the bill suggests that screening data can lead to regulation, and that concerns me.

Thank you very much.

[The prepared statement of Mr. Quill follows:]

Testimony of
Terry F. Quill, J.D., M.S.

before the
House Subcommittee on Energy and Environment

"The Assistance, Quality, and Affordability Act of 2010"
May 13, 2010

Thank you for inviting me to testify. I am pleased to have this opportunity to address the recently introduced Bill that would, among other things, amend the Estrogenic Substances Screening Program provisions of the Safe Drinking Water Act. 42 U.S.C. §300j-17. My testimony addresses only Section 16 (Endocrine Disruptor Screening Program) of the Assistance, Quality, and Affordability Act of 2010 (the "Act").

Background

I am an attorney with a toxicology background. For the last 15 years I have addressed legal, regulatory, scientific and policy issues related to the endocrine issue and to the development and implementation of EPA's Endocrine Disruptor Screening Program (EDSP). During this time I have represented various sectors of the chemical industry. In my regulatory and litigation practice I address issues that arise at the intersection of science and law. Endocrine disruption is one of those many legal/science issues I have addressed in my years of practice.

I represent only myself today. My testimony is based on my legal and scientific training and expertise, my own experiences concerning endocrine legislation and regulatory activities, and my experiences concerning the potential effects of regulation on the affected community.

General Observation

While I understand the concern of the Subcommittee regarding the pace at which the EDSP has been developed and implemented and the Subcommittee's desire to push forward with a Bill to speed up testing of chemical substances (especially those that may be found in drinking water), I am concerned that various provisions of the Bill are contrary to good science, fail to require the use of good science and either intentionally or unintentionally significantly undermine existing, well-established procedures for science-based regulation. In that regard, I believe significant improvements can and should be made to the Bill to ground it

more on objective principles of science. I suggest a number of areas of improvement in the following section of my testimony.

This Subcommittee heard testimony on February 25, 2010 and on April 22, 2010, concerning the basic scientific principles applicable to endocrine screening. While not new, those principles were well summarized by Dr. Borgert at the February 25th hearing. Briefly, those principles concern: (1) measurement: scientific studies must measure what they claim to have measured within a known margin of error; (2) confounding: measurements and observations must not be confounded by extraneous factors and influences known to corrupt their accuracy and precision; and (3) replication: measurements and observations must be replicable in independent hands. At the April 22nd hearing, Dr. Birnbaum of NIEHS and Dr. Falk of ATSDR agreed that "good science" includes these principles and that "regulatory policy in the United States, things that we do, to the extent that it is going to rely on scientific research should, at a minimum, make these criteria . . . the cornerstone of our policymaking." April 22, 2010 Hearing on "The Environment and Human Health: HHS' Role" at 79-80. When I refer to "good science" in my testimony I am referring to these and related scientific principles. For purposes of this statement, I would add other scientific concepts such as the need to weigh and consider all data when forming broader scientific conclusions or managing risks. I also believe it is important to understand to what extent certain data and observations are relevant to answering broader scientific questions (such as whether a substance is an "endocrine disruptor" or whether a substance may pose a risk to human health or the environment) and to managing related potential risks. Generally, I have been concerned that many involved in the endocrine disruptor issue often fail to adhere to the above-mentioned scientific principles, fail to consider all the data, and often misstate the relevance of data upon which they rely.

Section 300j-17 of the Safe Drinking Water Act currently grants EPA the Authority to accomplish most if not all of the activities provided in the Bill. An obvious feature of the Bill is that it directs EPA to list and order testing of substances that may be found in sources of drinking water. More significantly, the Bill sets deadlines for those activities. Those deadlines, while understandable, may lead to unnecessary endocrine screening that could waste limited resources and lead to the unnecessary use of a great number of laboratory animals. For that reason, I believe the deadlines in the Bill should be slightly revised to allow EPA to modify, to the extent necessary and consistent with scientific principles, its Tier 1 screens and screening battery before undertaking additional screening.

Less obvious are a variety of other provisions and the use of various terms in the Bill that may significantly undermine the well developed scientific process currently used for science-based regulation in the United States. It is not clear whether those provisions are intentional or merely an artifact of legislative drafting. Specifically, health-based chemical regulation in the US currently is based on the potential for substances to produce adverse affects. As discussed

below, the Bill appears to suggest that EPA may and possibly should regulate based on a substance's mechanism or mode of action, regardless of whether that mechanism is adverse or leads to an adverse effect. Again, it is unclear whether it is the intent of the Bill to create a new regulatory paradigm. In any event, consistent with well-established principles for conducting risk-based regulation and with principles of sound science, the Bill should be modified to clearly state that to the extent EPA manages (i.e., regulates) endocrine disruptors, that regulation should be risk-based and designed to manage adverse effects.

Suggested Improvements to the Act

1. EPA should be allowed to complete its initial phase of screening before it is required to issue additional testing orders.

As the committee learned from the testimony it heard at its February 25, 2010 hearing, the time it has taken EPA to develop and implement its EDSP was expected by scientists given the Agency's attempt to develop and implement a very ambitious program along with the need to develop and validate a large number of new assays. Even at this time there remains significant uncertainty as to how well the individual assays and the Tier 1 EDSP battery will perform. Because of the uncertainties related to the Tier 1 screens and battery, EPA's Science Advisory Panel recommended that EPA initially undertake screening of fewer than 100 chemicals and, based on the results and experiences for those chemicals, modify Tier 1 screens and the Tier 1 battery as necessary prior to undertaking additional screening. Indeed, the initial phase of EDSP screening will be necessary to evaluate the performance of the screening assays and to validate the Tier 1 battery. The expectation of the SAP was that additional screening would not commence until after the first phase of screening was completed and assessed, and necessary changes were made to the assays and battery.

The Bill would require EPA to issues one or two rounds of new screening orders prior to its completion and assessment of the initial phase of screening. The Subcommittee should realize that, to the extent modifications to the Tier 1 assays and battery will need to be made in response to problems uncovered in the initial phase of screening, additional screening conducted prior to those modifications could result in a waste of limited resources and the unnecessary use of laboratory animals.

It will take two years from this point for EPA to complete the initial phase of screening under the EDSP and to analyze the data generated by that screening. During that time EPA should work diligently to develop a weight of evidence process for assessing Tier 1 screening data. I believe it would be more scientifically sound for the Act to require additional screening after that two-year period and to direct EPA to develop its weight of evidence assessment procedures

within one year so that those procedures are available as data from Tier 1 screening are reported.

2. The Bill should define "endocrine disruptors" as substances that exert an adverse effect.

The Bill changes the current definition of "endocrine disruptors" used in EPA's EDSP. The current definition of endocrine disruptor includes the concept of adverse effect (i.e., "endocrine disruptors" are currently viewed as substances that cause adverse effects through interactions with the endocrine system). The Bill's new definition is sufficiently broad to label anything that interacts with the endocrine system, regardless of effect, an "endocrine disruptor." In effect, the new definition would result in labeling anything screening positive in EDSP Tier 1 screening an "endocrine disruptor." It is unclear whether this is the intent of the Bill.

The Subcommittee should realize that the Bill's new definition would include within the term "endocrine disruptor" substances in the diet such as soy, sugar, salt, vegetables and almost all other exposures including physical factors such as sunlight. It should be remembered that the endocrine system functions as a mechanism to maintain homeostasis. Almost any exposure, given the right dose, will elicit adaptive changes in the endocrine system. Most of those changes are normal and without adverse effect. For these reasons, the Bill's new definition of endocrine disruptor is so broad as to be meaningless and useless. My concern is that the term "endocrine disruptor" is often used to elicit emotional responses that are not supported by the science. Indeed, how can the average person believe that the term "disruption" is not bad or adverse, even when endocrine disruption refers to a normal, uneventful interaction. In sum, the Bill's new definition of "endocrine disruption" implies adversity when there may be no adversity.

I believe the definition of "endocrine disruptor" in the Bill should be modified to read: " 'Endocrine disruptor' is an exogenous agent or mixture of agents **that causes an adverse effect by** interfer**ing with** or alter**ing** the synthesis, secretion, transport, metabolism, binding action, or elimination of hormones . . . ." Again, in my view, without this modification the Bill's definition of endocrine disruption is meaningless, useless and likely to cause mischief.

3. The Bill appears to promote regulation based on mechanism or mode of action.

When viewed in its entirety, the Bill appears to promote, contrary to currently established scientific and regulatory principles, regulation based simply on a substance's mode or mechanism of action. It is unclear whether this result is intended. In any event, the Bill plows new ground in this regard – we generally do not regulate based on mechanism. Rather, chemical regulation in the US is generally based on the potential for a chemical to cause adverse effects on

humans or the environment. My view is that the Bill should not promote regulation based solely on mechanism of action. I believe for a variety of reasons that such regulation would be contrary to good science and sound regulatory policy. It would also set a dangerous precedent that could affect all agency action.

My concerns arise out of the Bill's new definition of "endocrine disruptor" which appears to over emphasize the relevance of mechanism and ignores the importance of adverse effects. Further the Bill's definition of "testing" fails to distinguish the important difference between, and respective relevance of, screening and testing. Finally, the Bill explicitly directs EPA to determine whether to take action on "testing results" within 6 months after receipt of those results. See Section 1457(f)(2). Given the definition of "testing," which includes screening, and the fact that for most compounds EPA will have only screening data within 6 months of receiving "testing results," it appears the Bill may envision regulation based on screening results (i.e., mechanistic data) alone.

For the above reasons, I believe the Bill should be modified to (1) include the concept of adverse effects in the definition of "endocrine disruptor"; (2) distinguish screening and testing in the definition of "testing" and throughout the Bill to the extent necessary; and (3) clearly state in Section 1457(f)(2) that regulation should be risk-based and designed to manage adverse effects consistent with the current regulatory approach. As currently written, the scientific basis for various provisions in the Bill appear, at best, garbled and may lead to interpretations of the Bill contrary to Congressional intent. At worst, the Bill may actually intend to create a new regulatory paradigm unsupported by science and good regulatory policy.

I believe modifications to the Bill should be informed by a number of basic scientific and policy concepts upon which the EDSP and science-based chemical regulations are based. These concepts have been extensively discussed by the National Academy of Science, other scientific bodies and by various scientists. First, it is important to understand that screens are not tests. Screens are designed to be very sensitive and, therefore, generally have high false positive rates. Screens are useful to prompt testing. In the case of the EDSP, Tier 1 screening is designed to identify substances that may interact with the endocrine system and, in that regard, prompt more definitive Tier 2 testing. Tier 1 screens are not useful, on their own, for determining hazard or as a basis for regulation. Tests, however, can determine the potential for adverse effects and can serve as the basis for determining hazard. It is important to note, however, that identifying hazard is not equivalent to testing. Hazard is identified after testing data are interpreted using a weight of evidence assessment. Hazard, while not sufficient in itself for assessing risk, is used along with exposure data to assess risk. Finally, risk assessment, along with consideration of various societal issues, forms the basis for regulation.

4. All scientifically relevant information should be considered when ordering EDSP screening and testing.

Focusing on what should be the ultimate goal of the EDSP – determining which substances have the potential to cause adverse effects and managing associated risks – Congress may want to take this opportunity to clearly direct EPA to utilize, to the greatest extent possible, existing data that examines potential adverse effects. In that regard, it may be possible for some chemicals to forgo Tier 1 screening when sufficient Tier 2 type data are available. Although in some of these cases complete mechanistic data may not be available (data that might be generated in Tier 1 screening), sufficient data may still exist for purposes of assessing and managing risks. Therefore, while mechanistic data may be interesting in these cases, it may not be necessary for achieving the ultimate goal of the EDSP. By eliminating unnecessary screening and testing it may be possible to redirect limited resources to substances for which there exists fewer relevant data. Eliminating unnecessary screening and testing may also decrease the use of laboratory animals and further animal welfare concerns.

5. Throughout the Bill, EPA should be reminded to use the minimum criteria for developing reliable and relevant scientific information.

Congress may want to take this opportunity to reiterate the importance of using reliable and relevant scientific information, which is discussed in the previous section of this testimony. For example, the Bill directs EPA to:

- Prioritize the selection of substances that pose the greatest public health concern and to identify subpopulations that are at greater risk. Section 1457(b)(2)(A). That prioritization and identification should be based on actual data that comport with minimum criteria for reliable and relevant scientific information.

- Publish guidance on procedures for developing and updating protocols, determining when testing will be required and using other scientifically relevant information. Section 1457(c)(1). That guidance should require the adherence to the minimum criteria for reliable and relevant scientific information.

- Revise testing protocols. Section 1457(d). Determining whether to revise testing protocols and revising those protocols should comport with the minimum criteria for reliable and relevant scientific information.

- Accelerate testing for substances that, among other things, are "suspected to be an endocrine disruptor or has a structural similarity to a substance known to be an endocrine disruptor." Section 1575(e)(1).

> The determination as to whether a substance is suspected to be an endocrine disruptor should be determined on the basis of actual data that comport with the minimum criteria for reliable and relevant scientific information. Further, EPA is to use "scientifically relevant information" to make that determination. Section 1575(e)(2). "Scientifically relevant information" should be data that comport with the minimum criteria for reliable and relevant scientific information.

6. The scope of the Act should be clarified.

The Clean Water Act currently states, and the Bill reiterates, that a substance is subject to Section 1457 of the Act if "the substance may be found in sources of drinking water" and if "a substantial population may be exposed to such substance." The Act does not define the operative terms "may be found," "sources of drinking water," "substantial population" and "may be exposed." This language could be construed broadly as including within the scope of the Act almost any substance, even if the substance is not found in actual drinking water and even when no one is actually exposed. Indeed, an argument could be made that almost any water is a "potential" source of drinking water, possibly even an isolated aquifer under a Superfund site. Arguably, perhaps with some exceptions, any chemical may be found in such a source. Scenarios might also be imagined in which some number of people may be exposed to any water source.

Given limited testing resources, I believe it would be of greater benefit to human health to require testing of substance that may actually be expected in actual sources of drinking water. For purposes of prioritizing EDSP screening and testing, it would also be beneficial to focus first on more significant exposures. For these reasons, I believe it would be beneficial for the Bill to better define these terms and focus more on actual exposures or realistic exposure scenarios rather than what could amount to an highly unlikely chance of exposure. I believe the Bill should be modified to limit the scope of the Act to more likely drinking water contaminants. This could be accomplished by more narrowly defining the terms outlined above.

Again, I thank the Subcommittee for inviting me to testify on this very important Bill.

Mrs. CAPPS. Thank you, Mr. Quill.

Before we begin with questions, I would like to ask unanimous consent to include several letters and statements that we have received on this legislation, to include these in the record.

Without objection, so ordered.

[The information appears at the conclusion of the hearing.]

Mrs. CAPPS. I will begin with my questions, and I am going to turn first to Ms. Dougherty.

Currently, EPA is exploring whether to develop a drinking water standard for perchlorate. Some are arguing that EPA should stop this work. For example, one argument is made that the thyroid effect caused by perchlorate is also sometimes caused by eating foods, and so addressing the contaminant in drinking water might not even eliminate the risk.

Now, let me draw a parallel. EPA currently has a drinking water standard to ensure that there aren't harmful levels of E. coli in drinking water, even though E. coli can also be found in food. Do you think EPA should rescind its E. coli drinking water standard because it can also be found in food?

Ms. DOUGHERTY. No.

Mrs. CAPPS. Some people also say that pregnant women could just take iodine supplements to prevent the adverse health effects caused by perchlorate. Do you think that EPA should stop regulating E. coli in drinking water and instead advise people to just take antibiotics to prevent E. coli infections?

Ms. DOUGHERTY. No.

Mrs. CAPPS. So, just to sum up, even though the health risk may exist in more than just drinking water—and medication could be used to treat that health risk—you would agree that those are not reasons why EPA should cease its efforts to regulate perchlorate.

Ms. DOUGHERTY. I would agree that it is not necessarily the reason to do that.

Mrs. CAPPS. Thank you.

Mr. Estes-Smargiassi, a study released last year by the Association of Metropolitan Water Agencies and the National Association of Clean Water Agencies found that the Nation's drinking water systems alone would need $692 billion through 2050 to adapt their operations and their infrastructure to the impacts of climate change. AQUA directs States to give greater weight to Drinking Water SRF applications if the system improves its efficiency or reduces its environmental impact through measures like increased water efficiency or conservation, greater source water protections, and actions to develop sustainable energy on site. Do you believe that these types of projects will help water systems prepare for the impacts of climate change?

Mr. ESTES-SMARGIASSI. All of those things increase our flexibility and should make it easier for systems to adapt to climate change, yes.

Mrs. CAPPS. Are there some additional types of projects that you would like to list that would help you do this?

Mr. ESTES-SMARGIASSI. I would say what we can use from EPA and from the Federal Government is more detailed information, more research on the specific impacts for every use system. It is very different from place to place. So maybe not projects, because

I can't say what any individual system would require, but information and technical assistance would help us move that forward.

Mrs. CAPPS. Thank you very much.

And I turn now to Mr. Levy.

Several government reports have concluded that climate change will lead to increased heavy precipitation events in the Northeast and rising sea levels along the coast. What is Maine Rural Water Association or other rural water agencies doing to prepare for these impacts and how can the Federal Government help, either through Drinking Water SRFs or some other program?

Mr. LEVY. That is an interesting question. As you know, we have about 3,000 miles of coastline in Maine. I would say that climate change will probably be less of an issue for water systems typically because the water supplies aren't located next to the ocean. That being said, the wastewater facilities are often discharging into the ocean and in fact are often located nearby. So I would say that the clean water SRF fund would be a very, very valuable source of funding to help them either to move or to protect their resources due to climate change.

Mrs. CAPPS. Thank you very much. Your prompt answers are allowing me to ask another question, and I can turn to Dr. Janssen.

My State has defined, the State of California—I am not Mr. Markey, by the way. I am Mrs. Capps, from a different coastline, where we are impacted by climate change as well. My State has defined lead free as 0.25 percent lead content, rather than the extraordinarily high 8 percent lead content currently permitted under the Safe Drinking Water Act. The AQUA Act adopts this 0.25 percent lead content standard. You are from California as well. In your opinion, why is it unacceptable to define lead free as containing no more than 8 percent lead content?

Dr. JANSSEN. Thank you for your question.

We know that lead is a potent neurotoxin which has strong neurodevelopmental impacts, especially in babies and infants who are exposed to that. So, therefore, we really worry about even very low levels of exposure. So 8 percent might not seem like very much, but, in actuality, it is a level of lead exposure that could cause a loss of IQ points, a change in behavior, impairments in learning and memory. And so 0.25 percent is a much better level of exposure than a much higher percentage.

Mrs. CAPPS. Thank you.

Mr. Crouse, I am over time, but would you offer two words in response to that? Do you agree or disagree?

Mr. CROUSE. We agree.

Mrs. CAPPS. Two words. Thank you very much.

And now I turn to Mr. Scalise for questions.

Mr. SCALISE. I thank the chairman.

For Dr. Janssen, right now, in an ideal world, of course, we would have unlimited resources to address potential health issues, such as aging drinking water systems. I don't think anybody up here would disagree with that. However, we are most decidedly not living in an ideal word, and we have very limited resources. According to a report yesterday, the Federal Government ran a deficit in April for the first time in 26 years. We spent $20.9 billion more than we took in for last month alone. Since October, our overdraft

account has a balance of a record $802 billion; and at that pace we are on the road to our Nation's first-ever $1 trillion annual deficit.

So is it wise to say that some of the extra funds authorized in this bill, funds that we clearly don't have, should, as a priority, go to projects like the fourth priority, which was added in section seven of this bill, which makes preventative projects as much of a priority as the systems in most need or present the most danger to human health?

Dr. JANSSEN. When I took an oath as a physician, prevention was a big part of that. That is part of the Hippocratic Oath. Preventing disease is much less costly than treating disease.

So bacterial contamination has been associated with not just nausea and vomiting and having to be in bed all day with diarrhea and staying home from work, which is costly to businesses, but also has resulted in kidney failure, hospitalization in the ICU, and even——

Mr. SCALISE. Right. And so we have got a host of problems that you deal with, that we all deal with.

But, again, with unlimited resources, we could address each of those. But if you've got a situation—if a doctor is treating patients at a hospital and three people come in all at the same time with various levels of degrees, wouldn't you take the patient who is the most in dire need of attention? If you have only got one doctor and three patients, the one that is near death versus the one that might just need an aspirin, wouldn't you take the one with near death first or would you——

Dr. JANSSEN. I think that is true, but I would say our aging infrastructure is a dire situation.

Mr. SCALISE. Right. But until they change the priorities so that a system that is most severely in need gets the same attention as one that is not severely in need when you have limited resources—when you don't have limited resources, I understand it would be fine to treat all of those, but do you think it is appropriate that this bill changes that priority so that you as an administrator or somebody who is an administrator of a water system can't treat the most-in-need system, even if they have limited resources?

Dr. JANSSEN. Well, I am here to speak about the endocrine disruptor screening provisions in the bill, but my read of the bill and my interpretation of it is that prevention becomes an equal priority with the other priorities that you are describing. So it is not placing that priority above the other ones and the water system could——

Mr. SCALISE. Let me ask Mr. Crouse, who deals with the water system in Maine. What is your take on that?

Mr. CROUSE. When we look at projects that—we always get more project requests than we have money available, so we do prioritize based on those systems that are in violation. So our scoring system is weighted to the ones that are out of compliance with Safe Drinking Water Act regulations. Those are our highest priority. The ones that are lower priority are the ones that are maintenance, infrastructure, replacement, those types of activities.

Mr. SCALISE. Mr. Levy, your take on that, representing rural water systems.

Mr. LEVY. Representative, I probably spend 2 nights a week out raising water rates for some small town, and I understand what you are getting at. What I am seeing, frankly, is small communities being unable to keep up with both aging infrastructure and complicated rules and regulations, and it is an ongoing struggle. I think this bill does a lot to put the greatest needs first, and I think that is important.

Now, let me just share a little story we are doing——

Mr. SCALISE. I am almost out of time, so I apologize.

If I could go on, back to Mr. Crouse, why do some States' analysis conclude the Davis-Bacon provisions will inflate the cost of drinking water projects and how would you remedy that?

Mr. CROUSE. Well, in Maine, we do not have a State prevailing wage rate requirement. So when ARRA came along with the Davis-Bacon provision attached, we had to begin implementing that, so we did see some increases in costs, project costs, as a result of contractors having to meet the Davis-Bacon wage rate requirements.

Mr. SCALISE. OK. Mr. Levy, in terms of the prevailing wage, how would that increase costs for you? Any kind of quantitative analysis?

Mr. LEVY. In terms of—we have seen some project costs go up. We have seen some project costs stay the same. I would say that there is a mixed opinion on it. We are basically deferring to Congress on the implementation of Davis-Bacon. We feel that this is an issue that you are going to need to wrestle with.

I would say——

Mr. SCALISE. But it does, in cases, increase the cost and make it to where you are not able to fix as many water systems if that cost is increased on particular projects?

Mr. LEVY. I would say it is catch as catch can in terms of individual projects. Some of them are going up; some are staying the same.

Mr. SCALISE. Thank you. I yield back.

Mrs. CAPPS. I now recognize Mr. Inslee for 5 minutes.

Mr. INSLEE. Thank you.

I wanted to ask some of the witnesses about endocrine disruptors specifically. We have certainly had a problem. I am from the State of Washington, and we have found these disruptors in Puget Sound. We have got male fish with female proteins in Elliot Bay. We are finding there is 150,000 pounds of untreated toxic finding its way into Puget Sound every day. We have got the endocrine-disrupting chemicals found in numerous King County waters, and I won't list the names of them.

But I wanted to ask witnesses about the ability to keep endocrine disruptors out of the waterways in general. I have introduced a bill to create a legal pathway to dispose of pharmaceuticals so they don't get flushed down the toilet and end up in our waterways. We are particularly concerned about endocrine disruptors, and I just wanted to ask—maybe I would start with Ms. Dougherty—what advice you could give us.

I am trying to keep these things out of the waterway in general. We have suggested a way to allow communities to do drug take-back programs to keep these out of our sewer systems which are not designed to segregate this stuff from going into the bays and

estuaries. But I just wondered—and I will start with Ms. Dougherty—what comments you would give us on trying to keep this out of the water system in general.

Ms. DOUGHERTY. I think improving the ability for communities to have drug take-back programs is a good idea and something to follow through on. We have done some work over the last couple of years to try to see what could be done with that. That doesn't completely solve the problem, because, obviously, what goes through people's bodies also comes out; and we need to look at what we do in terms of the wastewater treatment plants and whether there are things that can be done to understand what comes out of wastewater treatment plants and goes into the environment.

Mr. INSLEE. Ms. Dougherty, you could help us. The bill that I have introduced—there are two concerns about leftover pharmaceuticals. One, they end up getting into the hands of our kids who then sell them on the street; and prescription drug abuse is now the fastest-growing problem with drug abuse right now. So that is one of the problems. The other thing is these endocrine disruptors and other chemicals getting in our natural water systems.

Our bill would address both of these issues. I hope you might think about trying to alert other members of my committee, frankly, of the necessity of making sure we deal with both of the problems, including the ones that we are here talking about of endocrine disruptors. Some of us suggested we don't deal with the environmental issue, we only deal with the drug abuse problem. We think we should deal with both.

Ms. DOUGHERTY. I agree you need to deal with both.

Mr. INSLEE. I appreciate that, and I will quote you widely. And if you can let others know in the House your thoughts on that, that would be appreciated, because we are trying to move this bill.

Does anyone want to comment on this issue on the panel?

Dr. JANSSEN. I can comment on this.

Thank you for your questions and for your efforts to reduce the upstream of these chemicals into the environment. NRDC published what we call a scoping paper on pharmaceuticals in the environment, and I will provide that to this committee for your pleasure in reading.

[The information appears at the conclusion of the hearing.]

We talk about the whole entire lifecycle of the pharmaceuticals so not just the disposal practices but also designing better drugs to begin with. Because we know that some drugs are more likely to remain in the environment than others and especially drugs which are not necessarily the most prescribed by volume or in terms of numbers but drugs which for whatever reason are very persistent because of the way that they are structured and developed.

A second is to have better physician practices in prescribing medications. I think physicians have largely gotten the message about reducing prescriptions for antibiotics, for example, for a viral infection. Well, we know they are not going to do any good to the patient. But patients still go in and expect to get an antibiotic when they see their doctor. So we have to do better education of

both patients and physicians to decrease the prescriptions of unnecessary drugs.

And, finally, I do agree that we need better treatments in our wastewater plants and better research into methodologies that can remove these things before they are put back into the wastewater stream.

Mr. INSLEE. Thank you.

Anyone else.

Mr. QUILL. Yes, if I may.

I think your approach is rational, but I don't know why it would be limited to so-called endocrine disruptors. It is always good to limit the release of any chemical to the environment.

I would say, on the fish issue, you may regulate or prevent the release of drugs per se, but it doesn't address other issues. You know, there's estrogens that come from female urine that are not related to pharmaceuticals. Those would have to be regulated. And there are other sources such as runoff, just what are called phytoestrogens from plants. There are a number of things that have to be regulated, and pharmaceuticals may be one, but there are other places to look.

Mr. INSLEE. I can assure you I will not be offering a bill to regulate the female constituents of the First Congressional District. And, by the way, our bill does deal with all chemicals and prescriptions, not just endocrine disruptors. Thank you.

Mrs. CAPPS. Dr. Burgess is recognized for your questions, 5 minutes, please.

Dr. BURGESS. Thank you. I appreciate that.

As a public service announcement, the water in your pitchers is either taken from a plastic bottle in the back which has not been screened for BPA or, worse yet, it came from the tap, and we are advised not to drink the water in the Capitol because of the high lead content. Just so you know.

Ms. Dougherty, let me ask you a couple of questions, if I could, because you are the director of one of the major offices in the Office of Water in the EPA; is that correct?

Ms. DOUGHERTY. Yes.

Dr. BURGESS. In March of this year, there is a report that came from the EPA Inspector General concerning recommendations from past Inspector General reports, and the report delineates down to the Office of Water, and some of these programs I think would fall under the jurisdiction of the Office of Ground Water and Drinking Water. So if I mention programs that are handled by another office, please let me know that.

But the report is the compendium of unimplemented recommendations as of March 31, 2010; and the report itself is dated April 28, 2010. The Inspector General lists six reports that involve unimplemented recommendations. One of the reports was issued in 2002, another in 2004, another in 2006. No other EPA program office was close to this record. If you could, tell us why the Office of Water has such a problem in implementing recommendations from the EPA Inspector General compared to other EPA program offices.

Ms. DOUGHERTY. I am afraid I will have to get back to you on that, since I don't have the list in front of me. But, normally, the Inspector General reports have recommendations for actions for

EPA to take and EPA responds with what actions we plan to take and tracks those actions. So I am not familiar with exactly which——

Dr. BURGESS. I think there is——

Ms. DOUGHERTY. Occasionally, there are some differences in what we think meets what we have said we would do and what the Inspector General thinks meets what we are expected to do. But let me get back to you on that.

Dr. BURGESS. But we are not just necessarily as a Federal agency free to ignore those IG recommendations because we disagree.

Ms. DOUGHERTY. What they track is not so much their recommendations but what we have said we would do about them, I believe, and——

Dr. BURGESS. Well, just a couple of specifics on the April 28 report which I will make available to your office.

Ms. DOUGHERTY. I am sure I have it. Thank you.

Dr. BURGESS. The EPA Office of Water agreed to complete implementation of a recommendation from a 2002 IG report on wastewater management by September 30, 2009, but as of the April 28 report it was still unimplemented. We are a few weeks past that point at this juncture. Is it still unimplemented at this time?

Ms. DOUGHERTY. I can assure you that it is not my office. That one is not my office, but I will go back and respond back to you on that.

Dr. BURGESS. Very good. Also, according to this same report, the Office of Water has not implemented a recommendation in which the Office of Water agreed to take corrective action by September 30. This action would be in response to a recommendation from a 2004 IG report that found that the EPA needed to reinforce its national pretreatment program; and, in particular, the Office of Water was to develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements. The IG says the Office of Water has not implemented the recommendations as of March 31, 2010.

I would ask you today, have those recommendations been implemented?

Ms. DOUGHERTY. I can't answer that. Again, that is not my particular office within the Office of Water, but I can get you a response.

Dr. BURGESS. I would appreciate that; and we will provide you the several things here that we have got, recommendations that haven't been implemented.

Mr. Quill, let me ask you, because you were building up to what sounded like an important apex in your testimony, and we unfortunately cut you off. You were making the point that the screening data sometimes can lead to regulation that, if I understood you correctly, that may be jumping the gun or missing the mark. Would you care to finish that thought that you had when you were giving your opening statement?

Mr. QUILL. Yes, sir. And thank you for the question.

The point I was making is, in the bill, there is a definition of endocrine disruptor which basically includes anything. If you don't incorporate into that definition the idea of adversity—although the term "disruptor" suggests adversity—what you have defined as an

endocrine disruptor is anything. It could be soy, it could be baby formula, anything that interacts with the hormone system, with the endocrine system.

On top of that, you have a definition of testing which includes screening, and it is important to understand that screening merely tells you whether something has the ability to interact with the endocrine system. It kind of tells you a mechanism of action. Not only that, screening tests are designed to be highly sensitive, which means there is a high false-positive rate.

Really, screening tests are valuable for prompting more definitive testing. So the idea is you have a definition of an endocrine disruptor, you have a definition of testing which includes screening, and then you have a provision that says, based on the results of testing—read screening or mechanistic data—the agency shall take action. And that action some might perceive to be regulatory action, and therefore what we might see is regulatory action based on mechanistic information. That is not the way science-based regulation is done currently in the country.

However, the thing that concerned me is there is this trend to not rely on data, to rely on some very basic screening-type data and use precautionary principles and call for regulation. That was my concern.

Dr. BURGESS. I know we have gone over time, but let me just ask you if you all will work with us on the language of that so maybe we could possibly get it right in the underlying bill. We would appreciate that very much.

Mr. QUILL. Thank you.

Mrs. CAPPS. Thank you.

Now turning to Mr. Shadegg for your questions, 5 minutes.

Mr. SHADEGG. Thank you, Madam Chairman.

Dr. Burgess hit upon the line of questioning that I would like to go ahead with, Mr. Quill, and I am interested in getting further definition. You say that there are various provisions of the bill that you believe are contrary to good science and fail to use good science either intentionally or unintentionally, significantly undermining existing, well-established procedures for science-based regulation. Can you compare the concerns you have or illustrate the concerns you have with what is in the proposed legislation compared to the program that is currently going on?

Mr. QUILL. Yes, sir. If we go back to the 96 amendments to the Safe Drink Watering Act that include the endocrine provisions, EPA was granted full authority to do pretty much everything that is in the current bill. The big difference here is that the bill orders the EPA to act, as opposed to just granting it authority, and it has some hard deadlines.

Mr. SHADEGG. Could you stop—it orders it to test or does it do more than order it to test? Because ordering it to test——

Mr. QUILL. It orders the agency to list and then test 25 chemicals per year. OK.

Mr. SHADEGG. I thought you said it was going to be up to the EPA to determine whether or not they could achieve——

Mr. QUILL. Well, that is always the case. In the Food Quality Protection Act that EPA bases its current EDSP on, the bill ex-

pected EPA to take certain action within 2 years. The science didn't allow it. So you know——

Mr. SHADEGG. Apparently. OK. Proceed.

Mr. QUILL. In any event, the current EDSP envisions that endocrine disruptors are substances that cause adverse effects. That is a change in the new bill.

I have this overarching concern that—I am not sure what the bill intends to do, but I have a concern that it might promote regulation based on screening data. The current EDSP makes it clear that that is not what is supposed to happen with screening data. Screening data are supposed to be used to prompt Tier 2 testing. And just in reading the bill, I was just concerned that it wasn't clear that it fully understood the value of screening data versus testing data and how regulations are typically done. And perhaps the committee fully understands this. However, as a person who has to deal with the interpretation of this Act down the road, I have some concerns.

Mr. SHADEGG. In your oral testimony, you said that we needed to stay true to the scientific method, not avoid, I guess, preconditions or preconclusions. But you also said that it was important to tie the definition to the potential for harm or adverse effect. From what you have just said, I gather what you are saying is that the current law says, in defining endocrine disruptors, that they are those with adverse effect and your concern is this legislation removes the requirement that there be adverse effect or that criteria?

Mr. QUILL. No, sir, not precisely. There is no definition in the current law. The current definition is in the EPA's EDSP, and there are a variety of definitions out there but the only one that really makes any sense is to have adversity incorporated in the definition. Even during the hearing today, the term "endocrine disruptor" is thrown around. Frankly, I don't know what it means. I don't know whether it means something that there is evidence of a molecular interaction or does it mean something where there is evidence of an adverse effect? Because we don't define our terms well.

Mr. SHADEGG. And you believe that a definition should be added to that law making that clear?

Mr. QUILL. Well, to the extent that the definition is added to law as it would be in this Act, it ought to be improved to include the concept of adverse effects.

Mr. SHADEGG. I appreciate that answer. And I would echo what Dr. Burgess said. I appreciate your assistance in clarifying that point.

I think often when we write laws we don't clarify the terms, and failing to define those terms then leaves vast discretion.

I yield back the balance of my time, ma'am.

Mrs. CAPPS. Thank you.

We have completed our first round of questions. If there are no objections, we will do a second round; and I will begin for 5 minutes.

Ms. Dougherty, one of our witnesses says that EPA shouldn't issue any more test orders for chemicals under the endocrine disruptor screening program until its first set of test results come

back in the next year or two. Isn't it true that EPA is already finalizing its next list of 100 chemicals for testing, and this is following direction from the House appropriators?

Ms. DOUGHERTY. Yes. As I mentioned in my oral testimony, we have a list of a hundred that we are doing based on current drinking—regulated drinking water contaminants, the contaminant candidate list of potential future drinking water regulations, and the pesticides that are up for review in the next 2 years.

Mrs. CAPPS. And isn't it true that the tests EPA has required have been validated by multiple laboratories? Is this the case?

Ms. DOUGHERTY. We have gone through a process to validate the tests, and they have been also peer reviewed by the Science Advisory Panel that the pesticides program has.

Mrs. CAPPS. Do you think the results of these tests will yield valuable information?

Ms. DOUGHERTY. I believe that they will, and we will be able to use that information then to evaluate the next steps that we would need to take on particular contaminants.

Mrs. CAPPS. So do you have the belief or opinion that there is any reason we should stop in our tracks and disrupt the continuation——

Ms. DOUGHERTY. No. I think that we need to have a process over time as the bill considers to relook at how we are doing the testing and improve things over time, but I think that we are fine with starting what we have and improving that over time.

Mrs. CAPPS. I will turn to you, Ms. Janssen.

One of our witnesses stated in his testimony that the endocrine disruptor screening language in the bill requires EPA to regulate endocrine disruptors even when there is no adverse health effect found. Isn't it true that the definition of testing in our legislation requires EPA to determine whether something is an endocrine disruptor as well as to determine what the effects of the substance are? And you can expound on that if you wish.

Dr. JANSSEN. Yes. Thank you for the question.

I agree that is correct. My reading of the bill is that it is requiring EPA to issue test orders which will be carried out by the manufacturers with these contract labs to determine whether or not they have endocrine disrupting effects. Right now, that protocol is both screening and testing; and then at the end of that EPA will have the discretion to decide the next steps that they will take based on the information.

Mrs. CAPPS. Isn't it also true that nothing in our legislation requires EPA to regulate any substance? In fact, really all the legislation does is to require EPA to determine whether or not to do so based on the result of the testing?

Dr. JANSSEN. Yes, that is correct.

Mrs. CAPPS. So, basically, all legal thresholds that must be met for substances to be regulated under the Safe Drinking Water Act would still apply to endocrine disruptors under our language; is that correct?

Dr. JANSSEN. That is correct. Thank you.

Mrs. CAPPS. And I will turn back to you for final agreement or disagreement, Ms. Dougherty.

Ms. DOUGHERTY. Yes. We would still have the statutory criteria that we use to make a determination as to whether to regulate, and we would still be required to establish our regulations on the same basis that we do now.

Mrs. CAPPS. Thank you.

I am going to yield back the balance of my time and turn to Mr. Scalise for any questions you may have.

Mr. SCALISE. Thank you.

Ms. Dougherty, section 16 in the bill establishes an endocrine disruption screen and testing program for 100 substances over 4 years. Is that a realistic set of criteria?

Ms. DOUGHERTY. It is consistent with what we are doing right now in terms of identifying the next list of a hundred.

Mr. SCALISE. So it is something that you think you all can meet?

Ms. DOUGHERTY. I believe so, yes.

Mr. SCALISE. OK. Thanks.

Mr. Levy, section 7 of the bill contains a new series of reporting requirements for SRF applicants. In your testimony you state that the new reporting could overwhelm many smaller communities' ability to apply for funding. What specific fix do you suggest be added to the bill to address this concern for the smaller water systems?

Mr. LEVY. Congressman, my understanding is the reporting is more based—is more a requirement of the primacy agencies than the drinking water systems themselves. That being said, small water systems and large water system always have enormous difficulties providing the reports that are required by the primacy agencies, which is why we contend that technical assistance is so important for our programs.

Thank you.

Mr. SCALISE. Thank you.

Mr. Crouse, you recommended that States be allowed to use the 15 percent set-aside for source water protection activities in addition to the assessment activities currently proposed. What are these activities and why shouldn't the States pay for them?

Mr. CROUSE. Under the '96 amendments, the 15 percent set-aside allowed us to assess source water protection needs, and most of that assessment work is done in the States, I believe, at least in Maine, and we are trying to implement those recommendations that we found in the source water assessments.

So we still have the 15 percent set-aside available. We have done the majority of the assessments. We would like to now move to the next phase of actually implementing a number of those recommendations.

Mr. SCALISE. OK. Why do the States need the administrative set-aside to increase? Because in the bill—and it is in section 9—they actually allow for a 50 percent increase in administrative costs for 4 percent up to 6 percent; and in these tight economic times when you have got families and businesses that are tightening their belt, why would you want the increase in administrative costs to go up by 50 percent?

Mr. CROUSE. Well, the 4 percent generally has not been adequate to finance the staff time and expenses needed to administer the Drinking Water State Revolving Fund, in Maine, anyway, where 1

percent stays so we get 1 percent of the national cap grant. So 4 percent of that has not been enough to cover all our staff costs to administer this area.

Mr. SCALISE. But a 50 percent increase seems like a pretty dramatic and to many people offensive increase when you are considering that people in businesses are cutting back, that here in this bill you are actually allowing for a 50 percent increase. What percent are systems? What is it costing systems right now? If 4 percent isn't enough, what is the kind of going rate? I mean, if they are doing it, if there is a cap now, they are making by.

Mr. CROUSE. Right now, we are using funds from other sources to supplement the administration of the SRF program, whether it be other set-asides, using the 10 percent set-aside or some other State money or fees on loans that are administered.

You now, there is a certain amount of staff that is needed to administer the SRF and there is a certain amount of costs associated with that. So we are just trying to meet those needs.

Mr. SCALISE. And clearly we can look at that as well.

On the 10 percent State set-aside you just talked about, the legislation removes the 100 percent State match. Shouldn't States have to put up money in order to be able to get money under this? Why take away the interest? If a State is that vested that they are putting up money, it seems like you should want to incentivize them to have a stake in it. This bill completely takes that away.

Mr. CROUSE. Well, with the SRF, States are required to come up with a 20 percent State match for the overall capitalization grant. So, in Maine, we are getting $13 million. So we have got to match 20 percent of that, $2.7 million.

So the 100 percent State match, the 100 percent match on the 10 percent set-aside is an additional match in addition to the 20 percent. So it is almost like there is a double match requirement on this. Where we have already matched based on the 20 percent, now with the 10 percent we are asked to match it once again, and so that is why we would like to remove that——

Mr. SCALISE. I have got just a few seconds left. I wanted to ask one quick question for Mr. Smargiassi.

You talked about faucets in your testimony. Right now, there is legislation in this committee that looks at products with any kinds of chemicals in them. No-lead faucets that you talked about, it seems no-lead faucets would be taken off the market because of the legislation that is also moving through here. Would you want to comment on that since no-lead faucets seem something you promote? There is other legislation moving through that would actually take them off the market.

Mr. ESTES-SMARGIASSI. I am not familiar with the specific legislation and this piece of legislation. What was done in California was to go from an unreasonable 8 percent lead in brass to a practical, reasonable one-quarter of 1 percent that the manufacturers can actually produce a salable product that homeowners will buy and install. Our goal is to make sure that, as people renovate, that they actually do change out those faucets with ones which leach less lead but not to ban a product.

Mr. SCALISE. You would promote no-lead faucets, wouldn't you?

Mr. ESTES-SMARGIASSI. The question is, would you—it is, again, a definitional question. In this case, we are talking about allowing the manufacturer to include a very small amount of lead which is necessary to machine the brass components so they can actually produce it. It is hopeful at some point in the future plumbing manufacturers will come up with adequate substitutes so that—absolutely no lead would be a long-term goal, but in the short term we need a product that actually can be produced and sold.

Mr. SCALISE. Thank you. I yield back.

Mrs. CAPPS. Thank you.

And now the chair recognizes the chairman of the committee who has returned and prefers to ask his questions from our far right but, of course, the witnesses' far left of the dias. So recognized.

Mr. MARKEY. I thank the gentlelady very much.

Mr. Estes-Smargiassi, Massachusetts is extremely progressive when it comes to funding State revolving funds projects. It allows for funding to be used for rehabilitation of all systems, creating system redundancies, and the incorporation of water and energy efficiency technologies. But I have heard from the water sector that other States do not consistently fund these types of projects which is why our bill explicitly authorizes the use of a State revolving fund for a wide range of forward-thinking projects. Why is it important, in your opinion, for water systems to be able to get funding for these types of projects?

Mr. ESTES-SMARGIASSI. Well, I think that encouraging systems to think about fixing things before they are broken, to plan for problems which may occur, in the case of making sure that you have got redundant facilities, and to think long term, not to only think about the problem at hand but to think 20, 30, 40, 60 years out and make sure you are doing something that is not just cost effective today but cost effective long term makes good sense. We are fortunate that our State has opened up the rules so that systems can set those priorities in their own system, and it just makes common sense that that be available elsewhere in the country.

Mr. MARKEY. So what you are basically saying is that ensuring that these sorts of cutting-edge projects are eligible for funding can actually help to boost compliance with drinking water standards and save drinking water systems money in the long run?

Mr. ESTES-SMARGIASSI. I think that is a fair statement.

Mr. MARKEY. As you know, our legislation also expands the eligibility for extra assistance for disadvantaged communities to portions of water systems that are disadvantaged. Water systems that serve big cities typically can't receive such assistance even though portions of their service areas can include extremely poor neighborhoods whose residents can't afford the rate increases necessary to bring their systems into compliance with safe drinking water standards. For example, El Paso, Texas, is one of the poorest cities in the country, but it still can't qualify for this funding. Do you think that poor urban areas should qualify for extra assistance just as poor rural areas do?

Mr. ESTES-SMARGIASSI. I think it is definitely a problem, that in large metropolitan areas, if we think of the system simply as a broad system, then we are going to have some of our ratepayers pay more than they can afford. That is clearly the case in our serv-

ice area with a city like Chelsea being among the poorest in the State is grouped and averaged in with towns like Weston, among the richest in the State. This bill takes some steps forward which should help some metropolitan areas with some increased flexibility for State programs to give a little bit extra umph there. It is a difficult problem. Won't solve every problem, but it is a step forward.

Mr. MARKEY. But, again, going to El Paso or other poor cities, obviously, there should be some way that we think this thing through to ensure that poor urban areas do get to qualify.

Mr. ESTES-SMARGIASSI. Absolutely.

Mr. MARKEY. Now, the State revolving fund has not been this reauthorized since it was originally passed and appropriations levels decreased steadily until we passed the Recovery Act. We need to reauthorize this fund and raise the authorization levels.

This legislation will provide $1.5 billion in 2011, and the authorization will grow each year, reaching $6 billion in 2015. There are water systems ready and waiting for these funds, and people across the country are counting on these funds to keep them safe.

I would like to hear a little bit more from our panel about their views on the funding levels. Ms. Dougherty, can you give the committee a sense of how these levels compare to past appropriations for the State revolving funds?

Ms. DOUGHERTY. Historically, the SRF has been appropriated at about a little bit under a billion dollars a year, in the range of 850 or so. So this would be a significant increase of that. When we received the appropriation for the Recovery Act of $2 billion more on top of the 2009 appropriation of about 850, that was almost tripling the size of the appropriation available to States; and they were able to move projects very quickly, find good projects, and move those projects very quickly.

Mr. MARKEY. Now, how does this can compare to EPA estimates of the infrastructure costs facing our Nation's water systems?

Ms. DOUGHERTY. Our latest needs survey estimated about $334 billion of need over 20 years for all the eligible categories of projects, which includes the rehabilitation kind of projects.

Mr. MARKEY. Mr. Crouse, how would these authorization increases affect your State's program?

Mr. CROUSE. The State of Maine is a 1 percent State, so we get 1 percent of whatever comes naturally. So next year we would get $15 million. In the past, we have gotten around $8 million; and this year, through the 2010 appropriation, we are going to get about $13.5 million.

Mr. MARKEY. Mr. Levy, how would these increases impact on rural systems across the country? You are here to testify on behalf of rural systems.

Mr. LEVY. I am. I would say that small utilities are the bottomless pit for financing. They are old. They need to be replaced. They need to come into compliance with new rules and regulations. So, frankly, we will use your money and put it to good use. Small water systems, large systems——

Mr. MARKEY. Do they need it?

Mr. LEVY. They do need it. Just in the three States that I work in on a daily basis, most of the water utilities are somewhere be-

tween 75 and 110 years old; and they need the money because the pipes are leaking and because they also need to put in sort of the cutting-edge projects, green things, new pumps, et cetera, to save their operating costs.

Thank you.

Mr. MARKEY. And, Ms. Janssen, could you talk a little bit about how these increases could help enhance public health?

Dr. JANSSEN. Thank you, Representative.

As I submitted in my written testimony, the deteriorating condition of our water infrastructure is concerning for public health reasons in part because when things like main pipes break, like happened recently in Massachusetts, people are forced to boil their water. We are not really sure exactly how to do that always, and it requires an inconvenience that some people might forego and subject themselves to a water-borne illness.

We also know that there are throughout the aging water infrastructure small leaks in the distribution lines, which create opportunities, especially when these lines are close to sewer lines, for sewerage waste to enter into the drinking water lines; and this has been documented to result in water-borne illnesses in the population. So shoring up our water infrastructure will go a long ways to prevent these bacterial illnesses in the public.

Mr. MARKEY. Thank you, Dr. Janssen.

I yield back the balance of my time. Thank you, Madam Chairman.

Mrs. CAPPS. Thank you, Mr. Chairman.

And final questions come from Mr. Shimkus.

Mr. SHIMKUS. Thank you very much.

I want to, to the panel and our guests, thank you for coming. It is a very busy time, and members are coming and going, and it is a very important issue. So I appreciate the chairman for holding the hearing and your testimony.

Just a comment. If we have people who don't understand how to boil water, we are in a world of hurt. So not belittling that point, but that is that is a very great statement to be said.

I want to start with Ms. Dougherty, because there is a vested interest. I am a cosponsor of Bob Etheridge's bill, H.R. 2206, which requires EPA to give priority to what assistance small communities believe is working the best to help their compliance needs. Is this something the EPA is capable of?

Ms. DOUGHERTY. I think in terms of how we do the technical assistance grants it is important for us to make sure we understand the issues that need to be addressed by technical assistance, and what we have tried to do over the last several years with the earmarks that we have received is to make sure that the technical assistance providers and the States work together to identify the priorities that need to be dealt with in a particular State so that the technical assistance providers are providing small systems the help that they need.

Mr. SHIMKUS. Yes. Because I have been here longer than I would like to admit sometimes and you learn that really the water supply is very diverse throughout the country and the people that have had to deal with it, especially in small town, rural areas, and they

have to address the needs. There really is some expertise there on the localism issue. So we would hope that that would be a focus.

I have a question to, if I can find it—Mr. Quill, I noticed that the legislation has a petition process to have substances included on this list, but I am curious that I don't see a process or at least a formalized process where substances could be removed. And the issue is, if there is—I always want to focus on real science, real data, the ability to replicate through the scientific method. If the scientific process poses a point that a substance should not be on the list, should there be a process by which an element can be removed?

Mr. QUILL. Well, that would make sense. I would think, though, that it could be a different process and there could be different requirements for adding a substance to the list or removing a substance to the list.

Keep in mind the point of adding a substance to the list now is just for it to undergo screening where we intend that there is going to be a high false-positive rate. What would it take to remove something from the list? It may take more evidence that a substance either doesn't interact with the endocrine system or, more importantly, evidence either for or against regulating. Because, at the end of the day, the point here should be to determine what substances cause an adverse effect and to manage those effects, not necessarily just to gather a bunch of facts about interactions with the endocrine system molecular data. So I think you make a very good point. I would just say it could be different types of data.

Mr. SHIMKUS. Because everything we do—and we are all in it—we want to make sure folks are safe and systems are sound, but for every addition there is an additional cost, especially in some of the systems. So I would think that we would focus on some real science and have a process.

Mr. QUILL. Yes, sir.

And if I may add one thing, the earlier question about the billions of dollars for infrastructure, the thing that popped in my mind was, jeez, if we had 5 to $10 billion, we might be able to screen and test a thousand chemicals. Well, that really raises the issue as to where is money best spent and how can we do the screening and testing in a more efficient manner so that funds can actually be used where they may have a greater impact.

Mr. SHIMKUS. Yes. And I want to end with this—and those bells are votes, and it looks like I am the last person—but, Mr. Estes-Smargiassi, this question is for you. It talks about the risk-risk tradeoff of implementation and it uses the D.C. Lead removal fixture story as a case study that, in trying to solve a problem, we may create more. And I think in essence shaving off to replace lead pipes may, in essence—our understanding is more lead contamination versus what was, in essence, a mitigated amount if you would have kept it.

Can you talk to that? How do we address this risk-risk tradeoff.

Mr. ESTES-SMARGIASSI. I think it is important to be thoughtful whenever you take an action that you understand the potential adverse impacts.

In the instance you are referring to, when you disturb a lead service line, the pipe connecting the main to the house, the evi-

dence does seem to indicate that you do get some additional lead for release during at least a short period of time after that. If you don't remove the whole lead service line, you see an increase in lead levels at the tap perhaps or certainly in the water that you are sampling for a period of time, and then the lead level returns pretty close to where it was before from the remaining lead pipe, at least in the research data we have seen.

So that says you want to be thoughtful and make sure that if you are spending money having a short-term adverse impact that you are actually getting a benefit at the back end, and that may not be the case for every lead service line replacement program. They need to be designed carefully, thoughtfully, and hopefully get all the lead out, if that is what you are trying to do.

Mr. SHIMKUS. Thank you.

Mr. Chairman, that is all the questions I have.

Mr. MARKEY [presiding]. Thank you.

Here is what we will do. We will wrap up the hearing this way. We will give each one of you 1 minute to tell us what you want us to remember.

Mr. SHIMKUS. Lightning round.

Mr. MARKEY. Yes. This is it. This is the moment where you get to talk to America. We have C–SPAN covering this.

What do you want us to know as we are looking at the water that people drink in our country, that comes into their homes, into their children's bodies. What do you want us to know about these issues as we are——

So, this way, we will go in opposite order of the original testimony. We will begin with you, Mr. Quill. We will give each one of you 1 minute.

Mr. QUILL. Thank you.

I think my major issue, again, is the message that the Act sends concerning regulation. In earlier questions, it was suggested that there was no intent to regulate based solely on mechanism of action. I would say that the legislation is not clear in that regard. It may be misinterpreted. I would urge the committee to, in that regard and throughout the bill, improve the language so it is very clear that the bill accomplishes the committee's purposes.

Mr. MARKEY. OK. Well, we want to work with you to make sure it is crystal clear. Thank you.

Dr. Janssen.

Dr. JANSSEN. Thank you.

I would like to say that—I didn't get a chance to mention it in my testimony, but the bigger picture problem is that, because of the weak chemical regulation laws that we have in this country, we have virtually no information about the majority of chemicals which are in our drinking water as well as in our food and our consumer products and inside of our homes, including whether or not these chemicals are endocrine disruptors.

Congress recognized that endocrine disruptors present a threat to human health in 1996, and then here we are 14 years later. They have spent a lot of money at the Environmental Protection Agency, but we have not yet tested one chemical for its endocrine-disrupting potential. The point of the screening and testing program is not to regulate these chemicals but rather to be identifying

them so that we know where we are being exposed to these chemicals which do likely present a threat to our health.

Thank you.

Mr. MARKEY. Thank you.

Mr. Estes-Smargiassi.

Mr. ESTES-SMARGIASSI. Our goal as water supply systems is to provide safe, reliable, affordable water for our customers. So in my remaining 40-some seconds, more SRF funding, that is helpful in making sure that we can accomplish what we need to do and not make our bills so high that our customers can't afford the water. More flexibility so that we can actually manage the problems that we see at the local level, whether it be aging infrastructure or our need for redundancy. And other portions of the system we don't control, such as the plumbing in people's homes. Less lead there so that our customers receive the high-quality water that comes out of our reservoirs and through our treatment plants all the way to their tap. It doesn't do any good for us to spend a lot of money on treatment if at the end the water is degraded in that last few feet of pipe.

Mr. MARKEY. Thank you.

Mr. Levy.

Mr. LEVY. Thank you for my 60 seconds.

The National Rural Water Association represents over 20,000 small water systems. These small water systems are mostly run by locally elected people, and they take public health very seriously.

They have special challenges. We feel this bill is an improvement because it helps target more resources to the most needy and helps prioritize that funding. There is never enough money, because there is just not enough money.

We also thank you for providing more technical assistance through rural water to these small towns who have these special circumstances, and we intend to work with the committee and EPA for the next 30 years.

Thank you.

Mr. MARKEY. Thank you. Thank you for the 18 seconds back.

Mr. Crouse.

Mr. CROUSE. Thank you.

The Association of State Drinking Water Administrators appreciates the opportunity to be here and to provide testimony, and I will speak specifically again on the SRF. We feel like it is not all doom and gloom. There are incredible things going on across the country with water systems and infrastructure improvement. The SRF has served us well, tremendously well over the last 13 years, and this reauthorization has the opportunity to continue to provide great work both on the Federal, State, and local levels to enhance our water systems' abilities to provide safe, reliable drinking water 24 hours a day, 7 days a week, and we very much appreciate being here.

Mr. MARKEY. Thank you, Mr. Crouse.

Ms. Dougherty.

Ms. DOUGHERTY. EPA's goal is to make sure everyone has safe water everywhere every day. The SRF has been an important tool in helping make that happen in a number of places, and we think it is important as we look at improvements to the SRF that we

make sure that it still is a valuable tool for States to use and for systems to get financing from. The endocrine disruptor testing program provides us with an opportunity to get better information on a number of chemicals that we are looking at in the drinking program that will help us make our decisions down the road in terms of regulatory decisions.

Mr. MARKEY. Thank you, Ms. Dougherty, very much.

This is obviously a very important piece of legislation because it deal with something that affects every American every day, the water that we put into our bodies, and we have to make sure that we have policies in place that ensure that it is dependable. That is a daunting challenge, because many of our systems are 75, 100 years old, especially in rural America, so that we ensure that the funding is there. And as we are looking at reliable funding sources, we also want to find ways of encouraging systems to use new, innovative technologies so that we move to the future, we capture the innovations that have been made.

And, finally, I would say that, because children especially are very vulnerable to chemicals that can impact on their endocrine system—and the endocrine system is no more, no less than just the computer system of the body and in children that computer system is still developing and if chemicals impact on any part of that endocrine system, that computer system for young people's bodies, it can change the way in which the genetic makeup of that body is then structured for the rest of those children's lives. We have a responsibility to make sure that we learn as much as we can about those chemicals that are in the water that are going into small children's bodies, especially because the impact on those children for the rest of their lives, if their DNA, if their genetic makeup is altered because they are so vulnerable, they are so fragile in the early years, that this responsibility falls to the government to ensure that we learn about these chemicals.

Because we know that while we have cured most of the diseases that affected people a hundred years ago, we know now that most of the diseases that people suffer from are diseases that we give ourselves, too much smoking, too much drinking, other dangerous activities that people might engage in, obesity, putting food in our bodies, but, also, what are those chemicals that are in people's bodies? What are those things that are now causing these extra levels of diseases that we are seeing?

And we do know that children are the most vulnerable and this water contains, we know, chemicals that did not exist 100 years ago, did not exist 50 years ago, and could, in fact, provide, if we learn more about the chemicals, the clues that we need in order to avoid the genetic makeup of children being altered as it is in its formative stage.

That is why this legislation is so important. Because it might give us that chance to begin to track those clues a little bit more closely. And then, in doing that research, because research is medicine's field of dreams from which we will harvest the findings that will give hope to families, that perhaps we can prevent children from growing up with disorders, diseases, or vulnerability to diseases that was preventable because we allowed their bodies to grow

strongly and not have them damaged in their early years through the water they were drinking.

And that is all we really are trying to do here, just get the information. Because information ultimately will allow us to put together the most commonsense and smart ways of protecting those children.

So we you thank all of you for being here. We want to work with you. We want to make sure that everything that we do is, Mr. Quill, crystal clear, but that the goals that we have should in fact be clear as well, and as long as we are achieving those goals, I think that we can all work together. That is our hope.

We thank all of you for your testimony. We would like you all to work closely with this subcommittee and the full committee over the next month or so, because we are going to continue to need to have access to your expert insight, and if we do that, I think we can put something together that will really work for the American people.

Thank you.

With that, this hearing is adjourned.

[Whereupon, at 11:30 a.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Opening Statement of Rep. Henry A. Waxman
Chairman, Committee on Energy and Commerce
Legislative Hearing on H.R. ____, the "Assistance, Quality, and Affordability Act of 2010"
Subcommittee on Energy and Environment
May 13, 2010

Thank you, Chairman Markey, for holding today's hearing on the Assistance, Quality, and Affordability Act of 2010 or the "AQUA" Act. This legislation takes a strong step forward in helping to ensure that public water systems deliver safe drinking water to the American people.

In 1996, this Committee passed amendments to the Safe Drinking Water Act that established the state revolving fund program, which has been a tremendous success. To date, it has helped finance **more than 6,600** drinking water projects throughout the country, using federal funds to supplement and leverage investment from other sources.

Unfortunately, the need for drinking water investment has overwhelmed available funds. According to a recent estimate from the Environmental Protection Agency our nation needs to

invest over $330 billion in our drinking water infrastructure. This staggering shortfall results in real life impacts on families across the country.

For instance, families in Boston and Nashville have been facing boil water advisories because of contamination of their drinking water supplies. Sadly, boil water advisories are not uncommon. A recent story in *The New York Times* detailed the problems of water main breaks in our aging infrastructure. In Washington, DC, on average, a water pipe bursts once a day. Every day. And nationwide, a significant water pipe bursts every two minutes, on average.

The AQUA Act takes a step towards helping to meet this need by increasing the revolving fund's authorization levels over the coming years. The legislation increases the authorization from $1 billion to $1.5 billion in 2011 and ultimately to $6 billion in 2015. Investment in the state revolving fund program allows states to leverage funding and yields a significant return on investment. It improves drinking water quality and promotes jobs.

This legislation also includes several improvements to the program designed to strengthen the state revolving fund program, make it more forward-looking, and ensure that all Americans are receiving safe and affordable drinking water.

For instance, under existing law, funding is focused on three priorities: addressing the most serious risk to human health, ensuring compliance with the requirements of the Safe Drinking Water Act, and assisting systems most in need on a per household basis. The AQUA Act adds another priority: increasing public water system ability to provide safe, affordable drinking water in the future. Adding this consideration of sustainability should allow states to fund projects that prevent breaches and catastrophic failures before they occur – which is cheaper and more desirable than fixing them after they fail.

The legislation also encourages systems to plan for the future and assess their infrastructure needs, by giving greater weight to applications from systems that are striving to improve their management and financial stability, improve their water and energy efficiency, and lower their environmental impact.

This legislation also seeks to strengthen the state revolving fund program by increasing overall compliance and enforcement of drinking water standards. Because funds are targeted at projects to bring systems into compliance, increasing compliance can free up funds for other projects. We hope to increase compliance by helping systems that are struggling to comply with new and existing standards because of affordability.

Instead of granting variances from SDWA rules, this legislation would require states to direct a portion of their funds to disadvantaged communities and to give greater weight to projects that will address compliance issues in these communities. This legislation will ensure that customers of all public water systems, large and small, wealthy and disadvantaged, will have safe, affordable drinking water.

I'd like to take a second to recognize that the AQUA Act contains the good work of other members of this Committee. Chairman Markey contributed the improvements to the endocrine disruptor screening program. Chairman Rush worked on the enforcement provisions. Representative Eshoo worked hard to strengthen the definition of "lead-free."

We have an outstanding group of witnesses this morning who are here to help us learn more about the AQUA act. I thank each of them in advance for their testimony and look forward to hearing from them.

Butterfield Opening Statement 5/13/10

The Safe Drinking Water State Revolving Fund has been successful in helping many communities modernize their water systems. In this Committee, we are frequently faced with policy needs related to our aging infrastructure. With the SRF, we have a working program that to date has completed over 6,000 projects. We have an excellent opportunity in this reauthorization to improve upon this system, focusing our resources on the most needy communities.

I am pleased with the commitment in this bill to small and disadvantaged communities. My district has 88 communities, and only 11 have populations greater than 10,000. I also represent the fourth poorest district in the

United States by median household income. Small and poor communities often lack the personnel necessary to adequately address needs of their water systems. Technical assistance is crucial to their compliance with SIDWA. I look forward to the testimony of Mr. Levy. I'm a long-time supporter of the Rural Water Agency, and I think he best represents the needs of small community water systems.

With respect to endocrine disruptors, an Associated Press article published September 15th of 2009 reported that "The Southeast, especially the Pee Dee River Basin of North Carolina and South Carolina, had the highest rates of feminization. In Bucksport, South Carolina, 10 of 11 largemouth bass examined were intersexed."

It is critical that the Endocrine Disruptor Screening Program truly get off the ground. EPA has an important job here: Collect what appears to be somewhat disparate data on the impact of these chemicals, evaluate it, report it, and in the process ensure the public trust with respect to one of our most precious resources, our drinking water.

Opening Statement
House Energy and Commerce Committee
Subcommittee on Energy and Environment Hearing
H.R. _____, the Assistance, Quality and Affordability Act of 2010
May 13, 2010

Thank you, Chairman Markey and Ranking Member Upton for holding today's hearing. I want to also thank the panel of witnesses here today.

I have always supported efforts to provide safe and clean water to our communities and to improve our nation's health, environment, economy, and quality of life through responsible clean water initiatives. I look forward to hearing from witnesses today about the importance of the Drinking Water State Revolving Fund in helping water systems meet the requirements of the Safe Drinking Water Act, as well as exploring ways we can ensure this reauthorization bill continues to serve the purpose of ensuring safe drinking water for all citizens while providing more focused assistance to small and disadvantaged communities that need the most help.

In my state of Utah, many counties are struggling to bring clean, reliable water to their communities. I am interested in hearing how this reauthorization proposal can help local communities make long-awaited improvements to their water systems in order to protect human health and the environment. I applaud the forward-looking approach this reauthorization takes and the goal of ensuring sustainability of our water systems, encouraging folks to do more with less.

However, as we move forward, we must continue to be mindful of the challenges that these new requirements can pose on many of the small and disadvantaged systems and ensure that we take steps to educate, inform, and assist these communities about the new process.

In Utah, the vast majority of funds through the Drinking Water State Revolving Fund go to rural communities –many of which lack the manpower, resources, and expertise on their own to fulfill the reporting and administrative requirements of the SDWA. It is important that as new priorities for projects through the SRF are considered, we be careful to ensure we clearly communicate the new requirements to small rural systems.

Key to this education and outreach is the technical expertise provided by the Rural Water Association of Utah, and I hope to hear today more detail about how we can ensure that funding for this crucial technical assistance continues to go to those associations that have demonstrated past success in aiding small and disadvantaged water systems to meet the requirements of SDWA. It is important we strike the right balance between advocating new goals while not placing too many burdens on small systems to meet the new requirements.

Again, thank you for holding this hearing on this important legislation. I look forward to working with the Committee on this bill, and I yield back the balance of my time.

Extension of Remarks- Rep. Rush- Energy & Environment Subcommittee Hearing

Reauthorization of State Revolving Funds (May 13, 2010)

Chairman Waxman, Chairman Markey, Ranking Member Barton, Ranking Member Upton, and all of my distinguished colleagues that sit on the Subcommittee on Energy & Environment, thank you all for allowing me to participate today on this important hearing on the reauthorization of State Revolving Funds within the "The Assistance, Quality, and Affordability Act of 2010."

Chairman Markey, I would especially like to thank you and your staff for working with my office over the past year to tighten the regulations within the SRF that govern water security to ensure that the incident that happened in my congressional district of Crestwood will not be replicated and all of our constituents will have access to clean, safe drinking water.

Mr. Chairman, I would like to briefly recount for all of my colleagues the preposterous and unbelievable events that happened in Crestwood that has brought us to the point we are today. It is a story that, unfortunately, is ripe with abuses of the public trust by crooked and corrupt public officials at a level that is hard to fathom.

And it is a story that, hopefully with the measures that we will enact in this legislation, will never be allowed to happen again.

Mr. Chairman, the story of Crestwood began in 1986, when the Illinois EPA was notified that the well water that was being used for public consumption was contaminated and was found to be unsuitable under federal EPA standards. Officials from the Village of Crestwood told state EPA authorities that the well would no longer be used for drinking purposes, but would remain open for emergency uses, such as fighting fires, only.

Unbelievably, despite the warning from the IL EPA to the Crestwood officials about using the well for public consumption, for another 20 years, from 1986-2007, untreated well water was mixed with Lake Michigan water and was piped into the homes of village residents for drinking and other uses.

Mr. Chairman, for over 20 years, the citizens of Crestwood Village were consuming water, filled with contaminants, while the IL EPA never went back in to test the water quality or ensure that Crestwood officials had followed their edict to stop using the well for public consumption.

Then in December 2007, acting on a tip from a private citizen, Tricia Krause, IL EPA decided to test the well water for the first time since first being alerted to the problem in 1986.

During these tests, IL EPA found that the well water contained unacceptable levels of per-chloro-ethylene (PCE), a chemical linked to liver damage and neurological problems, as well as other carcinogenic chemicals that were higher than federal standards permit.

Mr. Chairman, it took the brave and courageous act of an everyday, hardworking, private citizen, Ms. Tricia Krause, to finally pull the plug on the nefarious and despicable acts of Crestwood officials, who for 20 years, willfully and reprehensibly, lied to state authorities and fed contaminated water to the very citizens they had swore to protect.

After Ms. Krause blew the whistle on these despicable acts and the story became public, the US EPA and the Dept. of Justice executed search warrants and found that Village officials had been falsifying records regarding the purchase and delivery of water to its citizens for over 20 years.

And while we must acknowledge and praise the work of courageous citizens like Ms. Krause for taking matters into her own hands to shed a light and seek justice, we must also do everything in our power to make it more difficult for immoral and despicable public officials to dupe the public again and feed contaminated and poisonous water to our citizens.

Mr. Chairman, the steps that you have taken in this bill would go a long way in restoring the public trust in the system by requiring our state agencies, which are in many cases the last line of defense in ensuring public safety, to go that extra step in protecting the public.

This language would simply compel the EPA to set up requirements for notifying the public served by a water system when different types of violations occur. The EPA would be allowed to use the same categories of violations that have already been developed under subsection (c) of the Safe Drinking Water Act

Additionally, for each category of violation, the EPA will determine what types of follow-up inspections are needed, and how many inspections the state will need to carry out. This gets right at the issue of Illinois EPA not being required to go out and check whether the contaminated well was being used, without being overly burdensome if the violations are not related to public safety.

Mr. Chairman, as Representatives of the people we serve, for most of us the actions taken by Village of Crestwood officials would be unconscionable. In all of my time as a public servant, I have rarely encountered public officials acting so egregiously against their own citizens or abusing their power in a way that puts the public safety at risk.

In March 2010, the IL Dept. of Public Health released a report that found cancer rates were "significantly elevated" in Crestwood residents, with higher-than-expected cases of kidney cancer in men, lung cancer in men and women, and gastrointestinal cancer in men.

While researchers could not make a definite link between the consumption of contaminated water for 20 years for the 11,000 residents of Crestwood and the elevated rates of cancer there, they determined it was possible that toxic chemicals in the drinking water caused the extra cancer cases.

Well, I'm not a researcher, but I can analyze commonsense, and for me, the coincidence between drinking cancer-causing contaminated water for 20 years and then having higher-than-normal rates of cancer appear in those same citizens shows that there must be some connection between the two.

With our actions here today and in moving this bill forward, it is my sincere hope that no other community in America will have to suffer from the reprehensible acts of a few despicable public servants who would seek to abuse the public trust.

Thank you again Mr. Chairman, and distinguished Members of the subcommittee for allowing me to participate hear today, and with that I yield back my time...

May 12, 2010

The Honorable Henry Waxman, Chairman
The Honorable Joe Barton, Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives

The Honorable Edward Markey, Chairman
The Honorable Fred Upton, Ranking Member
Subcommittee on Energy and Environment
U.S. House of Representatives

Dear Representatives:

On behalf of the Association of Metropolitan Water Agencies, thank you for recognizing the importance of maintaining the nation's drinking water infrastructure through the "Assistance, Quality, and Affordability Act (AQUA) of 2010." AMWA believes that reauthorizing the Drinking Water State Revolving Fund (DWSRF) will bring renewed attention to the nation's infrastructure challenges.

As you know, the DWSRF was established to protect public health by offering loans to help community water systems come into compliance with federal drinking water standards. However, as a result of this focus on rectifying existing public health threats, the program tends to overlook the infrastructure needs of our nation's largest drinking water systems. As EPA Assistant Administrator for Water Peter Silva told the Senate Environment and Public Works Committee last year, ninety-six percent of all health based SDWA violations occur at systems serving less than 10,000 people. As a result, states have traditionally directed most SRF assistance toward these smaller systems.

EPA's own data confirms this imbalance. From the beginning of the DWSRF program in 1997 through 2009, community water systems serving more than 100,000 people received only twenty-three percent of funds distributed by the program, despite serving forty-six percent of the American population. In addition, EPA's 2007 Drinking Water Needs Survey found that these metropolitan water systems represent thirty-five percent of the drinking water sector's twenty-year infrastructure need.

While AQUA would not solve this problem, it would take several important steps to make the DWSRF more accessible to urban water systems. For example, under the bill projects that help water systems comply with SDWA "affordably in the future" will be afforded priority for funding. This will help systems plan ahead to address potential public health threats before they become serious, and thus widen the scope of projects that are given funding preference.

The bill would also institute a new set of criteria through which states will give additional weight to project applications from systems that have implemented good management and financial sustainability practices. This will ensure that federal funds are not wasted at utilities that have failed to be responsible with their own dollars. Additionally, weight would be afforded for projects that reduce a water system's environmental impact, such as through increased water efficiency or conservation. These are the same type of projects that some water systems are investing in as they prepare for the impacts of global climate change.

The legislation recognizes that metropolitan water systems often serve a range of communities with varied income levels and would allow these systems to receive additional subsidization if a portion of their service area qualifies as a "disadvantaged community" under state affordability guidelines. Current law only allows a utility's entire service area to qualify as disadvantaged, which severely limits access to this assistance by large systems.

Other portions of the bill also deserve praise. We believe that the increased funding levels authorized in the bill will, if appropriated, help large water systems access more funding without forcing states to divert dollars away from smaller projects. We also support the inclusion of language to match the lead content permitted by SDWA in repaired or replaced service lines and plumbing fixtures with the new California state standard that will take effect in 2012.

While we hope to see these provisions maintained as the bill moves forward, we would also like to suggest several enhancements. First, just as AQUA would clarify that preconstruction activities and the rehabilitation and replacement of aging infrastructure are permitted uses of DWSRF funds, the bill should make clear that projects to upgrade the security of public water systems are also eligible. Such a clarification was included in the Drinking Water and Clean Water SRF reauthorization bill approved by the Senate Environment and Public Works Committee last year.

Additionally, AQUA would direct states to give additional weight to applications from utilities that have reviewed restructuring options – which is defined to include changes in ownership and consolidation with other water systems. AMWA understands that the legislation is not intended to force public water systems to consider privatization, or to require large water systems to absorb smaller nearby systems in order to have a better chance of receiving SRF assistance. We hope to have the opportunity to work with you to develop report language making this point clear.

Again, thank you for introducing this important legislation. EPA estimates that America's drinking water systems need nearly $335 billion worth of infrastructure investment over the next twenty years, and AQUA represents a step in the right direction.

Sincerely,

Diane VanDe Hei
Executive Director

May 11, 2010

MEMORANDUM

TO: The Hon. Henry Waxman, Chairman
House Committee on Energy and Commerce
The Hon. Edward Markey, Chairman
Subcommittee on Energy and Environment

FROM: The American Society of Civil Engineers

RE: Strengthening Public Safety in the
Assistance, Quality, and Affordability Act of 2010

I. Introduction

The American Society of Civil Engineers[1] (ASCE) supports the goals and funding authorizations for critical infrastructure in the Assistance, Quality, and Affordability Act (AQAA) of 2010. The bill would provide $14.7 billion in new funding for the Safe Drinking Water Act State Revolving Loan Fund (SRF) program over five years. It also would authorize $100 million over five years for technical assistance to small community water systems to ensure that they can comply with federal primary drinking-water standards. In addition, the bill would authorize $25 million to identify endocrine-disrupting substances in drinking-water, and it would seek to reduce the amount of lead in drinking-water.

Each of these legislative proposals is vital to the general public health, safety and welfare, and ASCE is pleased to support their passage into law. We believe, however, that the bill could provide even greater protection for public safety through the wider use of the qualifications-based selection (QBS) process for the awarding of architectural and engineering design contracts funded by the state SRFs.

[1] ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 144,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code.

II. Qualifications-Based Selection (QBS) for A/E Contracts Should Be Expanded to Broadened to Protect Public Safety

Section 11 of the bill, Negotiation of Contracts, would require that contracts carried out using federal funds provided through the SRF program be negotiated in keeping with federal qualifications-based selection (QBS) requirements under the Brooks-Architect Engineers Act of 1972, or equivalent state or local requirements. This section, however, applies only to communities of 10,000 or more people. Finally, the section leaves discretion to the states to determine what state or local requirements are equivalent.

ASCE believes this provision needs to be broadened to require the application of QBS for all contracts funded through state SRFs to ensure that public safety is not compromised. We concur with the provision that defers the choice of which state law to apply to the states, however.

Enacted by Congress in 1972 for all federal agency acquisitions, the qualifications-based selection (QBS) procedure assures the selection of the best qualified firm.[2] This protects public safety in the long run by ensuring that those engineers most experienced in the design and construction of unique projects are professionally and ethically responsible to the public client.

> One of the more important tasks associated with any construction project is the selection of a design professional to design the project. Many people assume that all design professionals are equally qualified for all types of projects; therefore hiring the one with the lowest price is the best approach. This is far from the truth. Procuring design services is not the same as procuring road salt or paper for the office copier.[3]

Engineering design contracts by highly qualified professional engineers are essential to the delivery of safe projects. The safety of critically important drinking-water facilities should not be compromised by the use of budget-driven contract procedures. The design of public water treatment facilities should not be dependent on a state's reliance on optional contracting procedures that may place cost (in the form of a low-bid design contract) on a par with public safety. Lowest cost selection is the worst way to acquire professional services when quality and professional creativity are necessary for public works projects.

Under QBS, A/E firms compete based on their professional qualifications and quality of services, which allows large and small firms alike to compete on an equal

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[2] 40 U.S.C. § 1101 et seq.

[3] State of Maine, Qualification Based Selection Process *at* www.state.me.us/education/const/pw010.doc (last visited May 11, 2010).

footing. In other words, small firms are able to win contracts based exclusively on the quality of their services. Without QBS, larger firms would have a distinct advantage if competitive bidding were based solely on price. Indeed, we have been told by more than one executive of major engineering firms that the larger firms would be able to win many more federal contracts without the Brooks Architect-Engineers Act simply by underbidding their smaller competitors and making up the loss elsewhere on the contract.

QBS is the preferred system for selecting A/E services because the precise scope and range of the design services which are the basis for any contract price cannot be accurately determined until specific negotiations begin. Innovative approaches and alternative designs or methods arise when a client and a design professional develop the precise scope of a project together.

QBS requires A/E firms to compete based on skills, experience and ability to perform the required services—not on the illusory economy that a low bid may seem to provide. Low bids requiring substantial change orders or resulting in high construction or high life-cycle operating or maintenance costs are not cost effective.

This process has been so successful at the federal level that it is recommended by the American Bar Association in its model procurement code for state and local government. Forty-six states—including California and Massachusetts—have enacted formal qualifications-based selection laws for architecture, engineering, surveying and mapping services based on the federal model.[4] Significantly, no state has a law requiring bidding of architectural or engineering design services.

III. Congress Has Repeatedly Broadened QBS Coverage to Other Government Engineering Services

The application of QBS to government acquisitions over the past 38 years has been an unqualified success. Indeed, since 1972 Congress has clarified and extended the application of the QBS process to the awarding of architectural and engineering services contracts for:

- Aviation programs project grant application (49 U.S.C. § 47107)
- Mass transportation contract requirements, management and architectural engineering (49 U.S.C. § 5325).
- Military construction projects (10 U.S.C. § 2855).
- Engineering services as competitive procedures for procurement purposes (10 U.S.C. § 2302; 41 U.S.C. § 259).

[4] Iowa, South Dakota, Vermont, and Wisconsin do not have statewide QBS laws.

- River and harbor improvements (33 U.S.C. § 569b).

- Surveying, mapping, charting and geodesy contracts of the National Imagery and Mapping Agency (NIMA).

Indeed, Congress has even tightened other laws to require stricter application of the QBS process. In November 2005, Congress enacted the Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006. Section 174 of the Act amended federal law relating to the award of engineering and design services contracts that are directly related to a construction project and use federal-aid highway funding.

The amendment deleted a previous provision of law and required that these contracts to be awarded in the same manner as a contract for architectural and engineering services is negotiated under the federal QBS requirements. Under the new law, state and local agencies were no longer permitted to procure engineering and design-related service contracts (directly relating to construction) with federal-aid highway funding using "alternative" or "equivalent" state QBS procedures that were permitted prior to the 2005 amendment.

Finally, Congress is considering legislation to reauthorize the Airport Improvement Program to expand the use of QBS to airport projects. H.R. 915, which passed the House a year ago, authorizes the Secretary of Transportation to approve an eligible agency's application for authority to impose a "passenger facility charge" to finance airside projects for airports, provided the agency gives satisfactory written assurances that each contract and subcontract for program or construction management, architectural, engineering, and related services is awarded in the same way a contract for architectural and engineering services is negotiated with respect to QBS requirements or an equivalent qualifications-based method prescribed for or by the agency.

IV. The Agency Retains Control of the Selection Process, Including the Schedule and Price Factors

The QBS process should never be burdensome or pose an obstacle to the speedy acquisition of the necessary professional design services.

> To keep the process of selecting a design professional advancing smoothly, the owner establishes a time frame for completion of the selection process. Establishing the time frame communicates requirements with the firms and prevents misunderstandings and last minute "surprises" which may delay the process. The time frame for each public project differs, depending upon the nature of the project, the concerns of the owner and other factors. The suggested time frame for an average QBS project is a total of four to six weeks to

allow proper planning and administration between each step of the selection process. Depending upon the status of the owner's project, adjustments can be made to accommodate the owner's needs.[5]

This is not a recent discovery. In 1985, the American Institute of Architects (AIA) analyzed procurement practices and laws in Maryland and Florida in the awarding of more than 1,200 architectural and engineering contracts. The study concluded that "the QBS selection method appears to result in about one-half the cost of selection and design and about one-half the administrative cost, while delivering projects in about three-fourths the time of the (apparently) price-dominated quality-and-price selection method."[6]

V. Summary

The qualifications-based selection procedures of the Brooks-Architect Engineers Act result protect public safety by awarding design contracts for federally funded infrastructure projects to the most highly qualified architects and engineers.

Congress has repeatedly broadened QBS coverage to other government engineering services over the past 38 years. The Committee should expand the coverage of the QBS provisions in the AQAA to ensure the Safe Drinking Water Act is no less protective of public safety than other federal infrastructure laws.

Respectfully submitted,

THE AMERICAN SOCIETY OF CIVIL ENGINEERS

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[5] New Mexico Professional Technical Advisory Board, Owner Manual for Qualification-Based Selection 12 (2006), *at* http://www.nmenv.state.nm.us/cpb/PTAB_Manual%20Rev%2005-24-06.pdf (emphasis in original) (last visited May 11, 2010).

[6] Symeon Christodoulou et al., Qualifications-Based Selection of Professional A/E Services, 20 J. MGMT. IN ENGINEERING 34, 36 (2004).

For more information, please contact:

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American Water Works Association

The Authoritative Resource on Safe Water SM

May 13, 2010

The Honorable Henry A. Waxman
Chair, House Committee on Energy and Commerce
The Honorable Joe Barton
Ranking Member, House Committee on Energy and Commerce
The Honorable Edward J. Markey
Chair, House Subcommittee on Energy and Environment
The Honorable Nathan Deal
Ranking Member, Subcommittee on Energy and Environment

Dear Representatives,

The American Water Works Association (AWWA) applauds your efforts to tackle the challenges facing the nation's drinking water infrastructure via the state revolving loan fund (SRF) program. While the United States has long enjoyed safe, reliable drinking water, we must all heighten our efforts to maintain and upgrade our drinking water infrastructure to keep that water safe and reliable for the future.

Since its creation in 1996, the drinking water SRF program has become one of the most important tools available to communities seeking to improve their drinking water systems. The Assistance, Quality, and Affordability Act being presented at today's hearing includes a number of long-standing recommendations that AWWA has made in the interest of improving the SRF program. These include:

1. significantly boosting capitalization grants to state SRF programs;
2. making replacement and rehabilitation of aging treatment, storage, or distribution facilities explicitly eligible for SRF funds; and
3. giving greater weight to SRF applicants who can provide
    a. an inventory of assets and their condition;
    b. an asset replacement schedule;
    c. a comprehensive financing plan;
    d. a study of approaches to improve the sustainability of the system; and
    e. an audit of water losses.

We are indeed happy to see authorized funding for the SRF increased substantially in this bill. In many states, larger drinking water systems have been unable to access the program, simply because the scope of their projects could legitimately consume such a large portion of a state's available SRF funds. If states had more SRF capitalization funding, it might help fund some of these larger projects. AWWA looks forward to working with the committee to seek full funding of the program through the appropriations process.

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We believe the bill could be further improved by adding the following features:

1. a requirement that loan recipients work toward self-sustainability whether via water rates that reflect full-cost pricing, restructuring, consolidation, or related measures;
2. eligibility of security infrastructure upgrades for SRF loans; and
3. the inclusion of a provision similar to Section 304 of S. 1005, the Senate SRF reform bill, which would have EPA work with SRF stakeholders to identify ways to expedite and improve the SRF application and review process.

Like you, AWWA has long supported additional research on the occurrence and health effects associated with exposure to very low levels of endocrine-disrupting compounds. The 1996 Amendments to the Safe Drinking Water Act created a sound methodology for screening potential drinking water contaminants and making determinations whether to regulate them. We are concerned that the fast-tracking of possible endocrine disruptors for regulatory consideration will come at the expense of EPA resources devoted to these and other contaminants, some of which may already be in the Candidate Contaminant List pipeline and that may be more hazardous. We believe the best answer to the needs of water suppliers is significantly more funding for research on the health effects of various contaminants in drinking water, with the research priorities driven by the needs of scientists and researchers.

AWWA appreciates the opportunities it has had to discuss this bill in the past with the Committee, and looks forward to continuing to work with members and staff on this legislation. As we said earlier, the SRF program is a sound tool in the toolbox of infrastructure finance mechanisms; it just needs some improvements, several of which are found in this bill. We hope to continue to work with the committee in exploring other tools, such as a water infrastructure bank, that would address the needs of large systems via direct loans and provide assistance to small and medium-sized systems by helping states leverage SRF funds.

AWWA is the world's largest educational and scientific organization dedicated to the promotion of safe drinking water. Our 60,000 members work as community water providers, federal and state regulators, environmentalists, academics and scientists, and reside in all 50 states. Our utility members serve 80 percent of the U.S. population. AWWA stands ready to assist the committee in further addressing the nation's water infrastructure needs.

Sincerely,

Tom Curtis

Tom Curtis
Deputy Executive Director for Government Affairs

food&waterwatch
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The Honorable Henry Waxman
Chairman, Energy and Commerce Committee
2204 Rayburn House Office Building
Washington, DC 20515

The Honorable Ed Markey
Chairman, Subcommittee on Energy and the Environment
2108 Rayburn House Office Building
Washington, DC 20515

May 11, 2010

Dear Chairmen Waxman and Markey –

I am writing on behalf of Food and Water Watch, a national consumer advocacy organization based in Washington, D.C., in support of the "Assistance, Quality, and Affordability Act of 2010." This legislation is a much needed and long overdue reauthorization of the Drinking Water State Revolving Fund. We urge Congress to quickly pass this legislation.

As you know, our essential water infrastructure has been grossly underfunded for decades. The federal share of drinking water infrastructure funding was cut in half between 1997 and 2007. While Congress has recently restored some of this funding, the State Revolving Fund (SRF) remains underfunded.

The changes to project eligibility included in this legislation expand the SRF program to cover much needed areas including rehabilitation and replacement of infrastructure systems. At the same time, the technical assistance grants program for small public water systems is amended to ensure competition among non-profits to provide this valuable service.

We are pleased to see that your legislation includes two sections that address important public health concerns. We encourage the Committee and the Congress to ensure that the new definition of "lead-free", reducing the current definition of 8 percent to .25 percent, remains in any final SRF reauthorization passed into law. We also support inclusion of amendments to the Endocrine Disruptor Screening Program that will begin to strengthen the Environmental Protection Agency's ability to protect us from the harmful health effects of EDCs in our drinking water.

We note that although this legislation contains these positive changes to the current Safe Drinking Water Act (SDWA), it does not amend the system eligibility for the SRF. Our research has shown that allowing privately owned drinking water systems access to low interest SRF loans is bad policy for ratepayers and utility workers. Private drinking water systems are more expensive, less efficient, and less responsive than publicly owned systems. When water systems are privatized, rates go up, workers are laid off, and

food&waterwatch
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service suffers. We urge you to amend the SDWA to prohibit privately owned drinking water systems from receiving these taxpayer-subsidized loans. We look forward to working with you on making this change to your legislation.

Again, we urge you to quickly move this legislation through your Committee and look forward to working to ensure that a strong, pro-ratepayer "Assistance, Quality, and Affordability Act" passes this Congress.

Cordially,

Wenonah Hauter
Executive Director

Enclosure

HENRY A. WAXMAN, CALIFORNIA
CHAIRMAN

JOE BARTON, TEXAS
RANKING MEMBER

ONE HUNDRED ELEVENTH CONGRESS

Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–6115

Majority (202) 225–2927
Minority (202) 225–3641

June 1, 2010

Cynthia Dougherty
Office of Ground Water and Drinking Water
Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

Dear Ms. Dougherty:

Thank you for appearing before the Subcommittee on Energy and Environment on May 13, 2010, at the hearing entitled "H.R. ____, the "Assistance, Quality, and Affordability Act of 2010."

Pursuant to the Committee's Rules, attached are written questions for the record directed to you from certain Members of the Committee. In preparing your answers, please address your response to the Member who submitted the questions.

Please provide your responses by June 15, 2010, to Earley Green, Chief Clerk, via e-mail to Earley.Green@mail.house.gov. Please contact Earley Green or Jennifer Berenholz at (202) 225-2927 if you have any questions.

Sincerely,

Henry A. Waxman
Chairman

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 15 2010

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Henry Waxman
Chairman
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Waxman:

Thank you for the opportunity to respond to questions for the record that followed the May 13, 2010 hearing before the Subcommittee on Energy and Environment on H.R.____, the "Assistance, Quality, and Affordability Act of 2010." I hope this information will be useful to you and the members of the Committee.

If you have any further questions, please contact me or your staff may contact Greg Spraul in my office at 202.564.0255.

Sincerely,

Arvin R. Ganesan
Deputy Associate Administrator

Attachment

Legislative Hearing on H.R. __ "Assistance, Quality, and Affordability Act of 2010"
U.S. House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy and Environment
May 13, 2010
Cynthia Dougherty's Responses to
Questions for the Record

The Honorable Joe Barton

1. **There are provisions in this bill concerning prevailing wages. How are they different from the existing Davis-Bacon treatment under the Safe Drinking Water Act?**

The Safe Drinking Water Act currently has a Labor Standards provision that applies to direct procurement by the Agency. See 42 U.S.C. §300j-9 (e). Since the Drinking Water State Revolving Fund (DWSRF) program does not involve direct procurement, Davis-Bacon prevailing wages have not applied to projects funded by the DWSRF. The provisions in the bill concerning prevailing wages would be a new statutory component to the DWSRF base program. Note, however, that under the American Recovery and Reinvestment Act (ARRA) and the Fiscal Year 2010 (FY2010) Appropriations Act, Davis-Bacon prevailing wage treatment has applied to construction projects funded in whole or in part by the ARRA or for construction projects where the assistance from a DWSRF was provided as of October 30, 2009 through September 30, 2010.

2. **Your testimony mentions that 40 percent of DWSRF monies went to small systems and 19 percent went to disadvantaged communities. How much overlap was there between those two groups?**

At this point, EPA has very limited information on specific systems. Historically, EPA's data system has collected only aggregate state-level data, and so we can not see if systems that are in one category are the same in another category. For ARRA and moving forward, EPA will have project level data, and we will be able to see if projects fall into multiple categories, such as "small system" and "disadvantaged community."

3. **Could you please explain for me the practical effect of the changes – what happens today under the Safe Drinking Water Act versus after enactment of this bill – on affordability and variance criteria?**

The changes in the bill affect the evaluation of affordability, affordability variance procedures and financing systems with affordability and compliance issues.

We do not believe there are significant practical changes to EPA's small system affordability evaluation that would result from enactment of the bill. Section 13 of the bill retains the requirements under Section 1412.b.4.E.ii which requires that EPA "list any technology, treatment technique or other means that is affordable" for small drinking

water systems to comply with each drinking water regulation. Under the current provisions, EPA has identified affordable small system compliance technologies for all applicable drinking water regulations. If the bill were enacted, EPA would still identify small system compliance technologies for future regulations.

Enactment of the bill would change the process if EPA were not able to identify affordable small system compliance technologies for future regulations. Under this condition, SDWA 1412.b.15 requires that EPA identify variance technologies that "may not achieve compliance" but that are "protective of public health." Section 13 of the bill would eliminate this requirement, and instead require the Agency to periodically review small system compliance technologies to update the list of affordable technologies when they become available.

Section 13 of the bill also eliminates small system variances under SDWA 1415.e. Under a small system variance, a small water system could install and operate a less costly technology that does not reduce the contaminant to the level required by the regulation. Under SDWA, small system variances can only be issued by states if EPA cannot identify a small system compliance technology, and if EPA identified affordable variance technologies that are protective of public health. Small system variances are not available presently for States to issue to systems, because EPA has identified affordable small system compliance technologies for all applicable regulations. Therefore enactment of the bill would not have a practical effect on the current availability of small system variances, though it would preclude the use of small system variances for future regulations.

With regard to financing systems with affordability and compliance issues, currently, the DWSRF provisions of the SDWA allow a State, at its discretion, to establish a disadvantaged communities program and to offer to communities, the State determines to be disadvantaged, additional subsidies including principal forgiveness and extended repayment terms. Under the existing statute, the State establishes priority for DWSRF funding based upon criteria it develops and which provide priority for systems facing an immediate threat to public health; systems requiring assistance to achieve and maintain compliance with SDWA; and systems most in need on a per household basis.

Under the committee passed bill, Section 5 would require states to list all systems within the state that have, in effect, an exemption or variance for any primary drinking water regulation, or are in persistent violation of the requirements for any maximum contaminant level under a national primary drinking water regulation. Then, under Section 8, each state would be required to use 6% (as part of the state's disadvantaged communities subsidy) of the DWSRF's capitalization grant funds for the year in question for projects at public water systems that are included on the state's latest list as described above, to the extent that there are eligible applications.

The current DWSRF provisions of the SDWA allow a state to choose whether it will provide additional subsidization to communities that it designates as disadvantaged communities. This bill continues to allow States to establish their own criteria for

designation of disadvantaged communities. The bill, in Section 7, requires the State to determine if capital improvements necessary to meet a new national primary drinking water standard are affordable for disadvantaged communities in the State. If the State finds that the improvements are not affordable for disadvantaged communities, the State's Intended Use Plan must provide that priority for the use of the DWSRF capitalization grant for the year in question be given to public water systems affected by the new national primary drinking water standard and serving disadvantaged communities.

The Honorable Michael Burgess

1. **According to the April 28, 2010 EPA OIG report, the EPA Office of Water agreed to complete implementation of a recommendation from a 2002 IG report on wastewater management by September 30, 2009 but it was still unimplemented. Is this recommendation still unimplemented, and if so, why?**

The 1994 Combined Sewer Overflow (CSO) Policy requires that permittees ".....include a post-construction monitoring program adequate to verify compliance with water quality standards and protection of designated uses as well as to ascertain the effectiveness of CSO controls." In 1995, EPA developed technical guidance to facilitate implementation of the Policy. Two of the documents that were developed (*Guidance for Long-Term Control Plan and Combined Sewer Overflow Guidance for Permit Writers*) provided guidance on the development and implementation of post construction compliance monitoring programs. These guidance documents indicate that the post construction compliance monitoring plan should be implemented during implementation of the long-term control plan, and it should continue after the plan has been implemented.

OIG recommended that the Office of Water develop a compilation of monitoring approaches to better determine the impact of CSOs on water quality. After consultation with Regions and States, we elected to do a guidance which was determined to be more useful. The guidance includes information on designing effective monitoring programs (such as ensuring that monitoring is conducted during implementation of the long-term control plan) and is designed to help EPA regions, states, and the public to verify compliance with water quality standards as well as to ascertain the effectiveness of CSO controls. This guidance was reviewed by our regional offices and revised to reflect their comments. The guidance, while still in draft, is available for use by Regions and States. We intend to revise the guidance based on the experience of regions and states in using the draft guidance.

2. **According to the April 28, 2010 EPA OIG report, the Office of Water has not implemented a recommendation in which the Office of Water agreed to take corrective action by September 30, 2007. This action would be in response to recommendation from a 2004 IG report that found the EPA needed to reinforce its national pretreatment program, and in particular, the Office of Water was to**

develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements. The IG says the Office of Water has not implemented this recommendation as of March 31, 2010. Has the Office of Water implemented this recommendation since March 31, 2010? If not, why not? Why is it taking so long to implement a corrective action that your office agreed to complete by September 30, 2007?

OIG recommended that the Pretreatment Program develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements; determine the resources necessary to carry out the strategy; and gain the support of other Agency, State, and POTW staff to carry out the strategy.

EPA has not met its commitment with respect to pretreatment, because developing a long term strategy for results-based measurements and gaining support of stakeholders has proven to be an issue that is more complex than EPA initially expected, and will take additional time. As part of its plan of action to address the OIG recommendations, EPA agreed to assess data collection, methods of data collection, and data availability and accessibility on pretreatment program performance. EPA examined information on databases used by the EPA regions and states to store program information, and determined that although data considered crucial to program management were historically required through policy, the input of these data into a central, national database had been inconsistent for the past 20 years. Instead, programmatic data were maintained in decentralized databases within each state and/or EPA regional office. To resolve the centralized data entry challenges identified by states and EPA regions, EPA is: developing an educational handbook for non-programmatic managers which identifies the environmental and economic merits of implementing the pretreatment program; developing new guidance to minimize data quality errors for facilitation of data upload to a centralized database (necessary for national reporting requirements), and exploring ways to reduce data entry burden into such centralized database through the Clean Water Act Action Plan[1].

3. **According to the April 28, 2010 EPA OIG report, the Office of Water has not implemented a recommendation from a 2008 report to improve oversight of tribal water systems. The IG says that the Office of Water agreed to complete implementation of the recommendation by April 30, 2009 but it is still listed as unimplemented. Has the Office of Water implemented the recommendation? If not, why not?**

This recommendation was completed on March 11, 2010 when the Office of Water issued guidance regarding expectations of regions implementing the tribal drinking water program. Please see the attached letter.

[1] http://www.epa.gov/oecaerth/civil/cwa/cwaenfplan.html

4. **Listed below are the program recommendations identified in the April 28, 2010 EPA OIG report that have not been implemented by the EPA Office of Water. Please identify whether each of the specific programs listed below fall within the Office of Water's Office of Groundwater and Drinking Water, and if so, whether each of the recommendations has been implemented. If recommendations have not been implemented, please explain why they have not, and whether the Office of Water/Office of Groundwater and Drinking Water intends to implement them in the future:**

Only two of the items in the identified program recommendations fall within the purview of the Office of Ground Water and Drinking Water.

A. EPA Assisting Tribal Water Systems but Needs to Improve Oversight

See answer to Question #3.

B. More Information Is Needed on Toxaphene Degradation Products

For this recommendation, the action identified by the report as unimplemented is development of the third Contaminant Candidate List (CCL3), anticipated to have been completed by August 31, 2009. CCL3 was released on October 8, 2009[2].

[2] http://www.epa.gov/fedrgstr/EPA-WATER/2009/October/Day-08/w24287.htm

Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)
Action Office: OW
Report Title: EPA Needs to Accelerate Adoption of Numeric Nutrient Water Quality
Standards Report No.: 09-P-0223
Date Issued: 08/26/2009

Report Summary
EPA's 1998 National Strategy and Plan to promote State adoption of nutrient water quality standards (which better protect aquatic life and human health) has been ineffective. In 1998, EPA stated that a critical need existed for improved water quality standards, given the number of water bodies impaired from nutrients. In the 11 years since EPA issued its strategy, half the States still had no numeric nutrient standards. States have not been motivated to create these standards because implementing them is costly and often unpopular with various constituencies. EPA has not held the States accountable to committed milestones. The current approach does not assure that States will develop standards that provide adequate protection for downstream waters. Until recently, EPA has not used its Clean Water Act authority to promulgate water quality standards for States.
EPA cannot rely on the States alone to ensure that numeric nutrient standards are established. EPA should prioritize States/waters significantly impacted by excess nutrients and determine whether it should set the standards. EPA also needs to establish effective monitoring and measures so that accurate program progress is reported. These progress reports will assist EPA management in program decision making.

Unimplemented Recommendations
Recommendation 2-3: We recommend that the Assistant Administrator for OW establish EPA and State accountability for meeting milestones for adopting numeric nutrient water quality standards for those waters in the rest of the Nation that require them. EPA should do this by:
(a) Requiring States to develop milestones based on resources available.
(b) Reviewing those milestones and approving them as appropriate
Recommendation 2-4: We recommend that the Assistant Administrator for OW establish metrics to gauge the actual progress made by States in adopting numeric nutrient water quality standards.
Recommendation 2-5: We recommend that the Assistant Administrator for OW ensure that the regions annually validate Water Quality Standards Actions Tracking Applications data.
Status: OW agreed to utilize the next available opportunity to revise internal program activity reports to better gauge cumulative State progress. This corrective action is associated with the three recommendations above. The agreed-to completion date was February 28, 2010.

Action Office: OW
Report Title: EPA Assisting Tribal Water Systems but Needs to Improve Oversight
Report No.: 08-P-0266
Date Issued: 09/16/2008

Report Summary
EPA, rather than the States, has the responsibility for protecting human health and the environment on tribal lands. Approximately 600 tribal community water systems (CWSs) serve an estimated 622,000 people. EPA staff members provide these systems with technical and other assistance so that tribal CWSs maintain compliance with Safe Drinking Water Act requirements. We conducted this evaluation to assess EPA's oversight and assistance of tribal CWSs, and to independently evaluate water quality at selected drinking water systems.
Tribal drinking water sample results in EPA files indicate that drinking water supplies consistently met regulatory requirements. Regional EPA staff also made correct compliance decisions with sample results that tribal CWSs provided. However, the OIG found internal control deficiencies in administering EPA's oversight of tribal CWSs in two of the five regions we reviewed. To varying degrees, tribal drinking water records in four of the five regions were incomplete due to a failure to maintain oversight of system operations and/or poor records management.

Unimplemented Recommendation
Recommendation 2-3: We recommend that the Assistant Administrator for OW direct regions to issue monitoring and reporting violations, take appropriate enforcement actions against tribal CWSs with health-based violations or who fail to monitor or submit monitoring reports, and enter violations into Safe Drinking Water Information System.
***Status*:** OW planned to issue guidance regarding expectations of regions implementing the tribal drinking water program. The original agreed-to completion date was April 30, 2009.

Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)
Action Office: OW
Report Title: Total Maximum Daily Load Program Needs Better Data and Measures to Demonstrate Environmental Results
Report No.: 2007-P-00036
Date Issued: 09/19/2007

Report Summary
EPA does not have comprehensive information on the outcomes of the Total Maximum Daily Load (TMDL) program nationwide, nor national data on TMDL implementation activities. EPA and States are responsible for implementing point source TMDLs; however, EPA cannot identify all of the permitted dischargers that should receive or have received wasteload allocations. Measuring nonpoint source TMDL implementation is difficult because EPA does not have statutory authority to regulate nonpoint sources and it is highly dependent on State and local stakeholders. EPA's lack of information prevents the Agency from determining the extent to which TMDLs are restoring impaired waters and whether TMDL implementation activities are occurring in a timely manner.
EPA has begun to take steps to measure program results and improve program data, sponsored several studies of TMDL implementation, and is studying additional TMDL results measures. Developing meaningful measures is challenging; however, EPA needs to provide more management direction to improve its ability to assess how well this critical program is functioning. The TMDL and performance measures we reviewed do not provide clear and complete metrics of the program's accomplishments.

Unimplemented Recommendation
Recommendation 1-2: We recommend that the Assistant Administrator for OW demonstrate that TMDLs are being implemented by annually reporting on the progress of TMDL implementation activities completed nationwide including the number of TMDLs:
- that have all wasteload allocations incorporated into NPDES permits,
- that have implemented load allocations through at least one best management practice funded through the Section 319 Program, and
- for which implementation data are not available to EPA.

Status: According to MATS, OW has:
- Reported on TMDL implementation rates, including point source permits and nonpoint source best management practices, through a statistical study covering EPA Region 5.
- Completed development of a national statistical study design to assess TMDL implementation rates.
-
- Queried EPA data systems and issued its first annual national report on the three

metrics specified in 1-2. OW has three corrective actions that have not been completed for this recommendation:
- Complete development of an information collection rule (ICR) that covers assessments of TMDL implementation.

18 Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)

- Produce a synthesis paper covering the findings from multiple implementation-related studies.
- Initiate national sample-based assessment upon ICR approval.

The agreed-to completion date for these actions was December 31, 2009. The OW indicated that they have not proposed rescheduled completion dates for -- developing the ICR and completing a national sample-based assessment -- because they plan to request modifications to these corrective actions with the OIG. OW feels that the relevance of the ICR to the TMDL implementation survey is questionable. If the ICR is no longer essential to the implementation survey as originally conceived, OW could potentially request that the ICR's development be withdrawn as a corrective action. OW also stated that the value-added worth of a national TMDL implementation survey, estimated to cost $400,000 or more in 2007, is also questionable given improved knowledge about implementation and budgetary constraints. OW's position is that the survey would not be cost effective and should be withdrawn as a corrective action.

Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)

- Produce a synthesis paper covering the findings from multiple implementation-related studies.
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Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)
Action Office: OW
Report Title: More Information Is Needed on Toxaphene Degradation Products
Report No.: 2006-P-00007
Date Issued: 12/16/2005

Report Summary
Toxaphene in the environment changes, or degrades. The resulting degradation products are different from the original toxaphene in chemical composition and how they appear to testing instruments, so they could go unreported. The analytical methods EPA uses to identify and measure toxaphene are not designed to identify toxaphene degradation products. However, a new testing method used by others specifically tests for toxaphene degradation products. We believe EPA should validate, approve, and use this method. Certain toxaphene degradation products accumulate inside people. Although studies indicate that some of these degradation products may be harmful, more research is needed to determine how much of a risk these products pose to people. The report recommendations were reported to OA, OW, OSWER and ORD, OA and ORD have no past-due corrective actions recorded in MATS.

Unimplemented Recommendations
Recommendation 2: We recommend that the Administrator direct the Assistant Administrators for ORD, OW and OSWER to arrange for specific research into the dangers of tumors (i.e., cancer) and of harm to embryos posed principally by a mixture of toxaphene congeners and metabolites found in fish.
***Status*:** OW anticipated completing the third Contaminant Candidate List by August 31, 2009.

Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)
Action Office: OW
Report Title: EPA Needs to Reinforce Its National Pretreatment Program
Report No: 2004-P-00030
Date Issued: 09/28/2004

Report Summary
The reductions in industrial waste discharges to the nation's sewer systems that characterized the early years of the National Pretreatment Program have not endured. Since the middle of the 1990s, there has been little change in the volume of a broad list of toxic pollutants transferred to Publicly Owned Treatment Works (POTWs) or in the index of risk associated with these pollutants. As a result, the performance of EPA's pretreatment program, which is responsible for controlling these discharges, is threatened, and progress toward achieving the Clean Water Act goal of eliminating toxic discharges that can harm water quality has stalled.
The curtailing of the early gains may be explained in part by two factors: (1) dischargers that developed systems in response to EPA's initial program requirements have not enhanced their pretreatment systems in recent years, and (2) the rate at which EPA has been issuing effluent guidelines dramatically declined since 1990. Without more visible leadership from Headquarters, improved programmatic information, and the adoption of results-based performance measures, EPA's pretreatment program is at risk of losing the gains it made in its early years.

Unimplemented Recommendation
Recommendation 4-1: We recommend that the Acting Assistant Administrator for OW direct staff to develop a long-term strategy to identify the data it needs for developing pretreatment results-based measurements; determine the resources necessary to carry out the strategy; and gain the support of other Agency, State, and POTW staff to carry out the strategy..
Status: OW agreed to request information on databases used by the EPA regions and States to store information regarding POTW pretreatment program performance. Through the Permitting for Results process, OW will compile information regarding current data systems used to store pretreatment data at the EPA regional and State level. OW intends to use this information to identify inaccurate data and target data correction in the Permit Compliance System. Both of these activities are crucial to facilitate migration and retention of data as we transition to the Integrated Compliance Information System. Once these efforts are complete, OW will be able to determine a long-term strategy based on data availability and resources, which should ultimately assist it in developing pretreatment results-based measurements. The agreed-to completion date for this corrective action was September 30, 2007.

Compendium of Unimplemented Recommendations as of March 31, 2010 (Report No. 10-N-0114)
Action Office: OW
Report Title: Wastewater Management: Controlling and Abating Combined Sewer Overflows
Report No: 2002-P-00012
Date Issued: 08/26/2002

Report Summary
Combined sewer overflows (CSOs) are the total discharges into waterbodies of untreated domestic, commercial, industrial waste, wastewater, and storm water runoff, which can adversely affect the health of humans, animals, and aquatic organisms, as well as cause beach closings and fishing and recreational restrictions. We found that many communities do not as yet have the data to determine the effect of CSO controls on water quality. Most communities were only monitoring the number, volume, and duration of CSO discharges, and did not have data on the effect CSO controls were having on the quality of receiving waters. This was because EPA does not require monitoring until completion of CSO projects. Consequently, it could not be determined until it was too late whether each CSO project being undertaken was a wise investment of taxpayers' dollars.

Unimplemented Recommendation
Recommendation 5-1: We recommend that the Assistant Administrator for OW work with CSO permitting authorities and communities to assure they negotiate and establish the proper level of interim monitoring of CSO efforts to determine the impact of the project on water quality.
Status: OW agreed to initiate an effort at EPA Headquarters to develop a compilation of the monitoring approaches that are or may be used in different situations. This compilation, which will be available in Fiscal Year 2009, will help permit writers develop appropriate monitoring expectations for those permitees that have completed construction of their planned CSO controls. In August 2008, EPA reached a settlement filed in U.S. District Court for the Central District of California that requires EPA to complete studies and develop new recreational water quality criteria by October 2012. The agreed-to completion date was September 30, 2009.

Responses to Follow-up Questions Posed by Cong. Barton
Regarding Roger Crouse's May 13th Testimony
on the Assistance, Quality, and Affordability Act (AQUA) of 2010
June 14, 2010

1. *In Section 7 of the legislation, the state's intended use plan is required to provide priority for funding public water systems affected by a new national drinking water standard and service disadvantaged communities. Would this requirement pose undue challenges for the states?*

   This subject provision in Section 7 would be quite challenging for states to implement; however, we do not necessarily believe it would represent an undue challenge. Some states have long-standing disadvantaged loan programs. Presumably, such states will mainly need to ensure that their programs meet all of the new statutory provisions. Where their programs need to be augmented to address certain of the new requirements, they will need to take on those tasks – which may well have an associated workload burden. However, the bill can be expected be particularly challenging for those states that currently do not have a disadvantaged loan program. Amendments that were added to the bill after the hearing lay out a number of criteria that states will need to consider in developing and applying disadvantaged loan programs per the requirements of Section 7 of the draft legislation. To the extent states are afforded substantial deference and discretion in how those factors are taken into account, we believe the provision can be implemented without becoming an undue burden on states. We appreciate the draft bill's approach of allowing states, rather than EPA, to make and apply disadvantaged system definitions.

2. *On the issue of competitive contracts, you state ASDWA believes the changes contemplated in section 11 should take place at the national level. Why?*

   We believe the changes contemplated should take place at the *national level* and believe the bill needs to be clarified in this regard. We would object to this provision if it's intended to apply to technical assistance contracts issued by states --since such a restriction could take away a state's ability to hire the best qualified 3rd party technical assistance providers. Many states have long standing grant agreements with 3rd party technical assistance providers that are built upon those particular provider's knowledge and background in assisting individual water systems in the state. Requiring a competitive process in such cases can be expected to add additional administrative hurdles and time to the process without any expected benefits.

3. *You testify that states with comparable prevailing wage provisions in their state laws recommend adding a phrase acknowledging that a state may satisfy Davis-Bacon requirements by implementing comparable and equivalent state prevailing wage rate laws. What is the difference between these laws and state wage laws?*

   I made this recommendation in reference to those state prevailing wage requirements for which there is no functional difference between state and Federal requirements. The equivalent state requirements are already codified in state statutes and regulations. Hence, it

would burdensome and ineffective to require states to substitute Federal law for their own, equivalent statutes.

4. *You testify that the provisions in Section 5 do not serve a practical purpose to include a system with a Variance, Exemption or persistent violations in a state's Intended Use Plan -- if the system has not expressed an interest in participating in the SRF. Are there many systems that would fall into that category?*

   Yes, we believe there are many systems that would fall into that category. We think it's important to remember, in connection with this question, that the SRF program finances infrastructure. Many systems in persistent violation need financial and managerial attention, rather than improvements to their infrastructure. In addition, not all water systems are eligible for assistance from the SRF. Listing an ineligible system would thus be an administrative requirement with no useful purpose. We therefore recommend that this provision be changed to require that the IUP include an indication of any eligible water systems on the IUP that has a Variance, Exemption, or are in persistent violation.

5. *You testified that states generally do not support the provisions in Section 14 related to inspections and that they prefer the existing framework of escalating enforcement responses (including inspections, where appropriate) to return facilities to compliance. Could you please explain why the states find such a provision objectionable?*

   This section would direct EPA to develop regulations prescribing the number of inspections required of field staff after violations, classified into various tiers. States generally do *not* support this provision and prefer the flexibility provided in current statutory and regulatory provisions which allow states to use an escalating series of enforcement responses (including inspections, where appropriate) to return facilities to compliance as quickly as possible. The requirement envisioned by this part of the bill will have resource implications, in terms of additional staff time and documentation, and not necessarily produce the intended consequences. The underlying presumption of the requirement is that inspections remedy compliance problems. While it is true that many types of non-compliance problems at public water systems can benefit from a field inspection by state personnel (and associated technical assistance), that is not necessarily the case with all violations. Some are remedied with a phone conversation about the nature of the violation. Some types of violations are associated with long standing deficiencies in the technical, managerial, or financial capacity of water systems that are not necessarily helped by an inspection. We see no reason to replace the existing compliance and enforcement approaches effectively used by states with a new provision that is not grounded in the reality of everyday workings of water systems. However, one of the most effective ways Congress *could* support state efforts to ensure compliance would be to increase the relatively meager funding provided to states through the Public Water Supply and Supervision grant. Without additional funding, the inspection requirements contemplated in this part of the bill, would necessitate states shifting their very constrained resources away from other aspects of their program to accomplish the requisite inspections.

6. *What is the likely outcome of imposing new requirements on the states to create criteria for evaluating disadvantage systems that are out of compliance? What is the cost to the states?*

   We believe that most states operate their programs in this manner already, thus we would not expect a massive shift in approach for most states. However, the relatively prescriptive nature of the new requirements may well require changes in state statutes, regulations, and on-the-ground activities. As with our answer to the question #1 above, we think it will be important to afford states a substantial degree of discretion and latitude to apply these criteria in ways that are most appropriate in their states. We are not able to accurately assess the likely costs at this stage.

Additional Note: While not specifically posed as a follow up question to me, I would like to take a moment to react to the Buy American provisions of the final bill. These provisions were added by amendment after the hearing and thus, I was not able to react to them in my testimony. We understand and appreciate the desire to buy American-made goods and services. However, we think this laudible goal is not practical in the context of the Drinking Water SRF. The requirement to adhere to these buying procedures involves project delays, increases the cost of projects (in some case, inordinately so), and involves considerably more administrative activities on the part of states to oversee. Thus, we recommend that this provision be omitted.

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The Honorable Joe Barton
United States House of Representatives
Committee on Energy and Commerce
2125 Rayburn House Office Building

June 11, 2010

Dear Representative Barton:

In response to my testimony at the May 13 Subcommittee on Energy and Environment hearing on the "Assistance, Quality and Affordability Act of 2010" you requested that I provide additional information on the question:

> *Why do you need the revolving loan funds rather than tapping the capital markets for wind turbines, hydroelectric pumps, and items beyond piping and contaminant removal compliance costs?*

In Massachusetts, the State Revolving Fund (SRF) program provides loans with interest rates that range from 2.0 to 2.5 percent depending on the term of the loan, which is below what most issuers can achieve in the municipal bond market. By reducing the overall cost of financing for a project the SRF fund lessens the burden placed on local rate or taxpayers while ensuring critical infrastructure projects are being completed. SRF funding for renewable energy projects will significantly improve the pay back period for the projects making them more cost-effective for the public. Increasing the scope and scale of the SRF program will help local water and sewer utilities to continue to improve critical infrastructure and pursue renewable energy projects which will benefit all citizens.

I trust that this information is responsive to your question. If you require additional information, I will be happy to provide it. Thank you again for the opportunity to testify on behalf of the bill.

Very truly yours,

Stephen Estes-Smargiassi
Director of Planning

NATURAL RESOURCES DEFENSE COUNCIL

July 21, 2010

Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515-6115

Dear Chairman Waxman, Rep. Barton, and Members of the Committee:

I am pleased to respond to the additional written questions posed by Representative Barton in follow-up to my testimony before the Subcommittee on Energy and Environment on May 13, 2010, at the hearing entitled, H.R. 5320, the "Assistance, Quality, and Affordability Act of 2010 (AQUA)". My original testimony focused on the importance of a dependable water structure for public health, the importance of reducing the amount of lead in drinking water, and addressing the problem of endocrine disrupting chemicals. I expressed serious concerns about the documented presence of chemical contaminants, including endocrine disruptors, in source water in the United States. The decade-long delay in the implementation of the EPA Endocrine Disruptor Screening Program (EDSP) has resulted in a huge backlog of chemicals that have not been tested for endocrine disrupting effects, including many common drinking water contaminants. Furthermore, EPA has failed to take regulatory action under the Safe Drinking Water Act (SDWA) to protect the public from chemicals that have been tested and found to be endocrine disruptors, and that are known to be contaminants in drinking water. In my testimony, I offered support for a number of provisions in AQUA that will address endocrine disrupting chemicals, including:

- Require testing of drinking water contaminants for endocrine disruption on a reasonable and achievable timeline;
- Accelerate the identification of endocrine disrupting substances when scientific evidence already exists, thereby making the EDSP more efficient;
- Promote transparency and public participation in the EDSP; and
- Create a process for updating and revising testing protocols to be consistent with current scientific knowledge.

Responses to follow-up questions from Representative Barton are presented below.

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1. In your testimony, you cite a Center for Disease Control and Prevention statistic that almost 1 million children under the age of 6 have elevated blood lead levels (BLLs) in this country.
    a. What is considered an elevated BLL today? What was it 30 years ago?

In the 1960s, blood lead levels (BLL) greater than 60 micrograms per deciliter (μg/dL) were considered toxic. The level was revised downward several times in the following decades, based on an accumulation of scientific evidence demonstrating adverse effects of lead on children's neurodevelopment at lower levels. The level was reduced to 40 μg/dL in 1971, 30 μg/dL in 1975, 25 μg/dL in 1985, and 10 μg/dL in 1991.[1] In 2007, the Centers for Disease Control and Prevention (CDC) issued a document on "Interpreting and Managing Blood Lead Levels <10 μg/dL in Children and Reducing Childhood Exposures to Lead" (November 2, 2007).[2] This document stated that "CDC also recognized that a BLL of 10 μg/dL did not define a threshold for the harmful effects of lead. Research conducted since 1991 has strengthened the evidence that children's physical and mental development can be affected at BLLs <10 μg/dL."[3] The report also affirms that "no safe level for blood lead in children has been identified."[4]

In 1991, EPA recognized that there was no level of lead at which it could assure "no anticipated or adverse health effects" while providing "an adequate margin of safety," and accordingly set the Maximum Contaminant Level Goal (MCLG) for lead in drinking water at zero.[5] EPA preserved the MCLG, and reiterated its rationale, when it revised other national drinking water regulations for lead in 2007.[6] In setting the MCLG, EPA relied on 1) the occurrence of various low-level health effects for which it is difficult to identify clear thresholds levels below which there are no risks of adverse health effects; 2) EPA's policy goal that drinking water should contribute minimal additional lead to existing exposures because a portion of the sensitive subpopulation (children) already exceeds acceptable blood lead levels; and 3) the classification of lead as a probable human carcinogen.[7]

In recent years, extensive scientific research has emerged that supports the conclusion that there is no "safe" blood lead level for children. These new studies substantially add to the overwhelming body of scientific evidence clearly showing adverse effects in children at BLLs well below 5 μg/dL.

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[1] David C. Bellinger, Andrew M. Bellinger. "Childhood lead poisoning: the torturous path from science to policy." J. Clin. Invest. 2006; 116(4):853.
[2] Recommendations of CDC's Advisory Committee on Childhood Lead Poisoning Prevention. "Interpreting and Managing Blood Lead Levels <10 μg/dL in Children and Reducing Childhood Exposures to Lead." MMWR 2007; 56(RR08):1-14.
[3] Ibid p. 1.
[4] Ibid p. 1.
[5] EPA, Maximum Contaminant Level Goals and National Primary Drinking Water Regulations for Lead and Copper, 56 Fed. Reg. 26460, 26462 (June 7, 1991) (to be codified at 40 C.F.R. pts. 141 and 142).
[6] EPA, National Primary Drinking Water Regulations for Lead and Copper: Short Term Regulatory Revisions and Clarifications, 72 Fed. Reg. 57782, 57790 (Oct. 10, 2007) (to be codified at 40 C.F.R. pts 141 and 142).
[7] Ibid

For example:

- Nigg et al (2007) studied 150 children ages 8-17 years, including children with two forms of Attention Deficit Hyperactivity Disorder (ADHD) and normal children.[8] The blood lead levels in this study population ranged from 0.4 to 3.4 μg/dL, with a mean of 1.03 μg/dL, mirroring the range in the U.S. population today. Blood lead levels in the children with ADHD-combined type were statistically significantly higher than in control children. Blood lead was associated with both inattention-disorganization and with hyperactivity-impulsivity in these children. Thus, this study reported adverse effects in children at BLLs below 3.4 μg/dL.

- The association between ADHD and lead exposure in childhood was further defined by Braun et al (2006), based on data from the National Health and Nutrition Examination Survey (NHANES), a statistically representative subsample of the entire U.S. population 1999-2002.[9] This study, which included data on 4,704 children ages 4-15, found a statistically significant association between higher blood lead levels and ADHD. Children in the top quintile (BLL of $\geq$ 2.0 μg/dL) of population blood lead had a 4.1-fold higher likelihood of carrying a diagnosis of ADHD compared to children in the lowest quintile (BLL of $\leq$ 0.7). On the basis of these findings, the authors projected that environmental lead exposure accounts for 290,000 excess cases of ADHD in U.S. children. This study supports the finding that BLLs as low as 2 μg/dL are associated with adverse neurobehavioral effects in children.

- A recent cohort study of 294 1-2 year-old children in Mexico City focused on the effects of BLLs below 10 μg/dL.[10] The study found that higher blood lead levels at ages 1 and 2 were associated with lower scores on the Mental Development Index and the Psychomotor Development Index at age 2. The slope of the relationship was steeper at BLLs below 5 μg/dL. The authors concluded that: "These findings thus provide additional evidence that 10 μg/dL should not be viewed as a biological threshold for lead neurotoxicity."

- Other new research has shown that blood lead levels as low as 2 μg/dL cause statistically significant discernable impacts on the performance of school-aged children on standardized tests.[11] This study analyzed the educational testing data for over 8,600 fourth grade students in North Carolina in 2000-2004, and linked the test results to blood lead surveillance data for seven counties. The

[8] Nigg JT, Knottnerus GM, Martel MM, et al. "Low blood lead levels associated with clinically diagnosed attention-deficit/hyperactivity disorder and mediated by weak cognitive control." Biol Psych 2008; 63(3):325-31.

[9] Braun JM, Kahn RS, Froehlich T, et al. « Exposures to environmental toxicants attention deficit hyperactivity disorder in U.S. children." Environ Health Perspect 2006; 114(12):1904-1909.

[10] Tellez-Rojo MM, Bellinger DC, Carmen Arroyo-Quiroz H, et al. "Longitudinal associations between blood lead concentrations lower than 10 μg/dL and neurobehavioral development in environmentally exposed children in Mexico City." Pediatrics 2006; 118: 323-30.

[11] Miranda ML, Kim D, Galeano MAO, et al. «The relationship between early childhood blood lead levels and performance on end-of-grade tests." Environ Health Perspect 2007; 115(8):1242-1247.

authors found that a blood lead level of 5 µg/dL was associated with a decline in reading and mathematics test scores that is roughly equal to the magnitude of the impact of poverty on educational performance. There was a discernable effect on the test results in this cohort at blood lead levels as low as 2 µg/dL.

- A prospective cohort study on 194 children in Rochester, NY focused specifically on the question of whether blood lead levels less than 10 µg/dL can adversely affect cognitive function.[12] In this study population, the lifetime average BLL was 7.2 µg/dL, with a range from 1.4-27.1 µg/dL. Lifetime average blood lead concentrations in these children (now 6 years old) were inversely associated with IQ. In comparison to the children with an average BLL < 5 µg/dL, children with average BLLs between 5-9.9 µg/dL scored 4.9 points lower on both full-scale IQ and on performance IQ. The researchers found similar relationships when they examined concurrent lead levels, infancy lead levels, and peak lead levels. A dose-response assessment of the peak blood lead relationship with IQ revealed a non-linear relationship with an inverse association between BLL and full-scale IQ down to 2.1 µg/dL (the lowest peak lead level measured in this study population). The slope of the relationship was steeper at lower blood lead levels, consistent with the findings in numerous other studies.

As many of these studies indicate, current lead concentrations are associated with significant IQ losses. Subpopulations of children with nutritional deficiencies are likely to be significantly more susceptible to lead toxicity. Diets low in calcium are known to significantly increase lead absorption and toxicity.[13] [14] In fact, there is an inverse relationship between brain lead levels and dietary calcium.[15] Similarly, dietary iron deficiency has been found in numerous studies to be associated with increased intestinal absorption of lead, and with increased vulnerability to lead toxicity.[16]

b. What is the average BLL of children today? What was it 30 years ago?

The mean ("average") BLL for children ages 1-5 was 13.7 micrograms per deciliter (µg/dL) in the second National Health and Nutrition Examination Survey, 1976 to 1980.[17] Today the mean BLL is 1.5 µg/dL.[18] This decline reflects public health policies

[12] Jusko TA, Henderson CR, Lanphear BP, et al. "Blood lead concentrations less than 10 micrograms per deciliter and child intelligence at 6 years of age." Environ Health Perspect. 2008;116(2):243-8.

[13] Mahaffey KR. "Environmental lead toxicity: nutrition as a component of intervention." Environ Health Persp 1990; 89:75-78.

[14] Mahaffey KR. "Nutrition and lead: strategies for public health." Environ Health Perspect 1995; 103(supp 6):191-196.

[15] Goyer RA. "Nutrition and metal toxicity." Am J Clin Nutr 1995; 61(suppl):646S-650S.

[16] Ros C, Mwanri L. "Lead exposure, interactions and toxicity: food for thought." Asia Pacific J Clin Nutr. 2003; 12(4):388-395.

[17] Pirkle JL, Brody DJ, Gunter EW, et al. "The decline in blood lead levels in the United States. The National Health and Nutrition Examination Surveys (NHANES)." JAMA. 1994; 272(4):284-91.

[18] http://cfpub.epa.gov/eroe/index.cfm?fuseaction=detail.viewMidImg&ch=49&lShowInd=0&subtop=381&lv=list.listByChapter&r=188246. Accessed 6/16/10.

by EPA and other agencies that have reduced many sources of lead contamination in the environment.

2. In your written statement, you describe how hormones are released by endocrine glands and travel through the blood to different parts of the body where they control and adjust many life functions.
    a. Using insulin as an example, would you agree that carbohydrates in foods elicit an insulin response from the endocrine system of rats, and also of humans? Would you characterize that insulin response as "adverse?"

Yes, I would agree that insulin release from the pancreas is a response that occurs after ingestion of carbohydrates to regulate levels of glucose in the body. This is a normal physiological response which maintains homeostasis by keeping glucose levels within a set range. It is not an adverse effect and when glucose levels are not maintained within a set point range over the long term, permanent damage occurs in major organs such as the kidney, heart, and eyes. A severe drop or elevation in blood glucose out of the set range can cause immediate death, so maintaining the set point is vital for proper functioning and vitality of an organism.

    b. What about temperature, would you agree that a change in the air temperature can elicit responses of the adrenal glands in rats and in humans? If so, would you characterize the adrenal glands responding to a change in air temperature as "adverse?"

Physiological responses to a change in air temperature are controlled by the hypothalamus region of the brain, which is the body's "thermostat" and responds to changes in temperature by controlling and activating responses from many different organs. This can include responses from the adrenal gland but also include other brain regions, skin and the nervous system. For example, in response to cold temperature, the adrenal medulla will secrete epinephrine to cause an increase in metabolism, fat-burning and heat generation in the body. Like the insulin example given above, this is a normal physiological response which maintains homeostasis by keeping core body temperature within a set range. It is not an adverse effect but something that is necessary for life and when temperature is not maintained within this set range there can be damage to all body systems, especially the limbs and brain. A severe elevation out of the set range can cause immediate death so maintaining the set point is vital for proper functioning and vitality of an organism.

    c. Do you consider both of those examples as normal or adaptive responses of the endocrine system? If an endocrine response is not "adverse," then what is the significance?

Both of the above examples, insulin and temperature regulation, are examples of normal physiological responses which maintain homeostasis in an organism. Homeostasis is the dynamic process that living things use to actively maintain stability in vital functions like blood flow, temperature, metabolism and energy balance. An analogy of these

processes could be made for your home thermostat. You set it at 70 degrees Fahrenheit and the house's heating and air conditioning system responds to maintain that temperature by either turning on or off whenever the home's temperature changes. It involves a constant monitoring, response, recheck, and response. Interfering with the thermostat by blocking or exaggerating the response is analogous to an adverse effect. The thermostat no longer responds to changes as expected and doesn't maintain the house at 70 degrees.

Endocrine disruptors change the "set point" to either interfere with or alter a homeostatic response. Chemicals such as bisphenol A have been associated with interference with insulin regulation for example, so that insulin secretion is no longer able to maintain glucose balance.[19] Bisphenol A has also been shown to interfere with estrogen signaling, interfering with development of reproductive organs causing a predisposition to cancer and altering the age of onset of puberty.[20] Other endocrine disruptors such as perchlorate interfere with the thyroid hormone by interfering with thyroid hormone production and lowering the amount of hormone circulating in the blood. This results in a state of relative hypothyroidism such that the thyroid hormone level "set point" that is lower than normal for the organism. This has significant consequences for a fetus which relies on thyroid hormone for development of the brain and nervous system. A relative lowering of thyroid hormone during pregnancy has been associated with a loss of IQ points and impaired learning and memory. [21, 22, 23]

3. If EPA should focus on all chemicals, regardless of how strong or weak their endocrine activity, how can you be sure that EPA's actions will have any beneficial effect? What if EPA can't do anything about the biggest contributors -- such as human hormones?

For the vast majority of chemicals contaminating drinking water, we have no information about their potential endocrine activity. This information is needed before any determinations about effects on wildlife or human health can be made. This is why we are urging testing of drinking water contaminants for their potential endocrine disrupting activity. Prioritization for testing should be done based on suspected endocrine activity, identification in drinking water sources, evidence of human exposure through biomonitoring or evidence of wildlife contamination. We also know that endocrine disruptors are likely to have additive effects when found in mixtures, and the combination of hormonally active synthetic chemicals is likely to have greater

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[19] Ropero, A. B., P. Alonso-Magdalena, et al. "Bisphenol-A disruption of the endocrine pancreas and blood glucose homeostasis." International Journal of Andrology 2008; **31**(2): 194-200.

[20] Chapin, R. E., J. Adams, et al. "NTP-CERHR expert panel report on the reproductive and developmental toxicity of bisphenol A." Birth Defects Res B Dev Reprod Toxicol 2008; **83**(3): 157-395.

[21] Haddow, J. E., G. E. Palomaki, et al. "Maternal thyroid deficiency during pregnancy and subsequent neuropsychological development of the child." N Engl J Med 1999; **341**(8): 549-55.

[22] Pop, V. J., J. L. Kuijpens, et al. "Low maternal free thyroxine concentrations during early pregnancy are associated with impaired psychomotor development in infancy." Clin Endocrinol (Oxf) 1999; **50**(2): 149-55.

[23] Miller, M. D., K. M. Crofton, et al. "Thyroid-disrupting chemicals: interpreting upstream biomarkers of adverse outcomes." Environ Health Perspect 2009; **117**(7): 1033-41.

endocrine activity than either alone. Therefore, weak activity cannot be an excuse for not regulating a chemical found to contaminate drinking water.

Furthermore, it is incorrect to presume that "human hormones" are the biggest contributors given the lack of knowledge about the endocrine disrupting effects for so many water contaminants and the evidence of endocrine activity of other contaminants. For example, there is evidence that alkyl-phenols, used as surfactants in consumer products such as detergents, and artificial hormones, used in the cattle industry, are also major contributors of hormonal activity in waterways.[24] [25] [26] Restrictions in discharge limits for known industrial estrogenic chemicals, such as the alkyl-phenols has lead to significant reductions in the estrogenic activity in U.K. waterways and a reduction in the feminization of fish.[27] This suggests the regulation of discharges of endocrine disrupting chemicals in the U.S. would have similar beneficial effects.

Finally, EPA has the authority under the Clean Water Act and Safe Drinking Water Act to act on all chemical contaminants in drinking water and in addition to regulating discharges could require, for example, treatment technologies which have been shown to remove hormonally active compounds, including synthetic human hormones.[28]

4. On Page 5 of your testimony, you mention many human diseases that you believe are caused by endocrine disruption, including infertility, birth defects of the genitals, and testicular cancer, to name a few
    a. If there were no endocrine disrupting chemicals in the water supply, how much lower would the incidence of infertility be? How much lower would the incidence of birth defects be? What about testicular cancer?
    b. Can you assure us that there will be any measurable decrease in these health problems if endocrine disrupting chemicals were removed from the water supply?
    c. How could EPA measure the effectiveness of removing potential endocrine disrupting chemicals from the water supply? Is there any way to document that removing such chemicals actually improves public health?

It will be difficult to detect any measurable decrease in the incidence of diseases and disorders such as infertility or birth defects because there doesn't exist a method for documenting the incidence of these diseases in America. Some states, such as California, maintain a birth defects registry and a cancer registry. But these databases

[24] Orlando, E. F., A. S. Kolok, et al. "Endocrine-disrupting effects of cattle feedlot effluent on an aquatic sentinel species, the fathead minnow." Environ Health Perspect 2004; **112**(3): 353-8.

[25] Hutchins, S. R., M. V. White, et al."Analysis of lagoon samples from different concentrated animal feeding operations for estrogens and estrogen conjugates." Environ Sci Technol 2007;**41**(3): 738-44.

[26] Ying, G. G., B. Williams, et al. "Environmental fate of alkylphenols and alkylphenol ethoxylates--a review." Environ Int 2002; **28**(3): 215-26.

[27] Sheahan, D. A., G. C. Brighty, et al. "Reduction in the estrogenic activity of a treated sewage effluent discharge to an English river as a result of a decrease in the concentration of industrially derived surfactants." Environ Toxicol Chem 2002; **21**(3): 515-9.

[28] Khanal, S. K., B. Xie, et al. "Fate, transport, and biodegradation of natural estrogens in the environment and engineered systems." Environ Sci Technol 2006; **40**(21): 6537-46.

are not universal. Therefore, it will be difficult to document a decrease in incidence in these diseases because there doesn't exist a good baseline measurement.

This is information that is desperately needed. Environmental public health tracking programs, such as those run by the U.S. Centers for Disease Control and Prevention (CDC) would greatly benefit from improved and consistent funding so that we could obtain this baseline data. It will not only be useful for measuring the impacts of water treatment technologies on the incidence of disease but will also be beneficial for understanding and monitoring the incidence of a number of human health conditions suspected of being on the rise.

However, this lack of incidence data should not be interpreted or used as a reason for not acting. There is solid animal data that oral exposure to known drinking water contaminants such as phthalates can cause birth defects and infertility in animals. Emerging human evidence also suggests that this group of chemicals is harming human health. Efforts should be undertaken now to reduce exposure to these and other endocrine disrupting chemicals in addition to testing other water contaminants for their potential endocrine disrupting activity.

I hope that this additional information is useful to the Committee as it continues its deliberations on these important public health issues. I have also attached here a copy of NRDC's report on the problem of pharmaceutical contamination of drinking water sources. I mentioned this report during the question and answer session following the testimony and respectfully request it be placed into the record.

Sincerely,

Sarah Janssen, MD, PhD, MPH
Senior Scientist

Quill Law Group

Via email: Earley.Green@mail.house.gov

June 14, 2010

The Honorable Joe Barton
House Subcommittee on Energy and Environment
Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515-6115

Re: Response to written questions related to the May 13, 2010 Subcommittee hearing on the Assistance, Quality, and Affordability Act of 2010.

Dear Congressman Barton,

Thank you for your written questions related to my May 13, 2010 testimony before the House Subcommittee on Energy and Environment related to the Assistance, Quality, and Affordability Act of 2010. Following are my written Responses.

1. Your testimony states that the timelines in the legislation should be matched up to synchronize with the existing work of the Endocrine Disruptor Screening Program. What practical as well as financial benefits do you think would accrue from such an approach?

Response

EPA has adopted a phased approach for implementing its Endocrine Disruptor Screening Program (EDSP).[1] Pursuant to the current EPA approach, the Agency has ordered Tier 1 Screening for 67 pesticide active and inert chemical ingredients. After receiving results for this first phase of screening, which is expected to take up to two years after the initial orders were issued, EPA intended to review and revise as necessary its Tier 1 battery prior to issuing new

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1 *See,* EPA's final EDSP Policies and Procedures, *Endocrine Disruptor Screening Program; Policies and Procedures for Initial Screening*, 74 Fed. Reg. 17650, Apr 15, 2009 ("EDSP Policies and Procedures"). *See, also, Final List of Initial Pesticide Active Ingredients and Inert Ingredients to be Screened Under the Federal Food, Drug, and Cosmetic Act*, 74 Fed. Reg. 17579, Apr. 15, 2009 ("EDSP Listing").

testing orders.

Although EPA has worked to validate individual Tier 1 screening assays, the Agency has not yet validated the Tier 1 battery. Information from the initial screening phase should be useful for validating the battery. Further, concerns remain as to the usefulness, accuracy and repeatability of the individual assays – the Tier 1 battery and individual assay protocols will likely need to be modified. Indeed, EPA will learn of battery, assay and compliance problems only after it assesses the results of the first phase of screening.

EPA's phased approach is consistent with its Scientific Advisory Board's (SAB's) scientific recommendation to initially screen 50 to 100 substances.[2] The SAB also recommended that, once EPA had collected the data from these 50 to 100 substances, the Agency should review all endocrine screening battery phase one screening data and test methods to revise the program "with an eye towards revising the process and eliminating those methods that don't work."[3] Likewise, the Office of Management and Budget approved EPA's Information Request (submitted pursuant to the Paperwork Reduction Act) for the initial 67 chemicals and stated in its Terms of Clearance: "This information collection is approved for the 67 chemicals published by EPA at 74 Fed. Reg. 17579 (April 15, 2009). OMB appreciates the continuing dialog with respect to the practical utility of the Tier I battery of EDSP assays and the role that the results from these first 67 chemicals will play in ensuring practical utility for subsequent groups of chemicals."[4] It is clear OMB also envisioned that EPA would not order additional

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[2] EPA, *Review of the EPA's Proposed Environmental Disruptor Screening Program; Review of the Endocrine Disruptor Screening Program by a Joint Subcommittee of the Science Advisory Board and Scientific Advisory Panel.* EPA-SAB-EC-99-013, July 1999 ("SAB EDSP Report").

[3] SAB EDSP Report at 2.

[4] Office of Information and Regulatory Affairs, Office of Management and Budget, *Approval of EPA's Information Collection Request: Tier 1 Screening of Certain Chemicals Under the Endocrine Disruptor Screening Program (EDSP)*, OMB Control No: 2070-0176, ICR Reference No: 200904-2070-001, Oct. 2, 2009, ("OMB Terms of Clearance").

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endocrine screening until the first phase of EDSP screening was completed, EPA assessed the performance of its screening assays and battery, and the Agency made necessary changes to the assays and battery.

For the reasons discussed above, the scientifically supportable approach is for EPA to await completion of its first phase of EDSP screening and to make necessary modifications to its Tier 1 battery and assays before ordering additional EDSP screening. This may take two years. Over the next year, EPA should develop, and has committed to develop, (1) a weight of evidence approach for assessing the results of Tier 1 screening, and (2) guidelines for assessing existing data (termed "Other Scientifically Relevant Data" or OSRI) that might obviate the need for some Tier 1 screening. These efforts should be completed before EPA orders additional EDSP screening. Indeed, EPA has stated that it intends to develop, prior to completion of the first phase of screening, a weight of evidence approach for assessing Tier 1 screening results. EPA has also indicated it will develop in the near term guidelines for assessing OSRI.[5] It is unclear what progress EPA has made in regards to those activities.

Contrary to the more scientifically supportable approach discussed above, the legislation appears to require EPA to issue additional EDSP testing orders prior to (1) completing the initial phase of EDSP screening; (2) assessing and modifying the current Tier 1 screening battery and assays; (3) developing a weight of evidence approach for assessing screening results; and (4) developing guidelines for assessing and accepting OSRI. The legislation would require EPA to issue additional EDSP testing orders within one year of enactment. Further, the legislation would not require EPA to develop approaches for assessing screening results, modifying its assays and screening battery, and assessing and accepting OSRI for two years.

The timeline mandated by the legislation could result in unnecessary

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5 EPA's stated efforts in regards to developing guidelines for assessing and accepting other scientifically relevant information is consistent with OMB's directive that "under the principles of the PRA [Paperwork Reduction Act], EPA should promote and encourage test order recipients to submit Other Scientifically Relevant Information (OSRI) in lieu of performing all or some of the Tier I assays, and EPA should accept OSRI as sufficient to satisfy the test orders to the greatest extent possible." OMB Terms of Clearance.

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screening, unnecessary use of inaccurate and non-repeatable assays, and unnecessary use of assays and protocols that may be unable to determine whether a substance interacts with the endocrine system. Again, after completion of the first phase of EDSP screening EPA could learn of significant assay, battery and compliance problems. Requiring new EDSP testing before EPA has an opportunity to learn of and correct problems with its existing assays and battery would likely result in unnecessary testing costs and the unnecessary use of laboratory animals. Indeed, assays may need to be repeated and new assays may need to be included in the screening battery. Conceivably, tens of millions of dollars could be wasted on unnecessary or useless screening if EPA departs from its originally planed screening timeline.

Given the potential problems that are likely to arise in conducting and interpreting the Tier 1 screening assays and battery, a phased implementation of the EDSP that will allow for modifications of the Tier 1 assays and battery should serve to improve the EDSP while conserving limited testing resources. The legislation should not impose a timeline that is not scientifically supportable, contrary to good science-based policy, and contrary to scientific and policy advice provided by the Agency's SAB and by OMB.

2. You mention the scope issue in your testimony. Though the language used in Section 16 is the same as that already in law, you remain concerned. Why should this be a concern?

Section 16 of the legislation,[6] like current law, fails to clearly define the scope of the endocrine screening and testing program under the Safe Drinking Water Act. The scope of the legislation refers to the chemical substances that would be included under the Act. The scope turns on the interpretation of the terms "may be found in sources of drinking water" and "substantial population." EPA has not yet interpreted those terms as they apply to the endocrine testing provisions of the SDWA. A broad Agency interpretation of those terms will

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[6] Please note that the Endocrine Disruptor Screening Program is now Section 17 of the legislation. My responses refer to the Endocrine Disruptor Screening Program provisions of the legislation.

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result in almost any substance falling within the endocrine testing provisions of the Act.

I believe the legislation provides an opportunity for Congress to clarify its intent concerning the scope of endocrine testing under the SDWA. It appears that the purpose of the legislation is to prioritize for endocrine testing those substances that may pose a real threat to human health through a drinking water route of exposure. To the extent substances that are unlikely to be found in drinking water are included within the scope of the legislation, substances of less concern (i.e., those that pose less chance of exposure) may receive greater priority over substances that are known to exist in actual sources of drinking water to which large numbers of people are exposed. Endocrine testing under the SDWA and prioritization should be driven by actual threats of exposure. By clearly defining the scope of the legislation and Act, testing can be better prioritized and limited testing resources can be maximized. It should be noted that limiting the scope of the endocrine provisions of the SWDA will not preclude endocrine testing of chemical substance. EPA has ample authority under FFDCA (Section 408p), FIFRA and TSCA to require endocrine testing.

3. **While Section 16 of the legislation suggests in one place a weight of the evidence approach to scientific review, your testimony is much more skeptical that valid, relevant, repeatable, and reliable science will be what EPA uses in this program. Why do you think it is important to have sound science provision included in the legislation?**

Section 16 suggests in only one place a weight of evidence approach for scientific review. That provision does not appear applicable to other parts of Section 16. Further, even in that single instance, the legislation fails to state that scientific evidence should be repeatable. The requirement for sound science should be a universal requirement applicable to all provisions of health and environmental legislation. This is especially true for legislation concerning endocrine disruption, an issue that has been driven as much by ideology and hypothesis as by sound science.

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Surely, some view the requirement for sound science a burden that might require additional work or inhibit non-scientific, policy-based actions. Some appear satisfied to generate rudimentary endocrine data (such as biochemical or mechanistic data) followed by hypotheses that argue for the relevance of that data to potential effects in humans and wildlife. There is certainly value in biochemical and mechanistic studies, and hypotheses are useful in directing further research. Hypotheses, however, must be tested. In the area of endocrine disruption, hypotheses are rarely tested while new hypotheses are continually created and promoted. Further, biochemical and mechanistic studies should be relied on as a basis for taking action (including prioritization of substances for screening) only when they comport with basic scientific principles: (1) measurement: scientific studies must measure what they claim to have measured within a known margin of error; (2) confounding: measurements and observations must not be confounded by extraneous factors and influences known to corrupt their accuracy and precision; and (3) replication: measurements and observations must be replicable in independent hands. I would add to this list other important scientific concepts such as the need to weigh and consider all data when forming broader scientific conclusions. I also believe it is important to understand to what extent certain data and observations are relevant to answering broader scientific questions (such as whether a substance is a potential "endocrine disruptor" or whether a substance may pose a risk to human health or the environment) and to managing related potential risks. As I stated in my testimony, I have been concerned that many involved in the endocrine disruptor issue often fail to adhere to the above-mentioned scientific principles, fail to consider all the data, and often misstate the relevance of data upon which they rely.

I believe requiring the use of sound scientific criteria will lead to the protection of health and the environment by allowing EPA to distinguish real scientific information from theory, hypothesis, bias, policy, and unsubstantiated belief. Application of sound scientific criteria will also allow the Agency to better weigh available scientific evidence to arrive at supportable and reasoned scientific conclusions. Better assessments of data quality will lead to better assessments of potential risks to health and the environment. That, in turn, will enable EPA, other agencies and Congress to better focus limited resources in areas where those resources can have a more meaningful effect. Better risk assessments also will help avoid the unintentional selection of riskier products and adoption of poor risk management choices.

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EPA is a science agency that should adhere to strict principles of sound science. My experience, however, is that the Agency's adherence to principles of sound science can vary depending on the EPA office, the views of the current Administration and broader policy objectives. Adherence to principles of sound science also varies greatly among different government agencies. For these reasons, I believe EPA and all government agencies should adopt and utilize sound scientific principles when assessing scientific studies and information. Some notice may be taken of Federal and some State courts, which have adopted rules for determining the reliability of scientific information. Congress can play a pivotal role in ensuring Agency adherence to principles of sound science by including sound science provisions in its health and environmental legislation.

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