### Before the House Energy and Commerce Committee Subcommittee on Environment and the Economy Hearing on

### H.R. \_\_\_\_, Drinking Water Improvement Act and Related Issues of Funding, Management, and Compliance Assistance under the Safe Drinking Water Act

#### May 19, 2017

### Testimony of James M. Proctor II McWane, Inc. Senior Vice President and General Counsel

Chairman Shimkus, Ranking Member Tonko, and members of the subcommittee:

Thank you for the opportunity to testify about an issue vital to our nation's health, economy and security. Water is our most precious resource, one that is essential to human life and health. Access to water depends upon a reliable water infrastructure system that preserves, treats, and delivers safe drinking water to our nation's communities. For almost 200 years McWane, Inc. has proudly provided the building blocks for our nation's water infrastructure, supplying the pipe, valves, fittings and related products that transport clean water to communities and homes across the country and around the world. In the process we employ more than 6000 team members who work in 25 manufacturing facilities in 14 states and in additional operations in 9 other countries.

Despite its obvious importance, "out of sight, out of mind" best describes the nation's attitude toward water infrastructure. Potholes, train wrecks, and delayed flights are much more visible; thus, transportation needs often crowd out our attention to water as a serious infrastructure need. But the reality is that much of America's drinking water, wastewater, and stormwater infrastructure, including the more than one million miles of pipes beneath our streets, is nearing the end of its useful life and must be replaced. Many communities strain to maintain and operate their water treatment systems. According to the U.S. Census Bureau, nearly half a million U.S. households still do not have access to safe drinking water or a working toilet. As much as 25-30% of the treated water that goes into our distribution systems leaks into the ground as it flows through pipes installed as many as 150 years ago. Those losses not only squander a vital and sometimes scarce resource; they represent a massive waste of the energy and associated capital required to treat and pump that water. As much as 19% of our nation's electricity consumption and 30% of our natural gas consumption is related to water treatment, pumping, and recovery. The energy used to treat water that leaks into the ground is simply wasted, which in turn increases energy prices for consumers and greenhouse gas emissions associated with its production.

Compounding the problem, our shifting population brings significant growth to some areas of the country requiring larger pipe networks to provide water service, while population decreases in other areas deplete budgets necessary to sustain water systems built for larger customer bases. Water is also a vital national security issue. U.S. security experts expect that within ten years, countries of strategic interest to the U.S. will face significant water challenges and more and more will come to the U.S. for expertise.

In every crisis, there is opportunity, and the water infrastructure crisis is no different. Investment in water infrastructure means more jobs: every \$1 billion invested in infrastructure creates or supports 28,500 jobs, and every dollar invested in water and wastewater infrastructure adds \$6.35 to the national economy. Moreover, the investment is largely self-sustaining. Studies have shown that with the increase in GDP, every dollar of water infrastructure investment generates \$1.35 in tax revenue to the federal government and \$.68 to state and local governments, tax revenues to help pay for the investment. Water also offers a unifying opportunity to make progress at home, while also projecting American leadership and boosting exports of U.S. solutions, products, and services abroad.

Our country has a choice: we can continue to ignore the problem, thus increasing the long-term burden for future generations, or we can do the responsible thing and take a strategic approach to carefully prioritize and invest in water infrastructure renewal that will ensure the public health, safety, security, and economic vitality of our communities.

I am pleased that the committee is considering efforts to reauthorize and modernize the Drinking Water State Revolving Fund (DWSRF) in this hearing and the draft legislation we will be discussing today. Since its inception, the DWSRF has played a key role in delivering investment efficiently to communities throughout the nation. Still, it has never been reauthorized since its creation and it needs reform to make it more responsive to both the scale of America's water infrastructure needs and the imperative that infrastructure investment be undertaken in a manner that creates and supports good American jobs, particularly manufacturing jobs.

The most important action your legislation should include is a substantial increase to the authorization level for the DWSRF. Building water infrastructure requires capacity, and companies need market and funding certainty to ensure that investments in building that capacity will not be wasted. A long-term, high level of annual authorization for the DWSRF will provide that market signal and spur increased use of the capacity that already exists and, potentially, the development of even more capacity as the market dictates. The obvious benefit of this – and one that is top of mind for all of us – is that this will create good, family-supporting manufacturing jobs. But another benefit is that as American manufacturers ramp up production, they can harness economies of scale and that makes American products more affordable and more competitive. There are several ways that this program can be tweaked and improved, but in the end there is no substitute for a strong, long-term, stable funding stream for this program.

While this funding is crucial, it does American workers and industry little good if those taxpayer dollars are spent on unfairly traded foreign imports. We must ensure that our efforts have the maximum impact on the American economy, and that the hard-earned tax dollars paid by American workers support the creation and preservation of American jobs, and protect our environment.

U.S.-made waterworks foundries conform to the world's most rigorous and effective, but also expensive environmental standards. American companies have invested significantly, at great cost, to modernize their U.S. operations to meet federal environmental and worker safety regulations. We at McWane are proud to say that our plants are among the safest and most environmentally sound in the world, but every day we must compete against foreign, state-owned or subsidized foundries and mills that regularly flout international trade laws, have no regard for worker safety, the environment, or public health and are not required to operate by standards comparable to those with which U.S. manufacturers must comply. In fact, the foreign-origin producers with whom U.S. iron and steel producers most often compete are also the most polluting. A typical foundry in China, for instance, emits more than 20 times the particulate (9.4 lbs. per ton versus 0.4 lbs. per ton) and nearly 35 times the carbon monoxide (149.4 lbs. per ton versus 4.4 lbs. per ton) than are emitted by a typical U.S. foundry. The carbon dioxide emitted from China's iron and steel industry accounts for as much carbon dioxide emissions as the rest of the global iron and steel industry. In addition to the harm to the environment, these disparities create significant cost and competitive disadvantages for American producers, that have led to lost sales, closed plants, lost tax revenues, and lost jobs. Communities across the country are in decline because the factories that once built our nation's infrastructure have disappeared, depriving them of the vital tax revenues and rate payers needed to operate and maintain their water systems and other public services.

Fortunately, this problem has been mitigated in recent years through the application of the American Iron and Steel (AIS) preference to the DWSRF, and the Clean Water State Revolving Fund (CWSRF) and Water Infrastructure Financing and Innovation program (WIFIA). AIS is critical to U.S. iron and steel producers. It has provided producers with critical incentives to preserve production capacities in the United States, make significant capital investments to improve manufacturing capabilities, and maintain workforces critical to sustaining the communities around them. I can say with pride and relief that AIS has saved at least one of our plants from closure, preserving hundreds of jobs in an economically depressed area.

By 2008, our waterworks fittings plant in Anniston, Alabama was the last surviving domestic manufacturer of those products. At one time there were as many as a dozen such plants in the United States, but all, including our other fittings plant in Texas, fell victim to the unfair foreign competition I described previously. Even that lone survivor was at risk of closure when the great recession hit, operating at around 30% of its production capacity. But with the application of AIS to the SRF's, first in ARRA and later through WRDA and the annual appropriations process, that plant has increased its capacity utilization to almost 70%, added product offerings, and, more importantly, more than doubled the number of jobs. But the benefits of AIS are not limited to our operations. Because of AIS some of the same foreign companies who drove the near destruction of the American fittings industry have now moved their production to the United States, first using existing foundries struggling for work, and more recently purchasing their own production facility. They have done this specifically in response to AIS. It is hard to conceive of a more concrete example of AIS's job-creating impact.

AIS was first enacted for both the DWSRF and the CWSRF in the Consolidated Appropriations Act, 2014. Later in 2014, the Congress enacted as part of the 2014 Water Resources Reform and Development Act permanent AIS statutes applicable to the CWSRF as well as the new Water Infrastructure Financing and Innovation program. Since that time, we have urged Congress to enact a statute to permanently apply the AIS procurement preference policy to the DWSRF just as Congress has applied the policy annually though the appropriations process to the DWSRF for Fiscal Years 2015, 2016, and 2017.

While it is to the credit of bipartisan and bicameral Appropriators that the DWSRF provision has been annually renewed, the Appropriations approach to AIS has always been a temporary means to the appropriate end, which is permanent statutory application of the preference via authorizing legislation. Moreover, many other water related programs have no domestic content requirement, which not only deprives the economy of the benefits of AIS, it also creates administrative inconsistencies and inefficiencies. The programs with no Buy America requirement include the U.S. Department of Agriculture's Rural Utilities Services' Water and Waste Disposal Program, the U.S. Department of Housing and Urban Development's Community Development Block Grant program, the U.S. Bureau of Reclamation's Rural Water Supply program, the Economic Development Administration's Public Works and Economic Development Program, and the Indian Health Services, Facilities and Environmental Health program.

Until Buy America preferences like AIS are made permanent and applied across the spectrum of water programs, the thousands of jobs that have been created and supported by this successful policy are always at risk. It is time to build on what is already a successful program, and to make AIS permanent for the DWSRF and other water programs as it is for the CWSRF, WIFIA, and most of the other non-water federal-aid infrastructure programs. As this legislation is further developed, the subcommittee and the committee should ensure that the AIS is permanently applied.

While the reauthorization of the DWSRF with a strong level of funding and a permanent application of the AIS preference are crucial to the improvement, rehabilitation, and expansion of America's water infrastructure system, they are not the only piece. It must act in concert with other federal and state programs, and new initiatives are needed to develop a comprehensive national approach to this crucial need. In addition to the SRFs and AIS, some additional steps that can and should be taken to address our nation's water infrastructure needs include:

# I. Establishing a Presidential Commission on Water Infrastructure Policy Coordination and Security to Evaluate and Create a Coordinated, Rational, and Efficient Water Infrastructure Policy and a Process for Administration.

The federal level of responsibility for water infrastructure and quality is currently shared across approximately thirty agencies, ten departments, and several independent commissions, councils, and offices. Mobilizing and aligning U.S. government agencies, the private sector, and civil society organizations through the creation of a short-lived (one year), focused Commission on Water Infrastructure Policy Coordination and Security (the "Water Commission") can play a positive role in breaking down the silos that have been unavoidable in such a diffuse system. Further, it can create a coordinated, rational, and efficient water policy and administration and foster better collaboration and coordination across federal agencies and other stakeholders. This Water Commission should develop a national strategic plan for water investments, and report back to the Congress with a plan for the strategic direction, coordination, and oversight to domestic and international water-related activities.

# II. INCREASE PUBLIC AND PRIVATE INVESTMENT IN AMERICA'S WATER INFRASTRUCTURE AND CREATE JOBS

Rebuilding our nation's water and wastewater infrastructure will require increased public and private capital investments. The American Water Works Association and EPA have estimated it will cost between

\$650 billion and \$1 trillion over the next 25 years to maintain current levels of water service. At the same time, private investors with billions of dollars of private capital are searching for ways to invest in water infrastructure. By creating the right mix of incentives, the United States can enhance the ability of state and local service providers to raise the capital they need and encourage significantly more private investment to help modernize America's water and wastewater infrastructure, thus putting millions of Americans to work in renewing our infrastructure for the 21<sup>st</sup> century. Options that would address this funding gap include:

#### A. Remove the Volume Cap on Private Activity Bonds (PABs).

Congress should amend the Internal Revenue Code of 1986 to remove the volume cap for private activity bonds used to finance water and sewage facilities. The annual volume cap hinders the use of PABs for water and wastewater infrastructure, which are generally multi-year projects and outside the public eye. In recent years as little as 1-1.5% of all exempt facility bonds were issued to water and wastewater projects. Removing water and wastewater projects from the restrictive state volume caps will increase private capital investment in the nation's aging water infrastructure by up to \$5 billion annually according to the EPA, increasing jobs, GDP, and tax revenues while solving a tremendous public need. According to the Congressional Budget Office, over ten years this policy change could infuse \$50 billion in private capital investment at a cost of only \$354 million in lost tax revenue.

#### B. Significantly Increase Congressional Appropriations for State Revolving Funds (SRFs), Enable Private Sector Participation in SRF Projects.

Congress should authorize and appropriate funding for SRFs, which are the nation's principal federal-aid programs for clean and drinking water infrastructure, at the level of the greater of 20% of the funding in

any 2017 infrastructure bill, or \$10 billion annually for the Clean Water State Revolving Fund (CWSRF) and \$10 billion annually for the Drinking Water State Revolving Fund (DWSRF). In addition, SRF authorizing legislation and implementing regulations and guidelines should be amended to encourage additional private investment.

#### C. Increase the Funding for the Water Infrastructure Finance and Innovation Act (WIFIA) Program.

WIFIA is emerging as an extremely effective and cost-effective tool for addressing financing needs in the water sector. WIFIA is in a position to promote the use of public-private partnerships in this area by reducing the cost of private participation. Earlier this month, EPA announced that it had received interest from 43 entities for the first round of WIFIA loans. Speaking about the announcement, EPA Administrator Scott Pruitt said, "[a]s a federal-local-private partnership, this program will help expand water infrastructure systems to meet the needs of growing communities. This investment will empower states, municipalities, companies, and public-private partnerships to solve real environmental problems in our communities, like the need for clean and safe water."

In 2017, Congress should appropriate \$1 billion for WIFIA. When used to provide credit enhancements, every dollar provided by WIFIA will generate \$65 in additional, private capital. Thus \$1 billion of funding could generate as much as \$65 billion in infrastructure investment.

D. Eliminate or Modify Tax Rules and Regulations Related to Defeasance that Create Obstacles to Public-Private Partnerships.

An estimated \$100 billion in private capital is available to invest in the domestic U.S. domestic water and

wastewater market, which some experts have valued at approximately \$130 billion. However, current

regulations discourage many municipalities from entering into cost-saving and efficiency-driven partnerships with private water companies for the operation of municipal water supply and treatment facilities. Specifically, IRS regulations impose a significant financial penalty on municipalities who sell or lease their water system to a private company if it was originally financed with tax-exempt debt. Removing tax inefficiencies for lease and sale of municipal water systems will provide greater options and opportunities for communities with failing water systems to attract more private investment and expertise to rehabilitate and restore failing water infrastructure though public-private partnerships.

#### E. Retain Tax Exemptions for Municipal Bonds.

Tax-exempt municipal bonds are the primary means by which utilities and municipalities raise capital for water infrastructure projects. The market for these bonds provides an established, reliable, and efficient mechanism for public utilities to raise low cost capital. The tax-exempt feature of these bonds should be preserved in any tax reform measures adopted by Congress.

#### F. Encourage Water Utilities and Operators to Fully Account for Total Costs.

In part because of a steady decline in federal funding for water infrastructure, approximately 98% of water projects are financed by local water utilities through their rate structures. However, water is arguably the world's most undervalued resource, as traditional approaches to pricing have not reflected the true cost of service. A recent survey found that only one-third of water utilities are operating under rate structures that provide adequate revenue to fully cover their costs. This undervaluation of water as a commodity creates severe constraints on the ability of utilities to finance the investment required as

their infrastructure continues to age. To correct this problem, utilities must price their water based upon its true cost, while ensuring that lower-income households have reliable and affordable water service.

State and local water agencies are best able to assess how best to meet the needs of their water consumers. Where federal support is requested, however, applicants should be encouraged to conduct a study of the total costs associated with constructing, operating, and maintaining their water, wastewater and storm water systems, including long-term capital costs.

At the same time, low-income customers should be protected against significant rate increases that jeopardize their health and well-being. To create this safety net Congress should establish a support fund modeled on the Low-Income Home Energy Assistance Program called the "Low-Income Water Assistance Program" (LIWAP).

## G. Grant Greater Flexibility to the States to Make Use of Unliquidated Obligation (ULO) Balances to Provide an Additional Source of Funding for Projects.

"ULO balances" refer to unspent funds from grants provided by EPA to the states to support the financing of infrastructure improvements to drinking water systems and other important public health protection purposes. Funding that has already been allocated to the states in previous years – but simply remains unspent – should be applied to meet current-year and future-year water infrastructure needs and thus reduce the level of additional appropriations necessary.

#### III. MAKE AMERICA'S WATER INFRASTRUCTURE WORK BETTER

Congress should encourage actions that will unleash America's know-how, strengthen the technical and managerial skills of our workforce, vastly improve the efficiency and resiliency of our water systems, and promote the development, deployment, and diffusion of 21<sup>st</sup> century solutions throughout the United States and around the world.

#### A. Promote Smart Technologies and Smart Cities.

Without a full set of data and actionable information about network infrastructure conditions, operators are trapped in a reactive cycle. In addition, most utilities continue to utilize monitoring techniques that provide incomplete and often stale information about critical situations such as toxicity and chemistry, a situation that can endanger the public's health and the integrity of the water systems. Wireless technology and new sensing and metering capabilities create opportunities for remote but inexpensive real-time flow and quality monitoring. According to research commissioned by utility infrastructure company, Sensus, digital water networks can save utilities up to \$12.5 billion a year. Policy tools that could remove barriers to digital water adoption include:

#### 1. Establish the "National Water Infrastructure Test Bed Network".

Unless utility operators have the confidence that new technologies will work, they are reluctant to adopt or deploy them. But few are willing to serve as the pilot program because of the demands on time and budget, and even those pilot programs that do proceed can take years to complete. As a result, the deployment of workable, cost-saving and efficiency- creating technologies is unnecessarily delayed.

Congress should authorize and fund the creation of a "National Water Infrastructure Test Bed Network" (TBN), to coordinate and accelerate the water industry's deployment of new technologies. It would bring together the broader water community (i.e., regulators, operators, consulting engineers, etc.), and engage them in piloting and demonstration efforts to raise confidence in innovative technologies. The TBN's process would reduce the number of pilot projects otherwise needed and would also shorten the time needed to achieve commercial acceptance.

#### 2. Regulatory Reforms to Promote Adoption of Better Infrastructure Technology.

Duplicative, unnecessary and/or outdated regulations present a significant barrier to addressing water infrastructure issues. Public water authorities are loath to take substantial risks in new and efficient technology procurement, because they must manage an essential public service for perpetuity and at minimum cost. Some specific examples of opportunities for EPA reform:

#### 3. Reform Technology Approval Process.

Both the Safe Drinking Water Act and Clean Water Act require utilities to use EPA approved protocols for monitoring and treatment. While EPA's drinking water offices have implemented an Alternative Technology Approval process that has significantly expedited the commercialization of new technologies, the wastewater program has not adopted this new, more efficient process. As a result, the deployment of new technologies in the wastewater sector has been slow. Congress should require the agency to adopt the same approval processes across its programs so that they are consistent and efficient. In addition, the agency should use existing consensus bodies (e.g., ASTM, AWWA) to the

maximum extent possible to foster best management practices and standards that support the technology adoption, while minimizing agency expenditures on this mission.

#### 4. Reform National Science Advisory Board.

EPA's National Science Advisory Board plays an essential function in advising the agency on all manner of technical issues affecting regulatory promulgation and the water sector. This board should be comprised of representatives from across the water sector in a balanced fashion, so that the agency fully understands state-of-the-art science, industry practices, and the challenges facing water infrastructure owners and managers and their rate-payers.

#### 5. Enact Legislation to Promote 21<sup>st</sup> Century Digital Water Solutions.

The Internet of Things can enable water utilities to connect their physical assets with other key pieces of information, such as soil conditions, water chemistry and quality, and geospatial seismic activity to expedite repairing of infrastructure problems, reducing service disruptions, decreasing water losses, avoiding public health emergencies, and predicting other potential problems for early intervention. Expanding existing water infrastructure funding programs (SRFs, WIFIA, and private activity bonds) to include digital water projects as eligible activities will promote rapid and wide-spread adoption of digital water solutions, and in turn create high-value jobs for digital water solutions providers and utilities.

#### B. Empower Local Decision Making.

Communities across the country have diverse water and wastewater infrastructure needs. They must evaluate numerous factors when considering the proper design and materials for their community and

water projects. Encouraging and supporting local governance allows those closest to the problem to determine the best solution. Deference to local decision-making also saves money, as local communities can hold those in their community more accountable. Congress should encourage federal agencies to defer to local communities and their engineers of record.

#### C. Encourage Life-Cycle Costing and Pricing to Ensure Long-Term Value.

To ensure that the true costs of building, maintaining, and operating our water systems are captured and funded, all federally supported projects should encourage the use of full life-cycle cost analyses when comparing bids, so that they consider the true cost of systems and materials over their entire useful lives.

#### D. Improve Systems Management.

# 1. Unleash the "Blue Wave" to Build Capacity for Water and Wastewater Utilities and Other Water Resources Managers.

Congress should authorize the creation of a platform for collaboration among public enterprises, in the form of a web-based portal and network – the "Blue Wave." This portal would enable urban and rural utilities of every size and service to share best practices, develop joint partnerships with public and private agencies, engage private sector expertise and technology and access private capital markets and funding. In addition, this network would provide small rural and distressed water systems with the technical capacity to comply with regulations and to undertake projects to improve or expand their services.

The United States has more than 60,000 water utilities, the majority of which are small utilities (serving less than 10,000 customers). Thousands of small utilities have difficulty in assessing, selecting, implementing, and financing necessary capital upgrades or in implementing new smart technologies that can improve service and reduce operating costs. By creating the "Blue Wave" to deliver up-front expertise and transaction support and foster public-private partnerships, the federal government would enable small utilities to carry out quickly a backlog of vitally needed capital improvements worth hundreds of billions of dollars. This would generate tens of thousands of jobs and boost U.S. businesses engaged in design, construction, maintenance, operations, and technology and scientific support.

A relatively small investment of the federal government to support the start-up costs (approximately \$5 million per year for two years from the appropriated funding for the state revolving funds), to be matched 2:1 by the private sector, would fully support the development of the network. Membership in "Blue Wave" would be cost-free to agencies seeking assistance, although a fee would be assessed on successful partnerships and collaborations to cover the on-going costs of the Blue Wave Network.

"Blue Wave" is designed to be the implementation arm of many of the parallel water infrastructure proposals to small and distressed communities, as well as the dissemination arm of the policies of either the Water Commission or the White House Council on Environmental Quality. The Blue Wave Network would be a private enterprise supported by and leveraging current platforms of public and private agencies, trade associations, and sector coalitions.

#### 2. Develop a Water Workforce for the 21<sup>st</sup> Century.

Attracting and training the next generation of water and wastewater system operators is critically important, particularly for small and disadvantaged communities. Many water and wastewater utilities undertake the complex challenge of consistently delivering safe drinking water with a small and underresourced staff with limited technical skills and training. Even large utilities will soon face loss of talented workers with the skills essential to the effective operation of their systems, and the introduction of new technologies will aggravate this problem because the operators of the future will need greater technological skills than are common today.

The Safe Drinking Water Act includes several set-asides related to operator certification and training for water systems from the funding authorized for the state revolving funds. Congress should buttress that authority by tasking the U.S. Department of Labor with developing a workforce development program helping American workers get the skills and credentials needed to support the operation, maintenance, and improvement of water and wastewater systems of tomorrow.

#### E. Promote Integrated Watershed Management and Planning.

Frequently, agencies and local officials only manage the water bodies near urban areas rather than upstream sources. As a result, when the water arrives for treatment it often contains severe contamination from upstream activities. This not only creates a public health threat, it also dramatically increases the costs to utilities to treat the water to safe standards. More effective management at the watershed level will significantly reduce operational costs to utilities and customers by limiting the amount of local water treatment necessary to ensure good water quality.

### 1. Codify EPA's Integrated Planning Process as An Option for Local Governments to address their Wastewater and Storm water Management Needs.

For years, communities have been told to achieve Clean Water Act mandates without any consideration of whether those requirements are feasible, affordable, or provide a significant environmental benefit. This problem is especially acute for separate sanitary sewer systems. To partially address this issue, H.R. 6182, the Water Quality Improvement Act, introduced in the last Congress, would allow local governments to prioritize and focus on their wastewater and storm water management needs with the greatest public health and environmental benefits. This legislation would codify EPA's Integrated Planning process as an alternative to facing costly consent decrees while establishing economic affordability criteria for the EPA to assess the financial capability of communities to implement control measures.

### 2. Amend the Clean Water Act to Improve Federal Agency Coordination and Advance Integrated Water Resources Management (IWRM).

Congress should codify integrated water resource management (IWRM) principles into the Clean Water Act (CWA) to promote greater coordination among federal agencies such as the Army Corp of Engineers, the Department of Agriculture, the Department of Interior, and EPA, which often pursue separate and sometimes conflicting agendas for water resource management. Amending the CWA to promote greater coordination through the Water Commission and IWRM would foster more coherent water management among relevant federal, state, and local authorities, thereby optimizing the use of water for agricultural, urban, and ecosystem needs.

#### 3. Reform the Agricultural Act of 2014 to Reduce Agricultural Runoff in Watersheds.

Congress should reform the Agricultural Act ("Farm Bill") to upgrade water quality standards at the watershed level for runoff originating from agricultural areas that affect downstream water users. Existing laws do not adequately protect sources of drinking water from contamination by agricultural runoff, which includes pesticides, herbicides, or animal wastes, thus imposing greater treatment costs on downstream water utilities. Farmers should be encouraged to use existing incentive mechanisms to deploy best management practices to meet the standards.

#### 4. Promote Water and Wastewater Regulatory Reform.

A key reform measure would be to require the consideration of opportunity costs in assessing the economic toll of any new, proposed regulations. The true cost of compliance with a regulation not only includes the direct costs incurred, but also the loss of other opportunities because of the divergence of scarce resources. For example, burdensome recordkeeping or treatment requirements that do not materially improve public health might require the expenditure of thousands of dollars that could have been spent on infrastructure repairs or the addition of smart technologies that would have reduced water loss or otherwise improved efficiency. The benefits lost from those alternatives should be included in the calculation of the true cost of a new regulation, so that policy makers have a more accurate understanding of the consequences of regulations.

#### IV. MAKE AMERICA'S WATER INFRASTRUCTURE SAFER AND MORE SECURE

Americans must have confidence in the safety and reliability of their water supplies. Likewise, by promoting improved water management and greater cooperation on shared waters within the United States and internationally, we minimize the potential for disruptive conflicts over water, thereby strengthening America's security and economic interests at home and abroad.

Service lines, including those made of lead, can be a major source of toxins entering households across the country. Service line ownership is typically split between the homeowner and the water system. An array of solutions exists for dealing with toxins in water, ranging from better treatment and system management to in-home filtration to full replacement of outdated service lines. Full replacement is very expensive, and replacing all lead service lines across the country could cost a total of approximately \$30 billion. Many homeowners have limited discretionary funds to fund replacement of their lead service lines. Moreover, lower-income families tend to live in older housing units that are more likely to contain lead service lines, so the potential burden for a replacement program might disproportionally affect the poor.

To address these concerns Congress or the relevant agencies should consider:

- Creating tax incentives for replacement of service lines or installation of in-home filtration systems to remove lead and other toxics from drinking water;
- Expanding EPA and HUD real estate disclosure requirements to include whether a lead service line is present, and including lead in drinking water in the EPA and HUD's Lead-Safe Housing Rules;

- Adapting federal assistance programs such as the Federal Housing Administration (FHA) to make lead service line replacement an eligible activity for rehab mortgage insurance under Section 203(k) or as a Title I insured loan for property improvements; and,
- Increasing funding allocated to existing grant programs such as HUD's Community Development Block Grant program for purposes of lead service line remediation by low-income households, either through filtration or replacement.

#### Conclusion

These are only a few of the issues and solutions that merit discussion. The key takeaway, however, is that the scope and scale of America's water infrastructure needs demand a massive, coordinated, forward-thinking, and creative response. Water infrastructure is not a partisan or even a bi-partisan issue. It is and must be a non-partisan issue. With that cooperative spirit in mind, reform and reauthorization of Safe Drinking Water Act programs like the Drinking Water SRF are crucial to that effort, and we at McWane are glad to have the opportunity to contribute to that process.

Thank you for your time and consideration.