

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

February 26, 2015

To: Subcommittee on Environment and the Economy Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on “The Needs of Drinking Water Systems in Rural and Smaller Communities.”

On Friday, February 27, 2015, at 10:00 a.m. in room 2123 of the Rayburn House Office Building, the Subcommittee on Environment and the Economy will hold a hearing on “The Needs of Drinking Water Systems in Rural and Smaller Communities.” This hearing will focus on some of the unique issues facing rural and small water systems, and the resources needed to ensure continued provision of safe, clean and affordable drinking water.

I. BACKGROUND ON SMALL SYSTEMS

There are over 150,000 public water systems in the United States, serving nearly 300 million customers nationwide.¹ More than 94% of these systems serve fewer than 3,300 people.² These small systems serve 8% of the U.S. population. The U.S. Census Bureau estimates that rural communities make up 19.3% of the U.S. population.³

Small and rural systems face the same infrastructure needs as larger systems, as well as additional problems arising from their size. These problems include capacity challenges, financing challenges, and compliance challenges. Several programs exist at the Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) to address these

¹ U.S. Environmental Protection Agency, *Water: Small Systems and Capacity Development* (online at water.epa.gov/type/drink/pws/smallsystems/basicinformation.cfm).

² *Id.*

³ U.S. Census Bureau, *2010 Census Urban and Rural Classification* (online at www.census.gov/geo/reference/ua/urban-rural-2010.html).

challenges, including technical assistance grants through the Drinking Water State Revolving Fund (SRF) and the Rural Utility Service.

Since 2011, EPA and USDA have coordinated their efforts under a Memorandum of Agreement (MOA) to promote the sustainability of rural water and wastewater systems.⁴ The MOA focuses on four areas – system sustainability practices (e.g., asset management, long-term planning, and water and energy efficiency), workforce, water system partnerships and compliance with regulations.

In 2014, the agencies collaborated on the Rural and Small Systems Guidebook and Workshop in a Box and held workshops based on these resources. EPA also provides other software tools for small systems. The Check Up Program for Small Systems (CUPSS) software enables small systems to manage their assets and is provided free of charge.⁵ The most recent version of CUPSS was released last October. Additional programs to address specific challenges are described below.

II. WATER INFRASTRUCTURE NEEDS

Aging water infrastructure is a concern for water systems of all sizes. The American Society of Civil Engineers has given U.S. water infrastructure a “D” grade.⁶ Most of the pipes in this country are between 75 and 110 years old – at or beyond the expected limits of their useful life. An estimated 240,000 water main breaks occur every year.⁷

To maintain safe drinking water delivery, public water systems will need to make significant investments to repair or replace infrastructure and equipment. EPA’s most recent needs assessment for drinking water infrastructure estimated that \$384 billion will be necessary for infrastructure repairs by 2030.⁸ This amount grew significantly since the Agency’s last assessment, demonstrating that investment has not kept pace with need.⁹ The need for small community water systems is \$64.5 billion.¹⁰

⁴U.S. Environmental Protection Agency, U.S. Department of Agriculture, *Memorandum of Agreement, Promoting Sustainable Rural Water and Wastewater Systems* (June 2011) (online at water.epa.gov/type/drink/pws/smallsystems/upload/epausdamoaruraldevelopmentruralutilitiesservicejune2011.pdf).

⁵ U.S. Environmental Protection Agency, *Water: Check Up Program for Small Systems* (online at water.epa.gov/infrastructure/drinkingwater/pws/cupss/index.cfm).

⁶ American Society of Civil Engineers, *2013 Report Card for America’s Infrastructure*, (online at www.infrastructurereportcard.org).

⁷ *Id.*

⁸ U.S. Environmental Protection Agency, *Drinking Water Infrastructure Needs Survey and Assessment, Fifth Report to Congress* (April 2013) (EPA-816-R-13-006) (online at water.epa.gov/grants_funding/dwsrf/index.cfm).

⁹ *Id.*

¹⁰ *Id.*

Delaying these investments will increase needed costs because repairing broken pipes costs more than it would to replace them before breakage.¹¹ Old pipes will continue to break resulting in massive quantities of lost treated water, and prompting inefficient emergency repair expenditures. These costs are then passed onto the consumer in higher utility bills and increased service disruptions.

The Drinking Water SRF is EPA's primary mechanism for assisting water systems with infrastructure needs. The President's FY 2016 Budget includes almost \$1.2 billion for the Drinking Water SRF, a significant increase over enacted levels for FY 2015. The SRF funding is allocated to states based on need. A state receives a share proportional to its need unless its need is less than 1% of the total SRF, in which case a state receives 1%. States then distribute the funding to systems according to their Intended Use Plans.

Small and rural systems may face different application processes and challenges in different states. The SRF program confers discretionary authority on the states to provide additional assistance to disadvantaged systems, including zero interest loans and principal forgiveness.¹² States are allowed to set aside as much as 30% of their SRF funds for this assistance. The set aside rates vary significantly across states because providing additional assistance to disadvantaged communities limits the return states receive on these funds. Past legislative proposals would have set minimum set asides for all states to provide additional assistance to disadvantaged communities under this authority.¹³

III. FINANCING CHALLENGES FACING RURAL AND SMALL WATER SYSTEMS

Because small and rural community water systems serve fewer customers, they have a smaller rate base and lower revenues. This increases their reliance on outside financing. Unfortunately, many small systems also face significant hurdles in acquiring financing. This can arise because the systems lack credit history or credit worthiness or because they lack the knowledge and experience to navigate financial markets.

EPA recently announced a new Water Infrastructure and Resiliency Finance Center, designed to address this particular problem by providing financial advising for small systems.¹⁴ The Center will also provide information and assistance to communities looking to pursue

¹¹ *Id.*

¹² Safe Drinking Water Act §1452(d).

¹³ For example, the Assistance, Quality, and Affordability Act of 2014 would have required a minimum of 30% of state allotments for *disadvantaged community assistance*.

¹⁴ U.S. Environmental Protection Agency, *Water Infrastructure and Resiliency Finance Center* (Jan. 16, 2015) (online at water.epa.gov/infrastructure/waterfinancecenter.cfm).

innovative financing options for drinking water and wastewater infrastructure, although it will not itself provide such financing.¹⁵

IV. COMPLIANCE CHALLENGES FACING RURAL AND SMALL WATER SYSTEMS

Small water systems account for a high percentage of noncompliance with drinking water regulations.¹⁶ Technical assistance funding under the Drinking Water SRF, put in place through the 1996 Amendments to the Safe Drinking Water Act (SDWA), is designated for assisting small public water systems to achieve and maintain compliance with national drinking water standards.¹⁷

The 1996 Amendments to SDWA authorized \$15 million for this purpose through fiscal year 2003. Last year, \$12.7 million was appropriated for this purpose, and was awarded through five grants to the National Rural Water Association, the Rural Community Assistance Partnership, and the University of North Carolina at Chapel Hill.¹⁸

The Drinking Water SRF also provides incentives for compliance because systems that are in significant noncompliance with drinking water standards are not eligible for SRF funds, unless such funds would ensure compliance.¹⁹

Some noncompliance could be attributable to the limited resources of small systems and the fact that they miss out on economies of scale in purchasing and treatment. To address that, SDWA requires EPA to identify feasible treatment technology that will be affordable for small and very small public water systems.²⁰ If no affordable technology is available to achieve compliance, the Administrator is required to identify variance technology with which small systems can achieve the maximum affordable reduction in contamination.²¹ When variance technologies are identified, states have the ability to grant small system variances to allow small systems to meet a lower standard than the National Primary Drinking Water Standard.²² However, EPA has found affordable treatment technologies for all drinking water standards adopted under this system, which has made it unnecessary for EPA to exercise this authority.

¹⁵ *Id.*

¹⁶ U.S. Environmental Protection Agency, *Fiscal Year 2011 Drinking Water and Groundwater Statistics* (March 2013) (EPA 816-R-13-003) (online at water.epa.gov/scitech/datait/databases/drink/sdwisfed/upload/epa816r13003.pdf).

¹⁷ Safe Drinking Water Act § 1442(e).

¹⁸ Correspondence between EPA and Democratic Committee Staff (Feb. 24, 2015).

¹⁹ Safe Drinking Water Act § 1452(a)(3).

²⁰ *Id.* at § 1412(b)(4)(E).

²¹ *Id.* at § 1412(b)(15).

²² *Id.* at § 1415(e).

In Fiscal Years 2012 and 2013, EPA set an Agency Priority Goal to improve sustainability for public drinking water systems and public health protection for persons served by small water systems. To achieve that goal, EPA worked with 20 different states to improve compliance through the Optimization Program and the Capacity Development Program. EPA is currently performing the FY14-15 goal to engage with an additional ten states (for a total of 30 states) and three tribes to improve small drinking water system capability to provide safe drinking water.

V. CAPACITY CHALLENGES FACING RURAL AND SMALL WATER SYSTEMS

Rural communities also face significant capacity challenges. Because of their geographic isolation, these communities often have problems recruiting and retaining qualified staff. They may lack the personnel or expertise needed to make basic infrastructure repairs or install treatment technology. Inexperienced or inadequate management can lead to ineffective plans for maintenance and upgrades, source water protection, financial management and asset management.²³

Like systems that are in significant noncompliance, systems that lack technical, managerial, or financial capacity to ensure compliance with drinking water standards are not eligible for SRF funds unless they undertake changes in operations, potentially including restructuring or consolidating with other systems.²⁴ Consolidation can provide greater economies of scale and greater capacity for small systems.

In addition to creating the Drinking Water SRF, the 1996 Amendment introduced several new requirements to address these unique capacity-related challenges. The 1996 Amendments required states to put in place capacity development programs and operator certification programs as a condition of receiving their full SRF allotment. Capacity Development programs must include authority to ensure that any new water system has the technical, financial, and managerial capacity to comply with national drinking water standards and strategies to assist existing water systems to develop technical, financial, and management capacity.²⁵ Operator Certification programs were required to achieve the public health objectives of Federal minimum standards, although they were not required to match the minimum standards.²⁶

EPA is still implementing these programs. The Agency's Operator Certification Program, started in 1999, set guidelines and minimum standards for the establishment of state programs to provide certification and recertification for operators of community and nontransient noncommunity public water systems. EPA is now partnering with states through a workgroup to identify best practices and challenges states and operators are facing, as well as opportunities to improve the Operator Certification program. The Capacity Development program is also still in operation. The Agency has formed a planning committee with state Operator Certification

²³ *Id.*

²⁴ *Id.* at § 1452(a)(3).

²⁵ *Id.* at § 1452(a)(1)(G)(i).

²⁶ *Id.* at § 1452(a)(1)(G)(ii).

coordinators and Capacity Development coordinators to plan a biannual workshop. The 2015 Workshop will be held December 8-10, 2015 in Dallas, Texas

In order to help address workforce shortages in the water sector, EPA signed a Memorandum of Understanding (MOU) with the Department of Veterans Affairs (VA) Vocational Rehabilitation and Employment Service in May 2012 to connect veterans with disabilities to water sector careers. As part of the MOU, EPA hosted three webinars promoting the initiative in 2012, and another three in 2013. In addition, EPA developed the “From M.O.S. to J-O-B” guide to assist in applying Military Occupational Specialties (MOS) to civilian drinking water and wastewater jobs.²⁷ A follow-up guide is planned for this year, along with joint EPA/VA webinars.

VI. WITNESSES

The following witnesses have been invited to testify:

Alfredo Gomez
Director, Natural Resources and Environment
U.S. Government Accountability Office

Joseph Keegan
Mayor
Castleton On Hudson, New York
On behalf of New York Rural Water Association

Katetra Newman
Certified Water Operator
On behalf of National Rural Water Association

Robert Selman
Certified Water Operator
On behalf of Mississippi Rural Water Association

Robert Stewart
Executive Director
Rural Community Assistance Partnership

²⁷ U.S. Environmental Protection Agency, *Water Sector Infrastructure* (online at water.epa.gov/infrastructure/sustain/ws_workforce.cfm).