U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

March 14, 2017

TO: Members, Subcommittee on the Environment

FROM: Committee Majority Staff

RE: Hearing entitled "Reinvestment and Rehabilitation of Our Nation's Safe Drinking Water Delivery Systems"

I. INTRODUCTION

On Thursday, March 16, 2017, at 10:00 a.m. in 2322 Rayburn House Office Building, the Subcommittee on the Environment will hold a hearing entitled "Reinvestment and Rehabilitation of Our Nation's Safe Drinking Water Delivery Systems."

II. WITNESSES

- Randy Ellingboe, Minnesota Department of Health on behalf of the Association of State Drinking Water Administrators (ASDWA);
- John Donahue, CEO of the North Park Public Water District in Machesney Park, IL on behalf of the American Water Works Association (AWWA);
- Rudolph S. Chow, P.E., Director, Baltimore, MD Department of Public Works on behalf of the American Municipal Water Association (AMWA);
- Martin A. Kropelnicki, President and CEO, California Water Service Group on behalf of the National Association of Water Companies (NAWC)
- Greg DiLoreto, Chairman, Committee for America's Infrastructure, American Society of Civil Engineers (ASCE); and,
- Erik Olson, Director, Health & Environment Program, Natural Resources Defense Council (NRDC).

III. BACKGROUND

A. OVERVIEW

The United States uses 42 billion gallons of water a day – treated to meet Federal drinking water standards – to support a variety of needs.[1] According to the Congressional Research Service (CRS), more than 299 million Americans are served by more than 51,300 community water systems (CWSs). Most community water systems (82 percent) are relatively small, serving 3,300 people or fewer, but these systems provide water to just 9 percent of the

[1] http://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-Final.pdf

total population served by community water systems. In contrast, 8 percent of CWSs serve 82 percent of the population served.[2]

This drinking water is delivered across the country, via one million miles of pipes, by privately and publicly owned water systems. Many of those pipes were laid in the early to mid-20th century with a lifespan of 75 to 100 years.[3] While the American Society of Civil Engineers (ASCE) reports the "quality of drinking water in the United States remains high," ASCE and others also spotlight concerns directly related to water system integrity, efficiency, and affordability. Specifically, they point to an estimated 240,000 water main breaks per year in the United States that waste over two trillion gallons of treated drinking water. These leaking, aging pipes are wasting 14 to 18 percent of treated water per day – an amount that could support 15 million households; and indoor water use which has dropped by 22 percent since 1999.[4,5]

In April 2013, the Environmental Protection Agency (EPA) published its most recent survey of capital improvement needs for drinking water infrastructure. That survey indicated that water systems need to invest $384.2 billion on infrastructure improvements over 20 years (from 2011-2030) to ensure the provision of safe tap water.[6] EPA also reported that $42.0 billion (10.9 percent) of reported drinking water system needs are attributable to Safe Drinking Water Act (SDWA) compliance. The remaining 89.1 percent of EPA-identified needs are for projects that are not regulatory, but are needed to meet the act's health protection objectives. A study by the American Water Works Association projects that more broadly restoring aging infrastructure and expanding water systems to keep up with population growth would require a nationwide investment of at least $1 trillion through 2035.[7]

The Congressional Budget Office reports that, in 2014, the Federal share of total public spending on water and wastewater utilities was 4 percent, while State and local government expenditures accounted for 94 percent of all public spending on this infrastructure.[8]

User fees, primarily in the form of water utility rates, typically generate funds for daily operation and maintenance and long-term capital investments for drinking water and wastewater systems. Both the EPA and the United Nation's Development Program recommend affordability thresholds for water and wastewater services of 2.5 percent and 3 percent, respectively, of median household income.[9] The average price of treating and distributing water in the United States is about $1.50 for 1,000 gallons – at that price, a gallon of water costs less than one penny.[10] While the American Water Works Association (AWWA) estimates that drinking water

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[2] http://www.crs.gov/Reports/RL31243?source=search&guid=c987b8c3502d477b8842999a6ea62e7a&index=10

[3] American Water Works Association, *Buried No Longer: Confronting American's Water Infrastructure Challenge*, 2012, http://www.awwa.org/legislation-regulation/issues/infrastructure-financing.aspx.

[4] Op. Cit.

[5] http://www.circleofblue.org/waterpricing/

[6] https://www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf

[7] http://www.crs.gov/Reports/RS22037?source=search&guid=923f50f6c1274772996da7f8f1a3551b&index=6#_Toc466362844

[8] Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure, 1956 to 2014*, March 2015, p. 28.

[9] http://www2.pacinst.org/wp-content/uploads/2013/01/water-rates-affordability.pdf

[10] https://www.fcwa.org/story_of_water/html/costs.htm

rates, annualized from 2004 to 2014, have increased 5.5 percent. AWWA also shows that water rates have dropped three percent between 2012 and 2014.[11]

However, an ongoing problem for local water systems is how to finance major projects--increasing rates, borrowing on the private market, seeking Federal or State assistance, or some combination of these.

B. THE SAFE DRINKING WATER ACT

The SDWA not only contains Federal authority for regulating contaminants in drinking water delivery systems, it also includes the Drinking Water State Revolving Fund (DWSRF) program.[12] The DWSRF was created in the 1996 SDWA Amendments by Congress to provide financing for infrastructure improvements at water systems. Congress envisioned a program operating in perpetuity from which the principal and interest payments on old loans would be used to issue new loans, and from which a portion of each State's allotment could be "set aside" for State drinking water agencies to provide regulatory oversight and direct assistance to water systems.[13]

Specifically, the DWSRF program permits EPA to make grants to States to capitalize DWSRFs, which States may then use to make low-interest loans to public water systems for activities EPA determines facilitate compliance or significantly further the SDWA's health protection objectives. States must match 20 percent of the Federal grant. Grants are allotted based on the results of needs surveys quadrennially issued by EPA. Each State and the District of Columbia must receive at least 1 percent of the appropriated funds.[14]

In addition, States must make available 15 percent of their annual DWSRF allotment for loan assistance to systems that serve 10,000 or fewer persons to the extent that there are systems of that size within a State applying for funding of qualifying activities. States may also use up to 30 percent of their DWSRF grant to provide loan subsidies (including forgiveness of principal) to help economically disadvantaged communities. Finally, States may also use up to 4 percent of funds for technical assistance, source water protection and capacity development programs, and operator certification.[15]

When last reauthorized in 1996, SDWA provided appropriations of $599 million for FY 1994 and $1 billion per year for FY 1995 through FY 2003 for DWSRF capitalization grants. Of those amounts, EPA was either directed or given the ability to reserve, from annual DWSRF appropriations, 0.33 percent for financial assistance to territories and 1.5 percent for Indian tribes and Alaska Native Villages, $10 million for health effects research on drinking water contaminants, $2 million for the costs of monitoring for unregulated contaminants, and up to 2

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[11] https://www.awwa.org/resources-tools/water-and-wastewater-utility-management/water-wastewater-rates.aspx
[12] SDWA §1412 and §1452
[13]http://www.asdwa.org/document/docWindow.cfm?fuseaction=document.viewDocument&documentid=2683&documentFormatId=3404
[14]http://www.crs.gov/Reports/RL31243?source=search&guid=c987b8c3502d477b8842999a6ea62e7a&index=10#_Toc476131535
[15] SDWA §1452(g)

percent for technical assistance. Between FY 1997 and FY 2016, Congress appropriated over $20 billion, and more than 12,400 projects received assistance through the program.[16]

The Water Infrastructure Improvements for the Nation Act (WIIN Act, section 322 of P.L. 114-322) made several amendments to the DWSRF provisions. Among other changes, the amendments increased the portion of the annual DWSRF capitalization grant that States may use to cover program administration costs and authorized $300 million over five years for lead pipe replacement and $300 million over five years for aid to disadvantaged and underserved communities.[17] Further, the WIIN Act amended SDWA to require, with some exceptions, that funds made available from a State DWSRF during FY 2017 may not be used for water system projects unless all iron and steel products to be used in the project are produced in the United States.

C. The Water Infrastructure Finance and Innovation Act (WIFIA)

According to the Congressional Research Service, a chronic concern is the need for communities to address drinking water infrastructure requirements that are outside the scope of the DWSRF program since they are unrelated to SDWA compliance.[18] These categories include future growth, ongoing rehabilitation, and operation and maintenance of systems. EPA has reported that outdated and deteriorated drinking water infrastructure poses a fundamental long-term threat to drinking water safety and that, in many communities, basic infrastructure costs can far exceed SDWA compliance costs. As reported in EPA's most recent drinking water needs assessment, less than 11 percent of the 20-year estimated need is directly related to compliance with SDWA regulations.[19]

In June 2014, WIFIA was enacted.[20] In WIFIA, Congress authorized a pilot loan guarantee program to test the ability of innovative financing tools to promote increased development of, and private investment in, water infrastructure projects—while reducing costs to the Federal government. The pilot program is intended to complement, and not replace, the clean water and drinking water SRF programs. The act authorized to be appropriated to the Secretary of the Interior and the EPA Administrator $20 million each for FY 2015 and $25 million each for FY 2016, with amounts increasing annually to $50 million each for FY 2019.

Eligible projects include clean water and drinking water SRF-eligible projects and a wide range of water resource development projects that must generally have costs of at least $20.0 million. Such large projects face difficulty securing significant funding through the SRF programs. Moreover, unlike the SRF programs, WIFIA is not focused on regulatory compliance and, therefore, may be more available for other large-scale water infrastructure projects. For projects serving areas with a population of 25,000 or fewer individuals, eligible projects must have a total cost of at least $5 million.

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[16] Ibid.
[17] WIIN §§2102-2105
[18] Op. Cit.
[19] Op. Cit.
[20] (P.L. 113-121, H.R. 3080) includes in Title V, Subtitle C

Congress appropriated $20 million in funds for the program in FY 2017.[21] It is estimated that using WIFIA's full financial leveraging ability, a single dollar injected into the program can create $50 dollars for project lending.[22] Under current appropriations, EPA estimates that current budget authority may provide more than $1 billion in credit assistance and may finance over $2 billion in water infrastructure investment.[23]

D. OTHER FEDERAL PROGRAMS

Clean Water Act SRF (CWSRF): Congress provided States flexibility in setting priorities between the DWSRF and CWSRF programs to accommodate the divergent drinking water and wastewater needs and priorities among the States. Section 302(a) of the 1996 SDWA amendments authorized States to transfer as much as 33 percent of the annual DWSRF allotment to the CWSRF or an equivalent amount from the CWSRF to the DWSRF. The act authorized these transfers through FY 2001. In 2000, EPA recommended that Congress continue to authorize transfers between the SRF programs to give States flexibility to address their most pressing water infrastructure needs.[24] Several annual appropriations acts had authorized States to continue to transfer as much as 33 percent of funds between the two programs, and in P.L. 109-54 – the Conference Report to Accompany H.R. 2361, the Department of Interior and Related Agencies Appropriations Act, FY 2006, Congress made this authority permanent.[25]

Housing and Urban Development (HUD) Community Development Block Grants: HUD provides Federal funding, through the Community Development Block Grant program for housing, economic development, neighborhood revitalization, and other community development activities that benefit low- and moderate-income persons, including water and wastewater infrastructure. A common way in which water and sewer infrastructure projects can qualify as benefiting low- and moderate-income persons is if the activity serves a primarily residential area where at least 51 percent of the residents are of low or moderate income, and the benefits are available to all the residents of that area.[26]

Economic Development Administration Public Works program. The Economic Development Administration provides Federal funding and assistance to help economically distressed areas of the country through public infrastructure investment, technical assistance and research, and development and implementation of comprehensive economic development strategies. The Administration's Public Works program awards grants competitively to economically distressed areas, including cities that meet the eligibility criteria, to help rehabilitate, expand, and improve their public works facilities, among other things. As a result, projects funded with Public Works grants may include a water infrastructure project, but that water infrastructure project would be a secondary effect of an economic development project.[27]

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[21] Continuing and Security Assistance Appropriations Act of 2017; P.L. 114-254, Section 197.
[22] http://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-Final.pdf
[23] Ibid.
[24]http://www.crs.gov/Reports/RS22037?source=search&guid=923f50f6c1274772996da7f8f1a3551b&index=6#ifn2
[25] The Department of the Interior, Environment, and Related Agencies Appropriations Act, 2006, P.L. 109-54, Title II, August 2, 2005, 119 Stat. 530, provided: "That for fiscal year 2006 and thereafter, State authority under section 302(a) of P.L. 104-182 shall remain in effect."
[26] http://www.gao.gov/assets/680/679783.pdf
[27] http://www.gao.gov/assets/680/679783.pdf

Federal Emergency Management Agency (FEMA) Public Assistance and Hazard Mitigation grant programs: FEMA's Public Assistance and Hazard Mitigation grant programs may provide funding for water and wastewater infrastructure projects when the President has declared a major disaster. The Public Assistance program provides grants to States and others for the repair, restoration, reconstruction, or replacement of public facilities, including water and wastewater infrastructure damaged or destroyed by such a disaster. The Hazard Mitigation grant program provides grants for certain hazard mitigation projects to substantially reduce the risk of future damage, hardship, loss, or suffering in any area affected by a major disaster.[28]

IV. ISSUES

The following issues may be examined at the hearing:

- In view of the current budgetary and infrastructure State of the nation, what is a realistic amount of Federal funding that should be committed to public drinking water systems and what are the best ways to maximize our investment?

- What have States and local communities done and what makes sense for them to do to address their drinking water system needs in the future, including for communities whose populations are in transition?

- SDWA and the DWSRF offer States flexibility to tailor their programs to meet their particular needs. Using funds for these activities could significantly erode the corpus of State funds and slow the rate at which they become capitalized. To the degree that Congress relies on the DWSRF to fund other SDWA requirements, is the DWSRF program diminished?

- Municipal drinking water consumption has decreased by 5 percent this decade and drinking water needed for public supply has been flat for 30 years even as the US population has increased by 70 million. What does this mean for infrastructure needs in the future (i.e. replacement, capital investment, etc.)?

- The gap between funding and estimated needs, the growing cost of complying with SDWA standards, the ability of communities to afford financing, and the broader need for cities to maintain, upgrade, and expand their drinking water systems unrelated to SDWA compliance.

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Jerry Couri of the Committee staff at (202) 225-2927.

[28] Ibid.