

Drinking Water State Revolving Fund (DWSRF): Program Overview and Issues

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Summary

The Safe Drinking Water Act (SDWA) is the federal authority for regulating contaminants in public water supplies. It includes the Drinking Water State Revolving Fund (DWSRF) program, established in 1996 to help public water systems finance infrastructure projects needed to comply with federal drinking water regulations and to meet the SDWA's health objectives. Under this program, states receive annual capitalization grants to provide financial assistance (primarily subsidized loans) to public water systems for drinking water projects and other specified activities. Between FY1997 and FY2015, Congress had appropriated approximately \$20 billion, and more than 12,400 projects had received assistance through the program.

The latest Environmental Protection Agency (EPA) survey of capital improvement needs indicates that public water systems need to invest \$384.2 billion on infrastructure improvements over 20 years to ensure the provision of safe drinking water. EPA reports that, although all of the projects identified in the survey would promote the public health objectives of the SDWA, just \$42.0 billion (10.9%) of reported needs are attributable to SDWA compliance. A study by the American Water Works Association estimates that 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.

Key program issues include (1) the gap between estimated needs and funding, (2) the growing cost of complying with SDWA standards (particularly for small communities), (3) the ability of small or disadvantaged communities to afford DWSRF financing, and (4) the broader need for cities to maintain, upgrade, and expand infrastructure unrelated to SDWA compliance. Several overarching policy questions are under debate, including "What is the appropriate federal role in providing financial assistance for local water infrastructure projects?" and "What other funding mechanisms could supplement or replace a program reliant on annual appropriations?"

Enacted in 2014, the Water Infrastructure Finance and Innovation Act (WIFIA; P.L. 113-121, Title V, Subtitle C) authorized a five-year pilot loan guarantee program to promote increased development of, and private investment in, large water infrastructure projects. Congress noted that the pilot program is intended to complement, not replace, the drinking water SRF program and the similar Clean Water Act SRF program for wastewater infrastructure. For FY2017, President Obama requested \$20.0 million for EPA to begin providing loan guarantees for water infrastructure projects under WIFIA. Congress provided this amount in P.L. 114-254, the Continuing and Security Assistance Appropriations Act of 2017.

For FY2016, the President requested \$1.19 billion for the DWSRF program, and Congress provided \$863.2 million. For FY2017, President Obama requested \$1.02 billion. The program has been funded under continuing resolutions at roughly FY2016 levels. The Consolidated Appropriations Act, 2017 (P.L. 115-31), includes \$863.23 million for DWSRF capitalization grants for FY2017 and another \$20 million for WIFIA. The President's FY2018 request includes \$863 million for the DWSRF program and \$20 million for the WIFIA program.

In the 114th Congress, the Water Infrastructure Improvements for the Nation Act (WIIN Act; P.L. 114-322) made several revisions to the DWSRF program and authorized \$100 million in DWSRF appropriations to Michigan to assist the city of Flint in repairing its drinking water infrastructure. In P.L. 114-254, Congress appropriated the funding authorized in the WIIN Act to assist Flint.

The state of the nation's water infrastructure and the challenges many communities face in addressing infrastructure needs continue to receive congressional attention. A number of bills have been introduced in the 115th Congress to revise and increase funding authority for the DWSRF program and to increase investment in water infrastructure through new approaches.

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Introduction

The quality of water delivered by public water systems has been regulated at the federal level since enactment of the 1974 Safe Drinking Water Act (SDWA). Since then, the Environmental Protection Agency (EPA) has issued regulations for more than 90 contaminants, and all states (except Wyoming) have assumed primary responsibility for administering the federal drinking water program and overseeing public water system compliance. Congress last broadly amended the law in 1996 (P.L. 104-182) in response to criticism that the statute had too little flexibility, too many unfunded mandates, and an arduous but unfocused regulatory schedule.

Among the key provisions, the 1996 amendments authorized a Drinking Water State Revolving Fund (DWSRF) program to help public water systems finance improvements needed to comply with federal drinking water regulations and to address the most serious risks to human health. The law authorizes EPA to make grants to states each year to capitalize a state revolving loan fund. Each state must match 20% of its grant and develop intended use plans each year indicating how the allotted funds will be used. States are authorized to use their DWSRF funding to provide financial assistance (primarily subsidized loans) to eligible public water systems for expenditures that EPA has determined will facilitate SDWA compliance or significantly further the act's health protection objectives. The federal grants and state match—combined with funds from loan repayments, leveraged bonds, and other sources—are intended to generate an ongoing source of water infrastructure funding over time. The DWSRF program is patterned after the Clean Water Act State Revolving Fund (CWSRF) program for financing municipal wastewater treatment projects that Congress authorized in 1987 to replace a construction grants program.

Projects eligible for DWSRF assistance include installation and replacement of treatment facilities, distribution systems, and certain storage facilities. Projects to replace aging infrastructure are eligible if they are needed to maintain compliance or to further public health protection goals. Projects to consolidate water supplies and to enhance water system security may also be eligible. DWSRF funds may not be used to pay for operation and maintenance activities or for projects needed primarily to accommodate growth.

Public water systems eligible to receive DWSRF assistance include some 52,000 community water systems (whether publicly or privately owned) and 21,400 not-for-profit noncommunity water systems.³ States generally may not provide DWSRF assistance to systems that lack the capacity to ensure compliance with the act or that are in significant noncompliance with SDWA requirements, unless these systems meet certain conditions to return to compliance. Systems owned by federal agencies are not eligible. Although the law authorizes assistance to privately owned community water systems, some states have laws or policies that preclude privately owned utilities from receiving DWSRF assistance.⁴

¹ SDWA §1452, State revolving loan funds; 42 U.S.C. §300j-12.

² See CRS Report 96-647, Water Infrastructure Financing: History of EPA Appropriations, by (name redacted)

³ A community water system is one that serves at least 15 service connections used by year-round residents or that regularly serves at least 25 year-round residents. Noncommunity water systems regularly provide water to people but not year-round (e.g., schools and workplaces with their own wells).

⁴ Some states have legislative or regulatory restrictions on providing DWSRF assistance to private systems. According to EPA, some states have made a policy decision to restrict assistance to private systems because of concerns about endangering the tax-exempt status of bonds issued to provide the state match. EPA reported to Congress that 21 states had provided DWSRF assistance to private systems, 12 states had restricted assistance to private systems, and 17 states did not have restrictions but had not yet provided assistance to private systems. States restricting assistance to private systems include Alabama, Arkansas, Colorado, Georgia, Kansas, Louisiana, Mississippi, Nebraska, North Carolina, (continued...)

DWSRF Allotments and Set-Asides

The law directs EPA to allot DWSRF funds among the states based on the results of the most recent quadrennial needs survey (discussed under "Drinking Water Infrastructure Needs"), except that each state and the District of Columbia must receive at least 1% of available funds. ⁵ The law further directs that not more than 0.33% of the total appropriation must be made available for grants to the Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, and Guam, although Congress has increased this amount to 1.5% in appropriations acts.⁶

EPA Reserves

Before distributing funds among the states, EPA reserves 2% of the appropriated amounts for grants to Indian tribes and Alaska Native villages for water infrastructure projects. For FY2016. EPA set aside \$20.0 million for these grants. The SDWA further directs EPA to set aside from the annual DWSRF appropriation \$2.0 million to pay for monitoring of unregulated contaminants in small and medium systems. 8 Additionally, EPA is authorized to reserve annually up to \$30.0 million to reimburse states for operator training and certification costs if separate funding is not provided under Section 1419 of the SDWA; EPA reserved the full amount for several years but reserved none after FY2003, as state training programs had matured. To provide technical assistance to small systems, EPA may reserve up to 2%, with a \$15.0 million cap; however, Congress has appropriated funding for this activity under Section 1442(e), and EPA has not set aside DWSRF funds for this purpose.⁹

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Oklahoma, Tennessee, and Wyoming. Source: U.S. Environmental Protection Agency (EPA), The Drinking Water State Revolving Fund Program: Financing America's Drinking Water from the Source to the Tap, Report to Congress, May 2003, pp. 36-37, http://www.epa.gov/ogwdw/dwsrf/pdfs/dwsrf_congressreport-main.pdf.

⁵ SDWA \$1452(a)(1)(D): 42 U.S.C. \$300j-12(a)(1)(D). State-by-state allotments and set-asides for FY1997 through FY2014 are available at EPA's DWSRF website, https://www.epa.gov/drinkingwatersrf/annual-allotment-federalfunds-states-tribes-and-territories. For FY2015 and FY2016 allotments, see EPA, FY2017 EPA Budget in Brief, p. 99, https://www.epa.gov/sites/production/files/2016-02/documents/fy17-budget-in-brief.pdf.

⁶ SDWA Section 1452(j) [42 U.S.C. §300j-12(j)] provides that the total amount of grants under this section shall not exceed 0.33% of the appropriated amount. For FY2010, Congress authorized EPA to reserve up to 1.5% of the appropriated funds for territories (P.L. 111-88); this authority has continued through subsequent appropriations.

⁷ Under SDWA Section 1452(i) [42 U.S.C. §300j-12(i)], EPA may use 1.5% of the amounts appropriated annually to make grants to Indian tribes and Alaska Native villages. Since FY2010 (Department of the Interior, Environment, and Related Agencies Appropriations, 2010 [P.L. 111-88]), Congress has authorized EPA to reserve up to 2.0% of the appropriated funds for Indian tribes and Alaska Native villages. This authority was included in P.L. 112-74 and has continued through the terms and conditions of subsequent appropriations.

⁸ SDWA Section 1445 (42 U.S.C. §300j-4) directs EPA to administer a monitoring program for unregulated contaminants to facilitate the collection of occurrence data for contaminants that are not regulated but are suspected to be present in public water supplies. Every five years, EPA must publish a list of no more than 30 unregulated contaminants to be monitored by public water systems. All systems serving more than 10,000 people and a sample of smaller systems must monitor for the contaminants. EPA is required to cover the costs associated with monitoring for systems serving from 25 to 10,000 persons. EPA proposed the fourth Unregulated Contaminant Monitoring Rule in December 2015. For more information, see EPA, "Unregulated Contaminant Monitoring Program," http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/.

⁹ SDWA Section 1452(q) [42 U.S.C. §300j-12(q)] authorized EPA to reserve up to 2% of funds appropriated for the DWSRF program for each of FY1997 through FY2003 to carry out Section 1442(e). The Administration has not requested money for these small system technical assistance activities, nor has EPA used the SRF reserve authority to fund them. Rather, Congress has provided funding for these purposes in recent appropriations acts. See CRS Report R44208, Environmental Protection Agency (EPA): FY2016 Appropriations, by (name redacted) and (name red acted) under the heading National Priorities and "Earmarks," Enacted December 11, 2015, the Grassroots Rural and (continued...)

State Set-Asides and Requirements

The SDWA also includes several set-asides and directives that apply to the states. These provisions offer states flexibility in tailoring their individual DWSRF programs to address state priorities. They also demonstrate the emphasis that the 1996 amendments placed on enhancing compliance, especially among smaller systems. The act requires states to make available at least 15% of their annual allotment for loan assistance to systems that serve 10,000 or fewer persons to the extent that the funds can be obligated to eligible projects.

The act also allows states to use up to 30% of their DWSRF capitalization grants to provide additional assistance, such as forgiveness of loan principal or negative interest rate loans, to help disadvantaged communities (as determined by the state).¹⁰

Among other optional set-aside provisions, states may reserve a portion of their annual capitalization grants to cover the costs of administering the DWSRF program. Congress increased the amount states may use for administration purposes in the Water Infrastructure Improvements for the Nation Act (WIIN Act; P.L. 114-322), enacted on December 16, 2016.¹¹

States may use an additional portion to help pay the costs of other SDWA mandates. Specifically, states may set aside as much as 10% for a combination of the following:

- public water system supervision programs (Section 1443(a)),
- technical assistance through source water protection programs,
- state capacity development strategies (Section 1420(c)), and
- operator certification programs (Section 1419). 12

The WIIN Act removed the requirement that, in order to use DWSRF funds for these four purposes, states were to match expenditures with an equal amount of state funds. States may use an additional 2% of funds to provide technical assistance to systems that serve 10,000 or fewer persons.

States also have the option of using as much as 15% for a combination of the following:

- loans for the acquisition of land or conservation easements,
- loans to implement voluntary source water protection measures,
- technical and financial assistance to water systems as part of a capacity development strategy, and
- expenditures from the fund for wellhead protection programs.

Expenditures may not exceed 10% for any one of these activities. Other SDWA provisions include separate funding authority for several of these activities. For example, wellhead

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Small Community Water Systems Assistance Act (P.L. 114-98) amended Section 1442(e) to expand the technical assistance program and reauthorize appropriations through FY2020.

¹⁰ SDWA Section 1452(d); 42 U.S.C. §300j-12(d). Recent appropriations acts have required states to provide additional subsidization. (See discussion under "Congressional Actions.")

¹¹ SDWA Section 1452(g) had authorized a state to use as much as 4% of its capitalization grants to cover administration costs. The WIIN Act revised this provision to allow each state to use the greatest of \$400,000, one-fifth percent of the current valuation of the fund, and 4% of the capitalization grant plus any fees collected by the state.

¹² The WIIN Act, Section 2103(7), removed the requirement that, in order to use DWSRF funds for these purposes, states were to match expenditures with an equal amount of state funds.

protection provisions, Section 1428, authorized appropriations for the program through FY2003. Congress has generally not provided separate appropriations for these activities.

To further promote public water system compliance, the 1996 amendments added capacity development and operator certification requirements. The law required EPA to withhold part of the DWSRF grant from any state that did not meet these mandates. Section 1420 required states to establish capacity development programs that include (1) legal authority or other means to ensure that new systems have the technical, financial, and managerial capacity to meet SDWA requirements and (2) a strategy to assist existing systems that are experiencing difficulties in coming into compliance. ¹³ States were also required to adopt programs for training and certifying operators of community and non-transient non-community water systems.

Congress designed the DWSRF program to give states implementation flexibility. Additionally, Congress provided states flexibility in setting priorities between the DWSRF and Clean Water Act SRF (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% of the annual DWSRF allotment to the CWSRF or an equivalent amount from the CWSRF to the DWSRF. The act authorized these transfers through FY2001. 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. Several annual appropriations acts had authorized states to continue to transfer as much as 33% of funds between the two programs, and in P.L. 109-54, Congress made this authority permanent.¹⁴

DWSRF Program Appropriations

In the 1996 SDWA amendments, Congress established the DWSRF program and authorized program appropriations at a level of \$599.0 million for FY1994 and \$1.0 billion annually for each of FY1995 through FY2003, for a total appropriations authority of \$9.6 billion. Although the authorization of appropriations expired in 2003, the program authority has no expiration date, and Congress has continued to provide annual appropriations for the program. **Table 1** presents annual appropriations for the program since it began.

From FY2000 through FY2009, annual appropriations for the DWSRF program ranged from \$820 million to \$850 million. For FY2009, Congress appropriated \$829.0 million for the program through regular appropriations. The American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5) provided another \$2.0 billion for water infrastructure projects, delivered through the DWSRF program, for a total of some \$2.83 billion in appropriations for this program for FY2009. For FY2010, in P.L. 111-88, Congress appropriated \$1.39 billion for the DWSRF. For FY2011, the President requested \$1.29 billion, and under several continuing resolutions (CRs), the program was generally funded at FY2010 levels (through March 4, 2011, under P.L. 111-322).

¹³ SDWA §1420; 42 U.S.C. §300g-9.

¹⁴ 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."

¹⁵ In ARRA, Congress imposed several new conditions on projects receiving DWSRF assistance, including Davis-Bacon prevailing wage requirements and "Buy American" requirements. The act also required states to use at least 50% of the funds to further subsidize loans (including forgiveness of principal, negative interest loans, and grants), and to reserve at least 20% of the funds for green infrastructure, water efficiency improvements, or other environmentally innovative projects. (See discussion in the "Congressional Actions" section.)

The full-year CR (P.L. 112-10) reduced FY2011 funding to \$965.0 million (\$963.1 million after applying an across-the-board rescission of 0.2%).

For FY2012, the President requested \$999.0 million, and Congress appropriated \$919.4 million in P.L. 112-74 (\$917.9 million after applying an across-the-board rescission of 0.16%). In this act, Congress applied Davis-Bacon prevailing wage requirements to DWSRF program funding for FY2012 and all future years.

For FY2013, the President requested \$850.0 million for the DWSRF program. In September 2012, Congress approved a six-month CR, P.L. 112-175, to fund government agencies through March 27, 2013, generally at FY2012 levels with an across-the-board increase of 0.612%. On March 26, 2013, the six-month CR was superseded by the Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6), which provided full-year continuing appropriations for Interior, EPA, and related agencies through September 30, 2013. After taking into account sequestration and a 0.2% rescission pursuant to P.L. 113-6, EPA allocated \$861.3 million for the program for FY2013. Additional SRF funds were appropriated for FY2013 in the Disaster Relief Appropriations Act, 2013 (P.L. 113-2), including \$95.0 million (\$100.0 million before sequestration) for the DWSRF program and \$475.0 million (\$500.0 million before sequestration) for the Clean Water SRF program. These funds were targeted for drinking water and wastewater infrastructure projects in areas of New Jersey and New York affected by Hurricane Sandy.

For FY2014, the President requested \$817.0 million, and EPA received \$906.9 million. The President reduced the request to \$757.0 million for FY2015, but Congress again appropriated \$906.9 million in P.L. 113-235. For FY2016, the President requested \$1.18 billion for the DWSRF program, and Congress appropriated \$863.2 million (P.L. 114-113).

For FY2017, President Obama requested \$1.020 billion. House-passed H.R. 5538, Department of the Interior, Environment, and Related Agencies Appropriations Act, 2017, included \$1.07 billion—an increase of \$207.0 million from for FY2016; the Senate Committee on Appropriations recommended \$1.02 billion for FY2017 in S. 3068. The DWSRF program has been funded for FY2017 under continuing resolutions at FY2016 levels, minus across-the-board reductions of less than 0.2%. The Consolidated Appropriations Act, 2017 (P.L. 115-31, Division G, Title II), includes \$863.23 million for DWSRF capitalization grants for FY2017. The President has requested \$863 million for FY2018.

From 1997 through June 2016, cumulative appropriations for the DWSRF program reached \$20.03 billion. Adjusted for set-asides and transfers between the clean water and drinking water SRFs, cumulative net federal contributions totaled \$19.07 billion. When combined with the 20% state match (\$3.45 billion), bond proceeds, loan principal repayments, and other funds, the total DWSRF investment through June 2016 had reached \$34.18 billion, and the program had provided more than \$32.48 billion in assistance. Over the same period, more than 13,183 projects had received assistance, and 9,139 had been completed.¹⁸

In contrast to direct grants for construction projects—which would not create an ongoing funding source—the revolving fund program was designed to provide seed money to states in the form of capitalization grants to help generate a sustainable source of funding in each state over time.

¹⁶ This amount also takes into account P.L. 113-6, Section 1406, which rescinded \$10.0 million from unobligated DWSRF balances. The law also rescinded \$10.0 million from unobligated CWSRF balances.

¹⁷ For more information on EPA appropriations, see CRS Report R43709, *Environmental Protection Agency (EPA): FY2015 Appropriations*, by (name redacted) .

¹⁸ Detailed national and state program data are available at https://www.epa.gov/drinkingwatersrf.

Table 1. Drinking Water State Revolving Fund Program Funding, FY1997-FY2016

(in millions of dollars, nominal and adjusted for inflation 2016 dollars)

Fiscal Year	A uthorizations	Appro	Appropriations	
		Nominal	Adjusted for Inflation	
1997	\$1,000.0	\$1,275.0	\$1,819.8	
1998	\$1,000.0	\$725.0	\$1,022.2	
1999	\$1,000.0	\$775.0	\$1,079.0	
2000	\$1,000.0	\$820.0	\$1,118.4	
2001	\$1,000.0	\$823.2	\$1,096.5	
2002	\$1,000.0	\$850.0	\$1,114.2	
2003	\$1,000.0	\$844.5	\$1,086.2	
2004	_	\$845.0	\$1,060.6	
2005	_	\$843.2	\$1,026.1	
2006	_	\$837.5	\$987.1	
2007	_	\$837.5	\$960.9	
2008	_	\$829.0	\$931.9	
2009	_	\$829.0	\$921.2	
2009/ARRA	_	\$2,000.0	\$2,222.4	
2010	_	\$1,387.0	\$1,527.8	
2011	_	\$963.1	\$1,039.7	
2012	_	\$917.9	\$973.2	
2013	_	\$956.3ª	\$997.0	
2014	_	\$906.9	\$928.5	
2015	_	\$906.9	\$917.7	
2016	_	\$863.2	\$863.2	
2017	_	\$863.2 ^b	\$847.6	
Total		\$20,898.4°	\$24,541.7	

Sources: Prepared by CRS using the most current information available from House, Senate, or conference committee reports accompanying the annual appropriations bills that fund EPA and Administration budget documents, including the President's annual budget requests as presented by the Office of Management and Budget (OMB) and EPA's accompanying annual congressional budget justifications. "ARRA" refers to the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). Inflation-adjusted values are based on OMB, Budget of the United States Government Fiscal Year 2018, Historical Tables, Table 5.4—Discretionary Budget Authority by Agency 1976-2022, and Table 10.1—Gross Domestic Product and Deflators Used in the Historical Tables—1940–2022, http://www.whitehouse.gov/omb/budget/Historicals.

- a. FY2013 post-sequestration enacted amounts are as presented in EPA's FY2013 Operating Plan. This amount reflects the baseline appropriation level of \$861.3 (\$908.7 pre-sequestration and pre-rescission) plus \$95.0 million (\$100.0 million pre-sequestration) for the DWSRF program in the Disaster Relief Appropriations Act, 2013 (P.L. 113-2) for projects in New Jersey and New York to address damage from Hurricane Sandy.
- b. The Continuing and Security Assistance Appropriations Act, 2017 (P.L. 114-254), included an additional \$100 million in DWSRF funding to assist Flint, MI, as authorized in the WIIN Act (P.L. 114-322).

c. Funds available to states are reduced by amounts that EPA sets aside from the annual appropriation. For FY2016, EPA reserved \$20.0 million for American Indian and Alaska Native water system grants (SDWA §1452(i)) and \$2.0 million to reimburse small systems for unregulated contaminants (§1452(o)).

Drinking Water Infrastructure Needs

To determine how to allot DWSRF funds among the states, EPA is required to assess the capital improvement needs of eligible public water systems every four years. ¹⁹ Concurrently, and in consultation with the Indian Health Service and Indian tribes, EPA must assess needs for drinking water treatment facilities to serve Indian tribes and Alaska Native villages. ²⁰ EPA is required to distribute the DWSRF funds among the states based on the results of the most recent needs survey. ²¹ Eligible systems include approximately 52,000 community water systems (publicly or privately owned) and 21,400 not-for-profit nontransient, noncommunity water systems.

In 2013, EPA issued the 2011 Drinking Water Needs Survey and Assessment—the most recent and fifth such survey. This needs survey indicates that public water systems need to invest \$384.2 billion on infrastructure improvements over 20 years (\$19.2 billion annually) to achieve regulatory compliance and ensure the provision of safe tap water. EPA reports that this amount is similar to the 2007 and 2003 needs estimates of \$379.7 billion and \$375.9 billion, respectively, when adjusted to 2011 dollars. The agency noted that these surveys reflect the use of increasingly consistent methodologies for needs estimation among the states and improved reporting of needs related to infrastructure rehabilitation and replacement.

Although all the infrastructure projects in the needs assessment would promote the health objectives of the act, just \$42.0 billion (10.9%) of the funding needed is attributable to SDWA regulations, while \$342.2 billion (89.1%) represents nonregulatory costs. ²³ Most regulatory funding needs typically involve the upgrade, replacement, or installation of treatment technologies. Most nonregulatory funding needs typically involve installing, upgrading, or replacing transmission and distribution infrastructure to allow a system to continue to deliver safe drinking water. Although these system problems often do not cause a violation of a drinking water standard, projects to correct infrastructure problems may be eligible for DWSRF funding if needed to address public health risks.

The 2011 needs survey presented the 20-year needs estimates by category: transmission and distribution, treatment, source, storage, and other. As seen in **Figure 1**, the largest needs category, installation and rehabilitation of transmission and distribution systems, accounted for \$247.5 billion (64.4%) of total 20-year needs. Water treatment needs constituted the next largest category, accounting for \$72.5 billion (18.9%) of total needs, while water storage accounts for \$39.5 billion (10.3%), and source (projects needed to obtain safe water supplies, including rehabilitation and installation of wells) accounts for \$20.5 billion (5.3%) of total 20-year needs. The survey also included \$235.9 million for projects to address security needs. However, EPA

¹⁹ SDWA §1452(h); 42 U.S.C. §300j-12(h). EPA must report each needs assessment to Congress.

²⁰ SDWA §1452(i); 42 U.S.C. §300j-12(i).

²¹ In June 2013, EPA published the allotment percentages that provide the basis for allocating the DWSRF appropriations among the states for FY2014 through FY2017. EPA, "State Allotment Percentages for the Drinking Water State Revolving Fund Program," 78 *Federal Register* 36183, June 17, 2013.

²² EPA, Office of Water, *Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress*, April 2013, http://water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf.

²³ Ibid., p. 10.

concluded that security-related needs may be far greater, because many water systems incorporate these costs into the costs of broader construction projects rather than report them separately.

Total National Need: \$384.2 billion

Source: 5.3%
Other:1.1%
Transmission and Distribution: \$247.5
Treatment: \$72.5
Storage: \$39.5
Source: \$20.5
Other: \$4.2

Figure 1.Total 20-Year Need by Project Type
(in billions of 2011 dollars)

Source: U.S. Environmental Protection Agency, Office of Water, *Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress*, EPA 816-R-13-006, April 2013.

Notes: EPA reported that of the total national need of \$348.2 billion, \$42.0 billion (10.9%) is attributed to costs of SDWA regulations, while \$342.2 billion (89.1%) represents nonregulatory costs (e.g., replacing distribution lines). In the 2007 survey, SDWA compliance accounted for 16% and nonregulatory costs accounted for 84% of needs. EPA also noted an increased need for new source water infrastructure as more communities experience drought. "Other" includes security measures, computer systems, and other needs not captured elsewhere.

The needs survey also breaks down the 20-year needs estimates according to system size and ownership. The 20-year drinking water infrastructure need for *states* totaled \$376.0 billion. Within that total, the reported needs among community water systems and not-for-profit noncommunity water systems (e.g., schools with their own water wells) broke out as follows:

- large community water systems (serving more than 100,000 people): \$145.1 billion (36% of the total 20-year need);
- medium systems (serving from 3,301 to 100,000 people): \$161.8 billion (43.6%);
- small systems (serving 3,300 or fewer people): \$64.5 billion (17.4%); and
- not-for-profit noncommunity systems: \$4.6 billion (3%).

In addition, the American Indian and Alaska Native village water system needs totaled \$3.3 billion. The 20-year needs reported by American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands totaled \$669.7 million. EPA estimated that an additional \$4.9 million would be needed for systems to comply with proposed and recently promulgated regulations.

EPA noted that the total needs estimate may be conservative for several reasons: (1) systems are required to meet stringent documentation criteria when identifying needs; (2) many systems did not fully understand their security needs at the time of the assessment; (3) capital improvement plans often cover fewer than 10 years, while the survey tries to capture 20-year estimates; and (4) the survey is limited to eligible needs, thus excluding projects related to dams, raw water reservoirs, fire protection, operation and maintenance, and future growth.

A 2012 study prepared by the American Water Works Association (AWWA) projected that restoring and expanding water systems to keep up with population growth would require a nationwide investment of at least \$1 trillion over the next 25 years. ²⁴ Additionally, the authors of a recent AWWA-sponsored analysis of lead service line occurrence estimated that there may be 6.1 million lead service lines nationwide. The AWWA notes that, while progress has been made, removal of these lines could represent an additional \$30.0 billion in infrastructure funding needs. ²⁵

Water Infrastructure Funding Issues

With the creation of the DWSRF program, Congress acted to help public water systems finance infrastructure projects needed to achieve or maintain compliance with SDWA requirements and, more broadly, to protect public health. While this federal/state program provides an important means for addressing drinking water needs, a substantial gap remains between financing needs and available funds. The 2011 needs survey identified a 20-year investment need of \$19.2 billion annually, ²⁶ and as infrastructure ages, needs are projected to increase. As noted, needs eligible for DWSRF funding include projects required for SDWA compliance (10.9% of needs) and projects that are nonregulatory but needed to meet the act's health protection objectives (89.1% of needs).

Since 1997, Congress has appropriated a total of \$20.03 billion (nominal dollars) for the DWSRF program. These federal funds—augmented by the state match, leveraging, repayments, and interest earnings—have created significant financing capacity among the state DWSRFs. However, many expect a funding gap to persist, and new SDWA rules are expected to drive up future needs estimates.

Overall, federal spending on drinking water infrastructure represents a small portion of such spending. The Congressional Budget Office reports that, in 2014, the federal share of total public spending on water and wastewater utilities was 4%, while state and local government expenditures accounted for 94% of all public spending on this infrastructure.²⁷

In addition to infrastructure needs, other SDWA mandates are eligible for DWSRF funding, thus increasing competition for these resources. The DWSRF program embraces competing objectives, and, thus, this competition is perhaps unavoidable. On the one hand, the fundamental

²⁴ Stratus Consulting, *Buried No Longer: Confronting American's Water Infrastructure Challenge*, American Water Works Association, 2012, http://www.awwa.org/legislation-regulation/issues/infrastructure-financing.aspx.

²⁵ See, David A. Cornwell, Richard A. Brown, and Steve H. Via, "National Survey of Lead Service Line Occurrence," *Journal of the American Water Works Association*, vol. 108, no. 4, http://www.awwa.org/resources-tools/public-affairs/press-room/press-release/articleid/4074/lead-service-line-analysis-examines-scope-of-challenge.aspx. The authors noted that the data were limited, and the number of remaining lead service lines could range from 5.1 million to 7.7 million lines in communities nationwide.

²⁶ EPA, Clean Water and Drinking Water Infrastructure Gap Analysis Report.

²⁷ Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure, 1956 to 2014*, March 2015, p. 28.

purpose of the program is to capitalize revolving funds in the states in order to generate a perpetual source of funding for drinking water projects. On the other hand, Congress authorized multiple set-asides to fund other drinking water program priorities and requirements, such as system compliance-capacity assurance, operator certification, wellhead protection, and small system technical assistance. Overall, states may use as much as 31% of their grants for the set-asides and another 30% to provide additional loan subsidies to disadvantaged communities.

While these options 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. A concern for states is that, to the degree that Congress relies on the DWSRF to fund other SDWA requirements—rather than providing separate appropriations—the potential of the DWSRF program is diminished. Moreover, in recent appropriations acts, Congress has added several policy directives not present in the SDWA that may also affect the states' ability to grow or maintain their SRFs. These added provisions include specified additional subsidization requirements for disadvantaged systems, Davis-Bacon prevailing wage requirements, and Buy American (iron and steel).²⁸

A chronic issue concerns the need for communities to address drinking water infrastructure requirements that are outside the scope of the DWSRF program. Communities must typically address several categories of infrastructure requirements that are unrelated to SDWA compliance and, thus, ineligible for DWSRF assistance. 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% of the 20-year estimated need is directly related to compliance with SDWA regulations.

Although the DWSRF program does not address certain categories of needs and excludes many noncommunity systems from coverage, it adds a key tool to the mix of federal, state, and local initiatives intended to help communities ensure the safety of water supplies. Nonetheless, the question of how to meet water infrastructure needs is a persistent issue that is receiving increased attention as the nation's water infrastructure ages and as budgets at all levels face constraints.³⁰

A fundamental question has concerned the long-term federal role in water infrastructure financing. A subset of questions concerns how deficit reduction efforts might affect federal involvement. For example, how might deficit reduction objectives impact proposals to develop a small system grant program or sustainable funding source, such as a water infrastructure trust fund? Other persistent water infrastructure issues include the gap between funding and estimated needs, the growing cost of complying with SDWA standards (particularly for small communities), the ability of small or disadvantaged communities to afford DWSRF financing, and the broader need for cities to maintain, upgrade, and expand infrastructure unrelated to SDWA compliance.

²⁸ As noted, P.L. 114-322 amended the SDWA to require that funds made available from a state DWSRF during FY2017 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. The 112th Congress made permanent the application of Davis-Bacon prevailing wage requirements to the DWSRF program (P.L. 112-74, H.Rept. 112-331, p. 236).

²⁹ Projects to replace aging infrastructure are eligible if they are needed to maintain compliance or to further public health protection goals.

³⁰ See, for example, U.S. Government Accountability Office, *Water Infrastructure: Information on Selected Midsize and Large Cities with Declining Populations*, GAO-16-785, September 2016, http://www.gao.gov/products/GAO-16-785.

Congressional Actions

Despite ongoing legislative interest, budgetary constraints and other concerns have posed challenges to efforts to enact new water infrastructure financing legislation. In the face of large needs, competition for limited federal resources, and debate over the federal role in funding water infrastructure, EPA, states, and communities and utilities have increasingly focused on alternative management and financing strategies to address costs and promote greater financial self-reliance among water systems. Strategies include establishing public-private partnerships, improving asset management, and adopting full-cost pricing for water services. Such approaches are intended to improve the financial and managerial sustainability of water systems; however, they may be limited in their ability to fully meet needs, particularly among poorer communities and small water systems that may lack economies of scale. Consequently, interest in exploring new infrastructure financing options—such as an infrastructure bank—and expanding federal assistance has persisted.

113th Congress

Deficit reduction pressures are not new to DWSRF appropriations considerations, but statutory spending caps in the Budget Control Act of 2011, as amended by the American Taxpayer Relief Act of 2012, have placed added constraints on appropriators.³¹ The 113th Congress considered various water infrastructure funding options. As discussed below, one such approach was enacted.

Water Infrastructure Finance and Innovation Act (WIFIA)

Enacted in June 2014, the Water Resources Reform and Development Act of 2014 (P.L. 113-121, H.R. 3080) includes in Title V, Subtitle C, the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA). 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 five-year pilot program is intended to complement, and not replace, the SRF programs.

Eligible projects include SRF-eligible projects and a wide range of water resource development projects that 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 \$5.0 million. Projects financed under this program are subject to Davis-Bacon prevailing wage requirements. Also, WIFIA funds may be used only if all the iron and steel used in a project are produced in the United States (unless this requirement would increase project costs by more than 25%).

WIFIA authorized to be appropriated to the Secretary of the Interior and the EPA Administrator \$20.0 million each for FY2015 and \$25.0 million each for FY2016, with amounts increasing annually to \$50.0 million each for FY2019. The Consolidated and Further Continuing Appropriation Act, 2015 (P.L. 113-235), did not appropriate funds for project financing but did provide EPA with \$2.2 million for hiring staff to implement the WIFIA program.

³¹ See out-of-print CRS Report R42949, *The American Taxpayer Relief Act of 2012: Modifications to the Budget Enforcement Procedures in the Budget Control Act*, by (name redacted) (available from the author).

Other measures were introduced to provide alternative financing options for water infrastructure. H.R. 2084, for example, would have established a national infrastructure bank to guarantee debt for a wide range of infrastructure projects.

114th Congress

The drinking water crisis in Flint, MI, heightened attention to the state of the nation's drinking water infrastructure and the challenges many communities face in addressing their infrastructure needs. The 114th Congress focused attention on funding levels for and implementation of the DWSRF program as well as EPA efforts to implement WIFIA—the five-year pilot water infrastructure loan program.³² Further, numerous bills were introduced to establish new water infrastructure funding sources through grants, a trust fund, and other means and to revise the tax code to promote private sector investment in water infrastructure. An array of proposals were introduced to provide infrastructure funding assistance to Flint to address lead contamination of drinking water associated with old pipes and corrosion problems and, more broadly, to increase water infrastructure funding for communities nationwide.

As in previous Congresses, legislation was offered to amend the Internal Revenue Code of 1986 to provide that the volume cap for private activity bonds (PABs) would not apply to bonds for drinking water or wastewater facilities. These tax-exempt bonds provide a financing tool to stimulate private sector investment in public projects. However, federal law imposes state bond caps, limiting the ability of state and local governments to use PABs to finance drinking water and wastewater infrastructure projects.³³

WIFIA Program

In both FY2015 and FY2016, Congress appropriated \$2.2 million for EPA to develop the WIFIA program. However, no project funds were provided. In the President's FY2016 budget request, EPA noted that it faced a complex task in standing up a new federal loan program. For FY2017, the President requested \$20.0 million for EPA to provide WIFIA financing for large drinking water and wastewater infrastructure projects (including administrative costs). The budget request stated that the program goal was to "accelerate investment in our nation's water and wastewater infrastructure by providing supplemental credit assistance to credit worthy nationally and regional significant water projects." EPA estimated, "Of the total requested, \$15.0 million in credit

³² For further information, see CRS Report R43315, *Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program*, by (name redacted) and (name redacted) .

³³ The federal tax code allows state and local governments to use tax-exempt bonds to finance certain projects that would be considered private activities. Congress uses an annual state volume cap to limit the amount of tax-exempt bond financing and restricts the types of "qualified private activities" that would qualify for tax-exempt financing to types of projects specified in the tax code. Supporters, including most segments of the water industry, assert that such bills would expand opportunities for private investment in the water infrastructure market and generate significant private capital at a very low cost to the government. Others have argued generally against subsidies and note the loss of revenue that would result from such an approach. Congress has generally limited the use of tax-exempt bonds for private activities because of concern about their overuse and related revenue losses. Moreover, Internal Revenue Service data suggest that PAB expansion may have only a small impact on water infrastructure investment. For a review of PABs, caps, qualified programs, and congressional action, see CRS Report RL31457, *Private Activity Bonds: An Introduction*, by (name redacted) and (name redacted).

³⁴ EPA, Office of the Chief Financial Officer, *United States Environmental Protection Agency Fiscal Year 2016 Justification of Appropriation Estimates for the Committee on Appropriations*, February 2015, p. 552.

³⁵ EPA, *FY2017 Budget in Brief*, February 2016, p. 103, https://www.epa.gov/sites/production/files/2016-02/documents/fy17-budget-in-brief.pdf.

subsidies could potentially support a loan capacity of nearly \$1.0 billion to eligible entities for infrastructure projects with the initial loans taking place in FY2017."³⁶ House-passed Department of the Interior, Environment, and Related Agencies Appropriations Act, 2017 (H.R. 5538), recommended \$50.0 million for the WIFIA program. The Senate Committee on Appropriations recommended \$30.0 million for the program for FY2017 (S. 3068). In P.L. 114-254, the Continuing and Security Assistance Appropriations Act of 2017, Congress provided \$20.0 million for EPA to begin providing loan guarantees for infrastructure projects under WIFIA. As noted below, Congress provided another \$10 million for WIFIA for FY2017 in P.L. 115-31.

DWSRF Appropriations

For the DWSRF program for FY2016, the President requested \$1.186 billion, which was \$429.0 million above the \$757.0 million requested for FY2015 and \$279.0 million above the FY2015 appropriation level of \$907.0 million. Congress appropriated \$863.2 million for the DWSRF program for FY2016 (P.L. 114-113). The conference report provided that each state must use 20% of its capitalization grant "to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these)."

For FY2017, President Obama requested \$1.02 billion for the DWSRF program. H.R. 5538 (H.Rept. 114-632) proposed to fund the program at \$1.07 billion for FY2017—an increase of \$207.3 million over FY2016. S. 3068 (S.Rept. 114-281) included \$1.02 billion, as requested. The program has been funded for FY2017 under continuing resolutions at FY2016 levels, minus across-the-board reductions of less than 0.2%.³⁷

Water Infrastructure Improvements for the Nation Act

Senate-passed S. 2848, Water Resources Development Act (WRDA) of 2016, included a number of SDWA and CWA infrastructure provisions and incorporated various bills introduced in response to the Flint water crisis. The House-passed WRDA bill, H.R. 5303, excluded such EPA provisions and proposed to authorize the U.S. Army Corps of Engineers to provide water infrastructure assistance to certain communities in states subject to presidential emergency declarations as a result of lead or other contaminants in the water system.

Enacted on December 16, 2016, the Water Infrastructure Improvements for the Nation (WIIN) Act (P.L. 114-322) incorporated WRDA, drought, and drinking water provisions. Title II of this wide-ranging water resources law comprises the Water and Waste Act of 2016. Title II, Subtitle B, authorized \$100 million in DWSRF funding and other emergency assistance to help an eligible water system (Flint, MI) address lead in the public water system. In P.L. 114-254, Congress appropriated the funding authorized in the WIIN Act to assist Flint, MI.

Title II, Subtitle A, of P.L. 114-322 made several revisions to the DWSRF program, including requiring that funds made available from a state DWSRF during FY2017 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. (Certain waivers of the requirement are specified.) The act also directs EPA to establish two new drinking water infrastructure grant programs: New SDWA Section 1459A authorizes grants to provide compliance assistance to small or disadvantaged public water systems; new Section 1459B authorizes grants for lead reduction projects, including lead service

³⁶ Ibid., p. 27.

³⁷ For information on continuing resolutions providing agency funding for FY2017, see CRS Report R44470, *Interior, Environment, and Related Agencies: FY2017 Appropriations*, by (name redacted)

line replacement. For each grant program, Congress authorized to be appropriated \$60 million per year for FY2017-FY2021. ³⁸ The act did not reauthorize appropriations for the DWSRF program.

The WIIN Act, Section 2107, rewrote SDWA Section 1464 to require EPA to establish a voluntary program for testing for lead in drinking water at schools and child care programs under the jurisdiction of local education agencies (LEAs). States or LEAs may apply to EPA for grants to cover testing costs. Appropriations for this grant program are authorized at \$20 million per year for FY2017-FY2021.

DWSRF Bills and Appropriations in the 115th Congress

The 115th Congress continues efforts to address drinking water infrastructure management and investment challenges. Bills have been introduced to increase federal investment in water infrastructure and to promote improved water system asset management and SDWA compliance capacity. Budget constraints, debate over debt reduction, and debate over the federal role in funding municipal infrastructure continue to be significant factors in the deliberations.

As noted above, President Obama had requested \$1.02 billion for the DWSRF program for FY2017. In the Consolidated Appropriations Act, 2017 (P.L. 115-31, Division G, Title II), Congress appropriated \$863.23 million for DWSRF capitalization grants;³⁹ the act also included another \$10.0 million for the WIFIA program (in addition to the \$20.0 million provided in P.L. 114-254).⁴⁰ For FY2018, the President has requested \$863.0 million for the DWSRF program and \$20.0 million for WIFIA.

DWSRF and related water infrastructure legislation introduced in the 115th Congress is reviewed below.

 H.R. 904, the Buy American Improvement Act of 2017, would standardize and expand Buy American requirements across federal agencies and programs and make permanent requirements to use U.S. manufactured iron and steel for projects receiving DWSRF assistance.

³⁸ For a review of SDWA amendments and authorizations in the WIIN Act and appropriations in P.L. 114-254 to assist Flint, see CRS In Focus IF10577, *Water Infrastructure Improvements for the Nation (WIIN) Act, P.L. 114-322: Drinking Water Provisions*, by (name redacted)

³⁹ P.L. 115-31 further provides that "states shall use 20 percent of their DWSRF capitalization grants to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these), and shall be so used by the State only where such funds are provided as initial financing for an eligible recipient or to buy, refinance, or restructure the debt obligations of eligible recipients where such debt was incurred on or after the date of enactment of this Act, or where such debt was incurred prior to the date of enactment of this Act if the State, with concurrence from the Administrator, determines that such funds could be used to help address a threat to public health from heightened exposure to lead in drinking water or if a Federal or State emergency declaration has been issued due to a threat to public health from heightened exposure to lead in a municipal drinking water supply before the date of enactment of this Act: Provided further, That in a State in which such an emergency declaration has been issued, the State may use more than 20 percent of the funds made available under this title to the State for Drinking Water State Revolving Fund capitalization grants to provide additional subsidy to eligible recipients." At their discretion, states also may use their FY2017 DWSRF capitalization grants "for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities." H.R. 244-377.

⁴⁰ P.L. 115-31, specified that \$8 million be made available for the cost of direct loans and guaranteed loans under WIFIA and that, "in addition, for administrative expenses to carry out the direct and guaranteed loan programs, notwithstanding section 5033 of the Water Infrastructure Finance and Innovation Act of 2014, \$2,000,000, to remain available until September 30, 2018."

- H.R. 939, the Buy America for Drinking Water Extension Act of 2017, would expand and make permanent the SDWA provision requiring use of U.S. manufactured iron and steel in projects receiving DWSRF assistance.
- H.R. 1068, Safe Drinking Water Act Amendments of 2017, is a broad SDWA reauthorization bill and Title IV includes numerous amendments to the DWSRF program. Among other revisions, the bill would (1) add Davis-Bacon prevailing wage requirements (currently imposed through appropriations acts), (2) make permanent the Buy American iron and steel requirement for projects receiving DWSRF assistance (currently applicable to FY2017 funding), (3) direct states to give funding priority to projects that improve the ability of water systems to protect health and comply with SDWA affordably and to give greater weight to applications that describe measures to improve the management and financial stability of the water system, (4) conditionally require states to use at least 6% of their capitalization grants to provide additional subsidization to disadvantaged communities, (5) incorporate in the statute a governor's authority to transfer as much as 33% of the annual DWSRF or CWSRF capitalization grant to the other fund, 41 (6) increase the amount reserved for insular areas from 0.33% to 1.5%, (7) authorize DWSRF program appropriations at a level of \$21.17 billion over five years, (8) authorize EPA to use unobligated funds to make grants to states with water systems disproportionately affected by new regulations to assist those systems, and (9) require EPA to use information from states to develop best practices for DWSRF program administration. Further, the bill would expand eligible uses of funds to include replacement or rehabilitation of aging water systems or for producing or capturing sustainable energy. H.R. 1068 would increase the authorized funding level under SDWA Section 1459B for lead reduction projects (including lead service line replacement) from \$60 million annually to \$100 million annually for FY2018 through FY2022. It would create grant programs for replacing school lead service lines and water fountains that contain lead, for increasing the resiliency or adaptability of water systems, and for developing real-time contaminant monitoring technologies. It would also establish deadlines for EPA to issue a revised Lead and Copper Rule and new regulations for perchlorate, perfluorinated compounds, and microcystin toxin.
- H.R. 1071, the Assistance, Quality, and Affordability Act of 2017, would amend and reauthorize the DWSRF program, paralleling DWSRF provisions in H.R. 1068, Title IV (above, and H.R. 4653 from the 114th Congress), among other purposes. As with Title IV, H.R. 1071 would place greater program emphasis on assisting disadvantaged communities, authorize DWSRF program appropriations at a total of \$21.17 billion over five years, revise the list of eligible activities, and require states to give funding priority to projects needed to make compliance affordable. The bill would also increase the level of funding authorized to be appropriated under Section 1459B(d) for lead reduction projects. (See also H.R. 2479, Title II.)

⁴¹ This transfer of funds authority was authorized through FY2001 under Section 302(a) of P.L. 104-182, the Safe Drinking Water Act Amendments of 1996. 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."

- H.R. 1647, the Water Infrastructure Trust Fund Act of 2017, would direct the Secretary of the Treasury to establish a voluntary product labeling system informing consumers that the manufacturer, producer, or other stakeholder is participating in the Water Infrastructure Investment Trust Fund and contributing to clean water. The Secretary would provide a label for a fee of 3 cents per unit. Funds would be made available only when the CWSRF appropriation is not less than the preceding five fiscal year average. Funds made available for a fiscal year would be split equally between the DWSRF and CWSRF programs. (This parallels H.R. 4468 from the 114th Congress.)
- H.R. 1653, the Drinking Water Affordability Act, would (1) extend DWSRF loan amortization periods to 30 years post project completion for public water systems generally and to 40 years for disadvantaged communities, (2) increase the portion of DWSRF funds states may use to provide additional subsidization to disadvantaged communities from 30% to 35%, (3) reauthorize state authority to use DWSRF funds for source water assessment and protection activities, (4) direct EPA to exempt water systems from a federal cross-cutting requirement if the Administrator determined that the state had an equivalent requirement, (5) require EPA to review best practices for streamlining the DWSRF loan process and fund administration and to report to Congress, and (6) direct the Government Accountability Office to study and report on the cost-effective and economically feasible rehabilitation or replacement of drinking water infrastructure to meet SDWA goals and an assessment of barriers that preclude use of materials and technologies identified in the study.
- H.R. 1673, the Water Affordability, Transparency, Equity, and Reliability Act of 2017, includes provisions to (1) establish a trust fund with funds going to EPA to support CWA and SDWA SRFs and activities and to the U.S. Department of Agriculture for household water well systems; (2) direct EPA to report on water affordability nationwide, discriminatory practices of water and sewer service providers, and water system regionalization; (3) authorize use of DWSRF funds to purchase privately owned community water systems from willing or unwilling sellers; (4) require states to use at least 50% of their capitalization grant to provide additional subsidization to disadvantaged communities; (5) authorize a grant program for repairing or replacing school drinking water coolers to ensure they are lead free; (6) require states to permit recipients of SRF assistance to enter into project labor agreements under the National Labor Relations Act; and (7) make permanent the "Buy American" iron and steel requirement for projects receiving DWSRF assistance.
- H.R. 3009, Sustainable Water Infrastructure Investment Act of 2017, would amend the Internal Revenue Code of 1986 to provide that the volume cap for private activity bonds shall not apply to bonds for drinking water and sewage facilities.
- S. 181 would require the Government Accountability Office to publish a report identifying all federal public works and infrastructure programs and whether a domestic content preference requirement (e.g., iron, steel, and manufactured products) applied and to include a list of programs for which a listed preference requirement does not apply. Generally, once the report was issued, no federal funds or credit assistance could be made available under a deficient program for infrastructure projects unless all iron, steel, manufactured goods, and commodity construction materials used were produced in the United States.

- S. 880, the Made in America Water Infrastructure Act, would expand and make permanent the SDWA provision requiring use of U.S. manufactured iron and steel in projects receiving DWSRF assistance. The bill would apply American iron and steel requirements to maintenance projects (in addition to construction, alteration, and repair projects).
- S. 1137, the Clean Safe Reliable Water Infrastructure Act, includes a sense of Congress that appropriations for the DWSRF and CWSRF should be robust. The bill would increase DWSRF set-aside authority for state implementation of source water protection plans and would apply 40 U.S.C. Chapter 11 to negotiation of DWSRF-assisted contracts for communities serving more than 10,000 individuals. The bill would also authorize EPA's WaterSense Program and authorize combined sewer overflow grants under CWA Section 221.
- S. 1401 would amend the SDWA to address lead in drinking water in schools and day care facilities.

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