

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

#### Mary Tiemann

Specialist in Environmental Policy

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## Summary

The Safe Drinking Water Act (SDWA) Amendments of 1996 authorized a drinking water state revolving loan fund (DWSRF) program to help public water systems finance infrastructure projects needed to comply with federal drinking water regulations and to meet the act's health objectives. Under the program, states receive capitalization grants to make loans to public water systems (privately and publicly owned) for drinking water projects and certain other SDWA activities. Since FY1997, Congress has provided more than \$16 billion for this program, including \$2 billion in the supplemental funding the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5). Through June 2010, the DWSRF program had provided a total of \$14.6 billion in assistance and supported 8,519 projects; with the 20% state match, bond proceeds, and other funds, the program had provided a total of \$20.027 billion in assistance.

The Environmental Protection Agency's (EPA's) latest (2007) survey of capital improvement needs for public water systems indicated that water systems need to invest \$334.8 billion on infrastructure improvements over 20 years to ensure the provision of safe water. EPA reports that this amount is similar to the 2003 needs estimate of \$276.8 billion (\$331.4 billion when adjusted to 2007 dollars). The latest survey reflects continued improvement in the reporting of needs for infrastructure rehabilitation and replacement, and also reporting funding needs related to compliance with SDWA regulations and security-related needs.

Key program issues include the gap between estimated needs and funding; the growing cost of complying with SDWA standards, particularly for small communities; the ability of small or economically disadvantaged communities to afford DWSRF financing; and the broader need for cities to maintain, upgrade, and expand infrastructure unrelated to SDWA compliance.

ARRA provided \$2 billion for the DWSRF program for drinking water infrastructure projects, and \$4 billion for a similar Clean Water SRF to fund municipal wastewater infrastructure projects in the form of capitalization grant loans. Under the DWSRF program, the supplemental funding was also allocated as capitalization grants to the states, which states use to provide financial assistance (subsidized loans and grants) to public water systems for infrastructure projects. The ARRA supplemental funding, and subsequent appropriations, have come with new requirements (such as a 20% reserve for "green" projects and the application of Davis-Bacon prevailing wage requirements to projects receiving any DWSRF funding). States have expressed concern that the added requirements have reduced their ability to determine project priorities, increased project costs, and placed new strains on the state/federal partnership.

In the 112<sup>th</sup> Congress, congressional action has focused on appropriations. For FY2012, the President requested \$999.0 million for the DWSRF program, and Congress provided \$919.4 million in P.L. 112-74 (before applying an across-the-board rescission of 0.16%). In this act, Congress made the green infrastructure reserve discretionary, and expanded the application of Davis-Bacon requirements to the DWSRF program to include FY2012 and all future years. The Administration has requested \$850 million for the program for FY2013. Other approaches to financing water infrastructure also have been proposed. For example, H.R. 402 would establish a National Infrastructure Development Bank, and H.R. 1802 and S. 939 would remove the volume cap on private activity bonds for drinking water and wastewater facilities; the Senate Finance Committee's Surface Transportation Reauthorization bill includes similar provisions.

## Contents

Introduction	1
Program Results	2
DWSRF Allotments and Set-Asides	3
Drinking Water Infrastructure Needs	5
Program Issues	7
Legislative Activity and Issues	
111 <sup>th</sup> Congress	
American Recovery and Reinvestment Act of 2009	
Water Infrastructure Authorizing Bills	
112 <sup>th</sup> Congress	. 11

### Tables

Table 1	Duintrin	Watan Ctat	Darralring	Errad I	D	Erradia	EV1007	EV2012	2
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### Contacts

Author Contact Information	12
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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, EPA has issued regulations for more than 90 contaminants, and all states (except Wyoming) have assumed primary responsibility for administering and enforcing the federal drinking water program. The 104<sup>th</sup> Congress substantially revised the SDWA in 1996 (P.L. 104-182). The amendments were the culmination of a multi-year effort to amend a statute that was widely criticized as having 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 loan fund (DWSRF) program to help public water systems finance projects needed to comply with SDWA regulations. A key provision, Section 1452, authorized a drinking water state revolving loan 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 authorized the Environmental Protection Agency (EPA) to make grants to states. A state uses its annual capitalization grant from EPA to "capitalize" the state's revolving loan fund to provide an ongoing source of water infrastructure funding for communities generally through repayment of loans to the state fund. States must match 20% of their annual grant and develop intended use plans each year indicating how the allotted funds will be used. States may use the DWSRF to provide loans and other assistance to eligible public water systems for expenditures that EPA has determined will facilitate SDWA compliance or significantly further the act's health protection objectives. Eligible projects include installation and replacement of failing 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 also may be eligible. This program is patterned after the Clean Water Act SRF (CWSRF) program for financing municipal wastewater treatment projects that was authorized under the Water Quality Act of 1987.

Public water systems that are eligible to receive DWSRF assistance include community water systems (whether publicly or privately owned) and not-for-profit noncommunity water systems.<sup>1</sup> 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.<sup>2</sup> Because many of the nation's 52,000 community water systems (especially small systems) are privately owned, this limitation has raised issues in such states.

<sup>&</sup>lt;sup>1</sup> 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).

<sup>&</sup>lt;sup>2</sup> 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. In 2003, EPA reported 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, Oklahoma, Tennessee, and Wyoming. Source: U.S. Environmental Protection Agency, *The Drinking Water State* (continued...)

The SDWA as amended authorized appropriations for DWSRF capitalization grants at a level of \$599 million for FY1994 and \$1 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 has continued to receive funding.

For each of FY2008 and FY2009, Congress provided \$829.0 million through regular appropriations acts. The American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5) provided another \$2 billion for water infrastructure projects *via* the DWSRF program, for a combined total of roughly \$2.83 billion for FY2009. (See ARRA discussion in the "Legislative Activity" section below.)

For FY2010, in P.L. 111-88, Congress approved \$1.39 billion for the DWSRF. For FY2011, the President requested \$1.29 billion, and under several continuing resolutions, the program was generally being funded at FY2010 levels (through March 4, 2011, under P.L. 111-322). The full-year continuing resolution (P.L. 112-10) reduced the level to \$965.0 million for FY2011 (\$963.1 million after applying an across-the-board rescission of 0.2%).

For FY2012, the President requested \$999.0 million, and Congress provided (P.L. 112-74) \$919.4 million, before applying an across-the-board rescission of 0.16%. This amount brings cumulative DWSRF program appropriations to some \$16.4 billion for FY1997 through FY2012. For FY2013, the President has requested \$850 million. **Table 1** provides annual funding levels for the program since its inception in 1997.

#### **Program Results**

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 of the states over time. Through June 2010, cumulative funding for federal capitalization grants provided in annual appropriations reached \$12.3 billion. When combined with the 20% state match, bond proceeds, loan principal repayments, and other funds, a total of \$19.8 billion in DWSRF funds was available for loans and other assistance during this time frame. Also through June 2010, 8,519 projects had assistance agreements, and 5,248 of these projects had been completed; total assistance provided by the program reached \$20.027 billion.<sup>3</sup>

<sup>(...</sup>continued)

*Revolving Fund Program: Financing America's Drinking Water from the Source to the Tap, Report to Congress*, EPA-918-R-03-009, May 2003, pp. 36-37, http://www.epa.gov/ogwdw/dwsrf/pdfs/dwsrf\_congressreport-main.pdf.

<sup>&</sup>lt;sup>3</sup> Program statistics are available at http://www.epa.gov/safewater/dwsrf/dwnims.html. For further discussion of the DWSRF program, see EPA Report to Congress, *Drinking Water State Revolving Fund: Investing in a Sustainable Future*, EPA 816-R-08-002, March 2008, http://www.epa.gov/safewater/dwsrf.html.

Table I. Drinking Water	State Revolving Fund Program Funding,
	FY1997-FY2012

Fiscal Year	Authorizations	Appropriations
1997	\$1,000.0	\$1,275.0
1998	\$1,000.0	\$725.0
1999	\$1,000.0	\$775.0
2000	\$1,000.0	\$816.9
2001	\$1,000.0	\$823.2
2002	\$1,000.0	\$850.0
2003	\$1,000.0	\$844.5
2004	—	\$845.0
2005	—	\$843.2
2006	—	\$837.5
2007	—	\$837.5
2008	—	\$829.0
2009	—	\$829.0
2009 ARRA Supplemental		\$2,000.0
2010	—	\$1,387.0
2011	—	\$963.1
2012	—	\$919.4
2013 (request)	—	(\$850.0)
Total		\$16,399.0ª

(in millions of dollars, nominal dollars not adjusted for inflation)

**Sources:** Prepared by CRS using the most recent 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 OMB, and EPA's accompanying annual congressional budget justifications. "ARRA" refers to the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). FY2012 enacted amounts are as presented in P.L. 112-74 and the conference report (H.Rept. 112-331), which do not reflect a 0.16% across-the-board rescission required in Section 436 of P.L. 112-74. EPA is directed to apply this rescission to the amounts specified in the law.

a. Funds available to states are reduced by amounts EPA sets aside from the annual appropriation. For example, EPA reserved \$2 million to reimburse small systems for monitoring for unregulated contaminants, and 1.5% for grants to Indian tribes (roughly \$19.26 million for FY2011).

## **DWSRF** Allotments and Set-Asides

Under SDWA Section 1452(a)(1), EPA is required to allot DWSRF funds among the states based on the results of the most recent quadrennial needs survey (discussed below). Each state and the District of Columbia must receive at least 1% of available funds, and as much as 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.<sup>4</sup> Before distributing funds among the states, EPA sets aside from the annual DWSRF appropriation \$2 million to pay for monitoring of unregulated contaminants in small and medium systems, and 1.5% for grants to Indian tribes and Alaska Native Villages (\$12.26 million for FY2011). EPA is also authorized to reserve annually up to \$30 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 million cap; however, funding for this activity is provided under Section 1442, and EPA has not set aside funds for this purpose.<sup>5</sup>

The SDWA also includes several set-asides and directives that apply to 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 grant to provide additional assistance, such as forgiveness of loan principal or negative interest rate loans, to help economically disadvantaged communities (as determined by the state).

Among other optional set-aside provisions, states may reserve as much as 4% of their DWSRF allotment to cover the costs of administering the DWSRF program and an additional portion to help pay the costs of other mandates added by the 1996 amendments. Specifically, states may set aside as much as 10% for a combination of the following: public water system supervision programs, technical assistance through source water protection programs, state capacity development strategies, and operator certification programs. To use DWSRF funds for these purposes, states must match these 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 systems as part of a capacity development strategy; and development and implementation of ground water protection programs. Expenditures may not exceed 10% for any one of these activities. (Other SDWA provisions include funding authority for several of these programs and activities.)

To further enhance public water system compliance, the 1996 amendments added new 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

<sup>&</sup>lt;sup>4</sup> For FY2010, Congress authorized EPA to reserve up to 1.5% of the appropriated DWSRF funds for territories (P.L. 111-88).

<sup>&</sup>lt;sup>5</sup> DWSRF state-by-state allotments and set-asides are available at EPA's website, http://www.epa.gov/safewater/dwsrf/ allotments/index.html.

coming into compliance.<sup>6</sup> States also were 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. Congress provided states flexibility in setting priorities between the SDWA and Clean Water Act SRF programs to accommodate the divergent drinking water and wastewater needs and priorities among the states. The SDWA 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. Subsequent conference reports to accompany EPA fiscal year appropriations have authorized states to continue transferring funds between these programs.

## **Drinking Water Infrastructure Needs**

SDWA Section 1452(h) requires EPA to assess the capital improvement needs of eligible public water systems and to report to Congress every four years.<sup>7</sup> 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 (§1452(i)).<sup>8</sup> EPA is required to distribute the DWSRF funds to the states based on the results of the latest needs survey. Eligible systems include nearly 53,000 community water systems (publicly or privately owned) and 21,400 not-for-profit nontransient noncommunity water systems.

EPA conducted its third survey of capital improvement needs for public water systems in 2003.<sup>9</sup> Based on this survey, EPA estimated that systems needed to invest \$276.8 billion on drinking water infrastructure improvements over 20 years to comply with drinking water regulations and/or to ensure the provision of safe water. EPA reported that the amount exceeded the 2001 needs survey estimate of \$165.5 billion (in 2003 dollars) by more than 60%. EPA attributed the large increase to several factors. The 2003 survey included funds needed for compliance with several regulations (including the revised arsenic and radium rules) and pending rules for radon and other contaminants. It also identified \$1 billion in security-related needs. Most significantly, water systems made efforts to improve their reporting of needs for infrastructure rehabilitation and replacement, which EPA determined had been under-reported in the previous surveys.

Issued in 2009, the latest (2007) needs survey estimated that public water systems need to invest \$334.8 billion on infrastructure improvements over 20 years (2007 through 2026) to achieve regulatory compliance and ensure the provision of safe water. EPA reported that this amount is similar to the 2003 needs estimate of \$331.4 billion, when adjusted to 2007 dollars. The agency noted that the survey reflects the use of more consistent methodologies for needs estimation

<sup>&</sup>lt;sup>6</sup> 42 U.S.C. §300g-9.

<sup>&</sup>lt;sup>7</sup> 42 U.S.C. §300j-12(h).

<sup>&</sup>lt;sup>8</sup> 42 U.S.C. §300j-12(i).

<sup>&</sup>lt;sup>9</sup> Environmental Protection Agency, *Drinking Water Infrastructure Needs Survey and Assessment: Third Report to Congress*, June 2005. EPA 816-R-05-001. This and earlier needs surveys are available online at http://www.epa.gov/safewater/needssurvey/index.html.

among the states, and continued improvements in reporting of needs related to infrastructure rehabilitation and replacement.<sup>10</sup>

Although all of the infrastructure projects in the needs assessment would promote the health objectives of the act, EPA reported that just 16% (\$52.0 billion) of the funding needed was attributable to SDWA regulations, while \$282.8 billion (84%) represented nonregulatory costs. 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. These system problems often do not cause a violation of a drinking water standard, but projects to correct infrastructure problems may be eligible for DWSRF funding if needed to address public health risks. Projects attributable to SDWA regulations (including proposed regulations) typically involve the upgrade, replacement, or installation of treatment technologies.

The survey presented the 20-year needs estimates by category: transmission and distribution, treatment, source, storage, and other. The largest needs category, installation and rehabilitation of transmission and distribution systems, accounted for \$200.8 billion (60%) of total 20-year needs. Water treatment needs constituted the next largest category, accounting for \$75.1 billion (22%) of total needs, while water storage accounts for \$36.9 billion (11%), and source (projects needed to obtain safe water supplies, including rehabilitation and installation of wells) accounts for \$19.8 billion (6%) of total 20-year needs.

The 2007 Needs Survey also included \$422.0 million for projects to address security needs. However, EPA concluded that security-related needs were underestimated, as many water systems incorporate these costs into the costs of broader construction projects rather than report them separately.

For further perspective, the needs survey breaks down the 20-year needs estimates according to system size and ownership. Large community water systems (serving more than 100,000 people) accounted for \$116.3 billion (36%) of total 20-year need; medium systems (serving from 3,301 to 100,000 people) accounted for \$145.1 billion (45%); and small systems (serving 3,300 or fewer people) accounted for \$59.4 billion (19%). Not-for-profit noncommunity water systems have estimated needs of \$4.1 billion. American Indian and Alaska Native Village water systems have combined estimated 20-year needs of \$2.9 billion. The estimated needs reported by American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands totaled \$889.4 million.

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.

Other needs assessments have also been prepared, including EPA's 2002 Gap Analysis. This study identified potential funding gaps between projected needs and spending from 2000 through 2019. EPA estimated a potential 20-year funding gap for drinking water capital and operations and

<sup>&</sup>lt;sup>10</sup> Environmental Protection Agency, 2007 Drinking Water Infrastructure Needs Survey and Assessment: Fourth Report to Congress, EPA 816-R-09-001, March 2009, http://www.epa.gov/safewater/needs.html.

maintenance ranging from \$45 billion to \$263 billion, depending on different scenarios.<sup>11</sup> (For more information on this study and other needs assessments, see CRS Report RL31116, *Water Infrastructure Needs and Investment: Review and Analysis of Key Issues*, by Claudia Copeland and Mary Tiemann.)

## **Program Issues**

With the authorization of the DWSRF program, Congress acted to help public water systems finance infrastructure projects needed to achieve or maintain compliance with SDWA requirements and 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 2007 needs survey identified \$334.8 billion in drinking water infrastructure needs over 20 years, while the DWSRF program was authorized at \$9.6 billion over seven years (FY1997-FY2003). The appropriated amounts, 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 requirements are expected to drive up future estimates of 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 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, and small system technical assistance. Overall, states may use as much as 31% of their grant for the set-asides and another 30% to provide loan subsidies to economically disadvantaged communities. While these options offer states flexibility to tailor their programs to meet individual 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 instead of providing separate appropriations, the potential of the DWSRF program is diminished.

Perhaps a larger issue is the need for communities to address drinking water infrastructure needs that are outside the scope of the DWSRF program. Communities typically must address several categories of infrastructure requirements 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 (2007) drinking water needs assessment, just 16% of the 20-year estimated need is attributable to SDWA regulations. Although the DWSRF program does not address certain categories of needs and excludes many noncommunity water systems from coverage, with this program Congress has added a major tool to the mix of federal, state, and local initiatives intended to help communities ensure the safety of water supplies.

<sup>&</sup>lt;sup>11</sup> U.S. Environmental Protection Agency, *Clean Water and Drinking Water Infrastructure Gap Analysis Report*, EPA 816-R-02-020, September 2002.

## Legislative Activity and Issues

In recent years, House and Senate committees have held hearings on the clean water and drinking water SRF programs, infrastructure needs, and funding issues and options. Funding bills have been introduced repeatedly. A fundamental and persistent question has concerned the long-term federal role in water infrastructure financing. A newer subset of questions concerns how the latest recession, economic recovery efforts, and deficit reduction efforts might affect the type and level of federal involvement. For example, how might deficit reduction objectives impact recent congressional efforts 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 economically disadvantaged communities to afford DWSRF financing; and the broader need for cities to maintain, upgrade, and expand infrastructure unrelated to SDWA compliance. Another issue for the states concerns the new requirements, not present in the SDWA, that Congress has imposed on state capitalization grants through ARRA and subsequent appropriations acts. These include a 20% Green Project Reserve and Davis-Bacon prevailing wage conditions. (See discussion below.)

Despite ongoing legislative interest, budgetary constraints and other concerns have posed challenges to efforts to enact new water infrastructure funding legislation. In the face of large needs, scarce federal resources, and debate over the federal role in funding water infrastructure, EPA, states, 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 meant 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. Consequently, interest in exploring new infrastructure financing options—such as an infrastructure bank—and expanding federal assistance has persisted.

### 111th Congress

In the 111<sup>th</sup> Congress, water infrastructure funding issues received early attention in the context of economic stimulus proposals. Consideration of such proposals raised a number of issues. For example, how might project readiness be balanced against traditional program priorities? Given multiple considerations—including speed and efficiency in creating jobs, public health need, economic need, or ensuring urban/rural equity or equity among the states—how would priorities be set? And how many projects were shoveled ready? The American Water Works Association estimated that at least \$10 billion in drinking water infrastructure projects were "ready to go" and could move forward rapidly given funding.<sup>12</sup> The U.S. Conference of Mayors estimated that \$15.36 billion in identified "ready to go" water and wastewater projects could generate 133,000 jobs.<sup>13</sup> Although much uncertainty surrounded estimates associated with the potential benefits of a stimulus package, the backlog of water infrastructure projects was much larger than any proposed

<sup>&</sup>lt;sup>12</sup> American Water Works Association, *Massive Stimulus Program Being Readied; Congress Needs to Hear from Drinking Water Sector*, Washington, DC, Report, December 11, 2008.

<sup>&</sup>lt;sup>13</sup> U.S. Conference of Mayors, Mainstreet Economic Recovery, "Ready to Go" Jobs and Infrastructure Projects, p. 1.

level of funding. Water sector advocates asserted that stimulus funding was especially needed to address a nationwide backlog of projects pending that had been hampered by the credit crisis.

#### American Recovery and Reinvestment Act of 2009

The stimulus debate resulted in the supplemental appropriations package, the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5). ARRA included \$2 billion for drinking water infrastructure projects to be administered through the DWSRF program, and \$4 billion for wastewater infrastructure projects through the Clean Water SRF program. Congress waived the 20% state match requirement for these grants. ARRA required states to use at least 50% of the funds to further subsidize loans (including forgiveness of principal, negative interest loans, and grants) to eligible recipients. States also were required to reserve at least 20% of the funds for green infrastructure, water efficiency improvements, or other environmentally innovative projects. A key program change was that ARRA applied Davis-Bacon prevailing wage requirements to construction projects that received assistance of any kind from these funds. (This requirement had not been applied previously to the DWSRF program.)<sup>14</sup> The act also required American steel, iron, and manufactured goods to be used in construction and repair of water infrastructure projects that received ARRA funding.

ARRA provided that, notwithstanding the existing state project rankings, priority for the supplemental funding would go to projects on state priority lists that were ready to proceed to construction within 12 months of enactment (by February 17, 2010). The EPA administrator was directed to reallocate funds that were not under contract or construction by that date. All states met this deadline, and no funds were redistributed.<sup>15</sup>

#### Water Infrastructure Authorizing Bills

Beyond the stimulus debate, drinking water and other water infrastructure issues received attention. In 2009, the Senate Environment and Public Works Committee reported, amended, S. 1005, the Water Infrastructure Financing Act (S.Rept. 111-47). The bill was similar to this committee's measure in the previous Congress, proposing to authorize \$20 billion over five years for clean water SRF capitalization grants and \$14.7 billion over five years for DWSRF capitalization grants. As discussed, the states use their annual capitalization grants from EPA to "capitalize" the state revolving loan fund to provide an ongoing source of water infrastructure funding for communities generally through repayment of loans to the state. S. 1005 also would have authorized new grant programs for critical water quality and drinking water infrastructure

<sup>&</sup>lt;sup>14</sup> The Department of the Interior, Environment, and Related Agencies Appropriations Act, 2010 (P.L. 111-88), included \$1.387 billion for the DWSRF program, and applied Davis-Bacon prevailing wage requirements to these FY2010 funds. Specifically, the act contains the following language in Title 11 under the heading, "Administrative Provisions, Environmental Protection Agency": "For fiscal year 2010 the requirements of section 1450(e) of the Safe Drinking Water Act (42 U.S.C. 300j-9(e)) shall apply to any construction project carried out in whole or in part with assistance made available by a drinking water treatment revolving loan fund as authorized by section 1452 of that Act (42 U.S.C. 300j-12)."

EPA guidance on this Davis-Bacon provision extended coverage to include all assistance agreements concluded during FY2010, regardless of the source of funding. For more information, see CRS Report R41469, *Davis-Bacon Prevailing Wages and State Revolving Loan Programs Under the Clean Water Act and the Safe Drinking Water Act*, by Gerald Mayer and Jon O. Shimabukuro.

<sup>&</sup>lt;sup>15</sup> For additional information and discussion, see CRS Report R40216, *Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009*, by Claudia Copeland, Megan Stubbs, and Charles V. Stern.

projects. During markup, the committee adopted several amendments, including one to specify that the Davis-Bacon Act prevailing wage requirement would apply to all projects financed in whole or in part through a clean water or drinking water SRF. Davis-Bacon language was not included in the bill as introduced. The full Senate did not take up the reported bill.

The Senate Environment and Public Works Committee had reported a water infrastructure financing bill in each of the four preceding Congresses. The application of Davis-Bacon requirements to the DWSRF program has been one of the policy issues that have hampered further action on these bills. Additionally, a jurisdictional issue has been that, while the Senate committee has jurisdiction over both the Clean Water Act (CWA) and Safe Drinking Water Act, this jurisdiction is split in the House between the Energy and Commerce Committee (SDWA) and the Transportation and Infrastructure Committee (CWA).<sup>16</sup> The House Transportation and Infrastructure Committee reported and the House passed clean water SRF legislation (H.R. 1262) in the 111<sup>th</sup> Congress, which proposed to make the clean water SRF more similar to the DWSRF. The DWSRF is a newer, more flexible program, and in the past several years no companion reauthorization bill for the DWSRF had been offered in the House. In July 2010, the House passed one such bill, the Assistance, Quality, and Affordability Act of 2010 (H.R. 5320, H.Rept. 111-524). As passed, H.R. 5320 would have reauthorized the DWSRF for three years (for a total of \$ 4.8 billion), applied Davis-Bacon prevailing wage provisions to projects financed in any way by a DWSRF, specified certain eligible uses of the fund (such as rehabilitation of aging infrastructure and projects that improve energy or water efficiency), and made other changes to this program and the act more broadly. The bill proposed to expand DWSRF program priorities to include projects designed to improve the economic and environmental sustainability and longterm viability of water systems. H.R. 5320 was referred to the Senate Environment and Public Works Committee, where no further action occurred.

The Water Protection and Reinvestment Act, H.R. 3202, as proposed in the 111<sup>th</sup> Congress would have established a dedicated water infrastructure trust fund supported by specified product and corporate taxes rather than general revenues. The trust fund was to be supported by taxes on a range of products that can affect water quality or treatment costs, such as pharmaceuticals and personal care products (PPCPs). The bill also would have imposed taxes on water-based beverages and some corporate profits.

Related legislation in the 111<sup>th</sup> Congress included companion bills H.R. 537 and S. 3262, the Sustainable Water Infrastructure Investment Act of 2009. These bills would have amended the Internal Revenue Code of 1986 to provide that the volume cap for private activity bonds (PABs) would not apply to bonds for water supply or wastewater facilities. A key purpose of this legislation was to provide alternative financing for water infrastructure investments. The House Ways and Means Committee reported the Small Business and Infrastructure Jobs Tax Act of 2010 (H.R. 4849, H.Rept. 111-447), which incorporated the text of H.R. 537 to lift the state volume cap on tax-exempt PABs for water or wastewater treatment facilities. The House passed the bill, but no further action occurred during the 111<sup>th</sup> Congress.

<sup>&</sup>lt;sup>16</sup> For a discussion of Clean Water Act legislation, see CRS Report R40098, *Water Quality Issues in the 111<sup>th</sup> Congress: Oversight and Implementation*, by Claudia Copeland.

#### 112<sup>th</sup> Congress

Congressional attention thus far in the 112<sup>th</sup> Congress has focused largely on appropriations bills. For FY2011, the full-year continuing resolution (P.L. 112-10, Division B, Title VII, §1738) provided \$965 million for the DWSRF program (\$963.1 million after applying the required across-the-board rescission of 0.2%).<sup>17</sup> For FY2012, the President requested \$999.0 million, and, in P.L. 112-74, Congress provided \$919.4 million (before applying the 0.16% across-the-board rescission). In the FY2012 appropriations, Congress further expanded the application of Davis-Bacon to the DWSRF program:<sup>18</sup> "For fiscal year 2012 and each fiscal year thereafter, the requirements of section 1450(e) of the Safe Drinking Water Act (42 U.S.C. 300j-9(e)) shall apply to any construction project carried out in whole or in part with assistance made available by a drinking water treatment revolving loan fund as authorized by section 1452 of that Act (42 U.S.C. 300j-12)."

As discussed, the application of Davis-Bacon prevailing wage requirements to construction projects funded in any part by DWSRF funds is one of the recently added appropriations conditions criticized by state financing and regulatory authorities and others for limiting state program flexibility. This requirement had not been applied historically to this program, although many states have similar requirements. The FY2012 appropriations also modified the green infrastructure reserve requirement first added in 2009 ARRA. The green project reserve was reduced from 20% to 10% for the Clean Water SRF and was made discretionary for states under the DWSRF. The act also applies Buy American requirements to SRF construction projects.

In addition to appropriations, other legislation concerning infrastructure funding has also been offered. As in the previous Congress, legislation has been introduced to remove the volume cap on private activity bonds (PABs) for drinking water and wastewater facilities. These tax-exempt bonds provide a financing tool to stimulate private sector investment in public projects. 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.<sup>19</sup> The Sustainable Water Infrastructure Investment Act of 2011 (H.R. 1802 and S. 939) would remove the cap to:

accelerate and increase overall investment in the Nation's critical water infrastructure; facilitate increased use of innovative infrastructure delivery methods supporting sustainable water systems through public-private partnerships that optimize design, financing, construction, and long-term management, maintenance and viability; and provide for more effective risk management of complex water infrastructure projects by municipal utility and private sector partners.

Supporters note that the proposed legislation would expand opportunities for private investment in the water infrastructure market and generate significant private capital at a very low cost to the

<sup>&</sup>lt;sup>17</sup> The rescission is required per Division B, Title I, §1119 of P.L. 112-10.

<sup>&</sup>lt;sup>18</sup> U.S. Congress, House, Conference Report, *Military Construction and Veterans Affairs and Related Agencies Appropriations Act, 2012*, 112<sup>th</sup> Cong., 1<sup>st</sup> sess., December 15, 2011, H.Rept. 112-331, p. 236.

<sup>&</sup>lt;sup>19</sup> 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. For a review of private activity bonds, caps, qualified programs, and congressional action, see CRS Report RL31457, *Private Activity Bonds: An Introduction*, by Steven Maguire.

government.<sup>20</sup> Others argue against subsidies, generally, and the loss of revenue that would result from such an approach. Congress generally has limited the use of tax-exempt bonds for private activities because of concern about their overuse.

Other legislation that would impact water infrastructure projects includes H.R. 1684, the Keep American Jobs from Going Down the Drain Act. This bill would amend the SDWA and the Clean Water Act to largely prohibit the use of SRF funds for water project construction, alteration, maintenance, or repair unless the steel, iron, and manufactured goods used in the project are produced in the United States. The provisions essentially codify the Buy American requirements contained in the ARRA supplemental appropriations and subsequent appropriations.

H.R. 395, the Healthy Communities Water Supply Act of 2011, would amend the Clean Water Act to extend the authorization of appropriations for the pilot program for alternative water source projects. This bill also would require the EPA administrator, when making grants under the program, to consider whether a project is located in an area which is served by a public water system serving 10,000 individuals or fewer. Similar to bills in the past four Congresses, the Small System Drinking Water Act (S. 999) proposes an alternate approach to address the chronic shortage of drinking water infrastructure funding relative to needs, particularly among small, rural communities: S. 999 would amend the SDWA to prevent the enforcement of certain drinking water regulations unless adequate funding was available.

Taking a different funding approach from the SRF programs, H.R. 402 and H.R. 3259/S. 1550 would establish a national infrastructure development bank that would be used to fund water, transportation, and other infrastructure.

The debate over debt reduction will likely be a key factor influencing the outcome of any infrastructure financing proposals in this Congress.

### **Author Contact Information**

Mary Tiemann Specialist in Environmental Policy mtiemann@crs.loc.gov, 7-5937

<sup>&</sup>lt;sup>20</sup> See, for example, National Utility Contractors Association, *Clean Water Council and Sustainable Water Infrastructure Investment Coalition Talk Strategy*, 2011, http://www.nuca.com/i4a/pages/index.cfm?pageid=2615.