Congressional Research Service
Informing the legislative debate since 1914

Infrastructure Investment and Jobs Act: Drinking Water and Wastewater Infrastructure

September 1, 2021

Congressional Research Service
https://crsreports.congress.gov
R46892

CRS REPORT
Prepared for Members and
Committees of Congress

Congressional Research Service
Informing the legislative debate since 1914

SUMMARY

R46892

September 1, 2021

Elena H. Humphreys
Analyst in Environmental Policy

Jonathan L. Ramseur
Specialist in Environmental Policy

Infrastructure Investment and Jobs Act: Drinking Water and Wastewater Infrastructure

In recent years, multiple events have increased attention to the condition of the nation's local drinking water and wastewater infrastructure, and the financial challenges that communities confront in maintaining, repairing, or replacing aging water infrastructure. The U.S. Environmental Protection Agency (EPA) estimates that the capital cost of wastewater and drinking water infrastructure needed to meet federal water quality and safety requirements and public health objectives exceeds $744 billion over a 20-year period.

Congressional interest in expanding federal funding for local drinking water and wastewater infrastructure has also increased in recent years. Recent legislation has focused on a number of themes, including affordability of local water infrastructure projects in low-income communities, the creation of new grant programs to address specific objectives, and increased funding for the existing grant programs that address certain types of projects, including lead reduction, resilience, and stormwater management. At the same time, appropriations for various federal financial assistance programs have increased in recent years. These programs include the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) programs, authorized under the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA), respectively.

In the 117th Congress, the American Rescue Plan Act (ARPA; P.L. 117-2), enacted March 11, 2021, provided $350 billion in grants for state and local governments for Coronavirus Disease 2019 (COVID-19)-related purposes, which can include water or sewer infrastructure investments. The U.S. Department of the Treasury's interim final rule implementing this funding allocation stated that the eligibility of water or sewer projects would align with eligibility of projects in the SRF programs.

Both chambers have passed legislation that would support water infrastructure activities. The House-passed INVEST Act (H.R. 3684) would authorize several targeted EPA-administered grant programs for wastewater or drinking water infrastructure, and would amend the SDWA process EPA uses to regulate contaminants in drinking water. The Senate-passed Drinking Water and Wastewater Infrastructure Act of 2021 (S. 914) would create multiple EPA-administered grant programs, under both the CWA and SDWA. On August 10, 2021, the Senate passed the Infrastructure Investment and Jobs Act (IIJA) as a substitute amendment (S.Amdt. 2137) to H.R. 3684. Division E of IIJA includes many of the drinking water and wastewater provisions from S. 914. In addition to authorizing numerous EPA-administered infrastructure grant programs and amending existing programs, IIJA would provide emergency supplemental appropriations for drinking water and wastewater infrastructure.

This report discusses the drinking water and wastewater infrastructure provisions in IIJA (as passed by the Senate on August 10, 2021). Drinking water and wastewater-relevant provisions of the bill include the following:

- Emergency supplemental appropriations to the SRF programs, which would represent a substantial increase over recent regular appropriations for these programs; in particular, the level of DWSRF appropriations would average $6.14 billion per fiscal year, nearly six times the level of recent DWSRF annual appropriations; the majority of the supplemental funding for the DWSRF program would be dedicated to lead line replacement.
- Nearly half of the supplemental funding for the SRF programs would be directed to principal forgiveness or grants, in contrast to subsidized loans, the traditional instrument of the SRF programs.
- Supplemental appropriations to address emerging contaminants: $4 billion for the DWSRF program and $1 billion for the CWSRF program over five fiscal years.
- Authority for EPA to establish multiple new grant programs to address a range of specific objectives, including assistance to specific communities, improvements in resilience to natural hazards and cybersecurity vulnerabilities, among others.
- Modifications in funding authority and eligibility to several existing EPA funding programs, including the SRF programs and grant programs that address specific concerns, including affordability.

Contents

Introduction 1
Wastewater Infrastructure and Drinking Water Financial Assistance: A Brief History 4

Figures

Figure 1. CWSRF and DWSRF Appropriations: FY2000-FY2021 7

Tables

Table 1. Proposed Infrastructure Investment and Jobs Act: Emergency Supplemental Appropriations for EPA Water Infrastructure Programs 8
Table 2. Proposed Infrastructure Investment and Jobs Act: Drinking Water and Wastewater Infrastructure Provisions in Division E 11

Contacts

Author Information 25

Introduction

In recent years, multiple events have increased attention to the condition of the nation's local drinking water and wastewater infrastructure, and the financial challenges that communities confront in maintaining, repairing, or replacing aging water infrastructure. Such events include elevated lead levels in the drinking water in Flint, MI, Newark, NJ, and other older cities; local water infrastructure damage from hurricanes, winter storms, or other natural hazards; and detection of unregulated contaminants that may require installation of additional treatment.

In many communities, water distribution, wastewater collection, and treatment systems may require repair or replacement to maintain levels of service and comply with relevant water treatment requirements.[1] An overarching issue is deferral, for a range of reasons, of local investment in water infrastructure.

The U.S. Environmental Protection Agency (EPA) provides periodic reports that estimate the capital cost of wastewater and drinking water infrastructure needs. EPA's most recent report on drinking water indicates that public water systems need to invest $473 billion on infrastructure improvements over 20 years to ensure the provision of safe drinking water.[2] A broader water infrastructure survey conducted by the American Water Works Association estimated that, for drinking water alone, the cost to repair aging infrastructure and expand water service to meet growing demand would be $1 trillion over 20 years.[3] EPA's report on wastewater estimates that the nation's wastewater treatment facilities will need $271 billion over the next 20 years to meet federal water quality objectives.[4]

Congressional interest in drinking water and wastewater infrastructure issues has generally increased in recent years. As a reflection of this interest, Congress has increased appropriations in recent years for several financial assistance programs administered by EPA. These programs include the Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) programs, established under the Clean Water Act (CWA)[5] and the Safe Drinking Water Act (SDWA),[6] respectively. Recent legislation has focused on a number of themes, including affordability of local water infrastructure projects in low-income communities, the

[1] See, for example, American Water Works Association, *Buried No Longer: Confronting America's Water Infrastructure Challenge*, 2012, https://www.awwa.org/Portals/0/AWWA/ETS/Resources/BuriedNoLonger2012.pdf?ver=2020-09-21-095318-407.

[2] EPA reports that, while all of the projects identified in the survey would promote SDWA health protection objectives, $57.6 billion (12%) of reported needs are attributable to SDWA compliance. See EPA, *Drinking Water Infrastructure Needs Survey and Assessment: Sixth Report to Congress*, 2018, https://www.epa.gov/dwsrf/what-infrastructure-needs-survey-and-assessment.

[3] American Water Works Association (AWWA), "Buried No Longer: Confronting America's Water Infrastructure Challenge," 2012. Unlike EPA's drinking water needs assessment, the AWWA estimate included the cost for additional distribution lines investments anticipated to meet projected population growth, regional population shifts, and service area growth through 2050, as well as the costs for investments needed for statutory compliance and repairs to aging water infrastructure.

[4] EPA, Clean Watersheds Needs Survey (CWNS) Report to Congress—2012, 2016, https://www.epa.gov/cwns.

[5] The statutory name for the Clean Water Act is the Federal Water Pollution Control Act, as amended, codified at 33 U.S.C. §§1231-1387. The current act took much of its current form after enactment of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500), which established the Title II construction grants program (although prior versions of the act had authorized less ambitious grants assistance since 1956).

[6] SDWA is codified generally at 42 U.S.C. §§300f-300j.

creation of new grant programs, and increased funding to existing programs that address specific objectives (e.g., lead reduction, increased resilience, or stormwater management).

In the 117th Congress, the American Rescue Plan Act (ARPA; P.L. 117-2), enacted March 11, 2021, provided $350 billion in grants for state and local governments for Coronavirus Disease 2019 (COVID-19)-related purposes, which can include water or sewer infrastructure investments.[7] ARPA assigned responsibility for the distribution of this funding to the Secretary of the Treasury. The U.S. Department of the Treasury's interim final rule stated that the eligibility of water or sewer projects would align with eligibility of projects in the SRF programs.[8] The act also provided $500 million to assist low-income households with their water and wastewater services bills.[9]

Both chambers in the 117th Congress have passed legislation that include numerous water and wastewater infrastructure program and funding provisions. On April 29, 2021, the Senate passed the Drinking Water and Wastewater Infrastructure Act of 2021 (S. 914). The bill would authorize multiple EPA-administered grant programs, under both the CWA and SDWA, and would extend and increase the authorizations of appropriations for the CWSRF and DWSRF and other existing programs.

On July 1, 2021, the House passed the INVEST in America Act (H.R. 3684), which would authorize several new EPA-administered grant programs for wastewater or drinking water infrastructure and would authorize substantial increases in funding for existing programs.[10] It would also amend the SDWA process EPA uses to regulate contaminants in drinking water, among other provisions.

On August 10, 2021, the Senate passed the Infrastructure Investment and Jobs Act (IIJA) as a substitute amendment (S.Amdt. 2137) to H.R. 3684.[11] This broad infrastructure measure is both an authorizing bill and an appropriations bill.[12] Division E of IIJA includes many of the drinking water and wastewater provisions from S. 914. In addition to authorizing numerous EPA-administered infrastructure grant programs and amending existing programs and providing authorizations of appropriations for these programs, IIJA would provide emergency supplemental appropriations[13] in EPA's State and Tribal Assistance Grants (STAG) account for drinking water

[7] These funds are not administered by EPA, but by the U.S. Department of Treasury.

[8] U.S. Department of Treasury, "Coronavirus State and Local Fiscal Recovery Funds," 86 *Federal Register* 26786-26824, May 17, 2021.

[9] ARPA §2912; for more information, see CRS Insight IN11642, *Water Service Issues and COVID-19: Recent Congressional Funding*, by Elena H. Humphreys and Libby Perl.

[10] For example, the House-passed INVEST Act would authorize $8 billion annually for FY2022 through FY2026 for the CWSRF (§12018); for the DWSRF program, the act would authorize $4.1 billion for FY2022, $4.8 billion for FY2023, and $5.5 annually for FY2024 through FY2031 (§13106). In comparison to the Senate-passed IIJA, the House-passed bill would not provide emergency supplemental appropriations.

[11] Some Members and stakeholders refer to this legislation as the "bipartisan infrastructure deal."

[12] Congress has established a process that provides for two separate types of measures—authorization measures and appropriation measures. These measures perform different functions. Authorization acts establish, continue, or modify agencies or programs. For example, an authorization act may establish or modify EPA programs, such as the SRF programs. An authorization act may also explicitly authorize subsequent appropriations for specific agencies and programs, frequently setting spending ceilings for them. See, CRS Report R42388, *The Congressional Appropriations Process: An Introduction*, coordinated by James V. Saturno.

[13] In addition to the amounts provided in a regular appropriations measure, Congress may enact additional funding for selected activities in the form of one or more supplemental appropriations measures. In general, supplemental funding may be enacted to address cases where resources provided through the annual appropriations process are determined to be inadequate or not timely.

and wastewater infrastructure. This funding would include emergency supplemental appropriations for the DWSRF and CWSRF, among other grant programs.[14]

While the emergency supplemental SRF appropriations in IIJA would be spread over five fiscal years (FY2022 through FY2026), the scale of appropriations for the SRF programs would represent a substantial increase over recent regular appropriations, particularly for the DWSRF program. Between FY2017 and FY2021, annual appropriations acts have provided an average of $1.1 billion in DWSRF appropriations per fiscal year, and an average of $1.6 billion in CWSRF appropriations per fiscal year. While some DWSRF appropriations in IIJA are directed for specific purposes (e.g., grants for lead service line replacement and for addressing unregulated contaminants), the level of DWSRF appropriations would average $6.14 billion per fiscal year, nearly six times the level of recent DWSRF annual appropriations.

The 117th Congress continues to consider regular appropriations for water infrastructure programs. H.R. 4372, as reported (H.Rept. 117-83), would provide $1.87 billion in CWSRF appropriations and $1.36 billion in DWSRF appropriations for FY2022. Taken together, the proposed emergency supplemental and regular SRF appropriations would comprise a significant increase in federal funding for drinking water and wastewater infrastructure. In addition, some states and localities may choose to use a portion of their ARPA COVID-19-related allotment for water infrastructure, as discussed above.

Oversight of these proposed increases in federal financial assistance for local drinking water and wastewater infrastructure projects may be of congressional interest. In IIJA, a percentage of appropriations are reserved for the EPA's Office of Inspector General (OIG). In addition to the Administration's oversight through the EPA OIG, oversight of such funds could be provided through congressional committee activities or a legislative support agency, such as the U.S. Government Accountability Office (GAO).[15] Other types of congressional oversight include authorizing specific administrative bodies such as the Recovery Accountability and Transparency Board, which was established to oversee emergency supplemental appropriations made by the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5).[16]

The first section of this report provides a brief history of the primary financial assistance programs for drinking water and wastewater infrastructure. Following this context, the report provides two tables that include details regarding the drinking water and wastewater infrastructure provisions in IIJA.

Table 1 identifies proposed emergency supplemental appropriations for EPA drinking water and wastewater infrastructure financial assistance programs contained in IIJA (Division J, Title VI).

[14] IIJA, Division J, Title VI. Appropriations may be designated or otherwise provided so that they are effectively exempt from the budget enforcement limits. Such funding may be referred to as "emergency spending." For more details, see CRS Report R42388, *The Congressional Appropriations Process: An Introduction*, coordinated by James V. Saturno.

[15] In response to the economic conditions from 2007 to 2009 (i.e., "Great Recession"), the American Recovery and Reinvestment Act (ARRA, P.L. 111-5) of 2009 provided emergency supplemental appropriations for water infrastructure delivered through the SRFs. ARRA provided several oversight provisions, including use-of-funds reporting by federal agencies, state and local implementing agencies, ARRA funding recipients, the U.S. Government Accountability Office, and the inspector general offices of federal departments or agencies.

[16] For more information about ARRA's oversight provisions, see CRS Report R40572, *General Oversight Provisions in the American Recovery and Reinvestment Act of 2009 (ARRA): Requirements and Related Issues*, by Clinton T. Brass.

The table also includes further details regarding the proposed funding and provides comments for additional context.

Table 2 provides a summary of each proposed section in IIJA, Division E, which includes a range of drinking water and wastewater infrastructure provisions and related authorizations of appropriations. The right-hand column of the table includes additional comments and context for some of the bill's sections.

Wastewater Infrastructure and Drinking Water Financial Assistance: A Brief History[17]

In 1972, amendments to the CWA established the principal federal program to support wastewater infrastructure activities.[18] The CWA Title II program was a grant program that provided funding for the construction of wastewater treatment facilities and related objectives. Federal funds were provided through annual appropriations under a state-by-state allocation formula contained in the CWA. States used their allotments to make grants to cities for eligible activities. Through FY1984, Congress had appropriated nearly $41 billion under this program, representing the largest nonmilitary public works program since the Interstate Highway System.

In the Water Quality Act of 1987,[19] Congress phased out the Title II construction grants program and authorized the CWSRF program and appropriations to capitalize state revolving loan funds. Under the CWSRF program, EPA receives an appropriation and makes grants to states to capitalize revolving funds administered by states. The states use the capitalization grant, and the required 20% state match, to make loans to publicly owned treatment works and other eligible entities for wastewater projects. Over time, those entities repay the loan to the state fund. Together, the capitalization grant, state match, repayments, and leveraged funds were intended to be a sustainable source of wastewater infrastructure financial assistance at the state level.

The initial federal financial assistance program for drinking water infrastructure was the DWSRF, authorized by the SWDA Amendments of 1996.[20] Federal funding support for drinking water infrastructure followed a different course than that for wastewater for several reasons. Until the 1980s, federal drinking water regulations were relatively few in number, and public water systems often did not need to make large investments in treatment technologies to meet those regulations. Between 1986 and 1996, the number of federal drinking water regulations increased from 23 to 83.[21] The intent of the 1996 SDWA amendments was "to help make more effective and more cost-effective Federal regulation of drinking water and to help small communities pay for improvements to their public water systems, while ensuring that health protections are maintained or improved."[22] The 1996 SDWA amendments revised the regulatory development process and

[17] For further details, see the background information in CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

[18] The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500).

[19] P.L. 100-4, the Water Quality Act of 1987, authorized $18 billion over nine years for sewage treatment plant construction, through a combination of the Title II grants program and a new revolving loan fund program in CWA Title VI (33 U.S.C. §§1381-1387).

[20] P.L. 104-182.

[21] For a detailed discussion of SDWA regulatory development provisions, see CRS Report R46652, *Regulating Contaminants Under the Safe Drinking Water Act (SDWA)*, by Elena H. Humphreys.

[22] U.S. Congress, House Committee on Commerce, Safe Drinking Water Act Amendments of 1996, 104th Cong., 2nd sess., June 24, 1996, H.Rept. 104-632, p. 6.

authorized a parallel program to the CWSRF for drinking water. Under the DWSRF, EPA makes grants to states to capitalize revolving funds administered by the states. From these funds, states make loans to public water systems for projects needed for compliance and other statutory purposes.

All 50 states and Puerto Rico implement their own SRF programs.[23] Both the CWA and SDWA provide for federal oversight of the state programs. For example, states are required to establish priority lists called Intended Use Plans (IUPs) that identify the projects that will receive SRF assistance in that year. EPA is required to review the state IUPs to confirm statutory and regulatory compliance. In addition, both the CWA and SDWA require states to report specific information to EPA regarding the implementation of their respective SRF programs. In particular, states are required to submit to EPA an annual report on the CWSRF and a biennial report on the DWSRF. Both statutes require EPA to annually review states' implementation activities and periodically audit state programs.[24] EPA annually publishes details information on activities for both programs.[25]

Although the SRF programs generally involve loans from the state to local entities, states may also use the DWSRF and CWSRF to provide "additional subsidization." This may include principal forgiveness and/or negative interest loans, which can make infrastructure projects affordable.[26] The degree to which additional subsidization is required or authorized—thereby altering the ratio between loans and subsidization—has generated considerable interest over the past decade.

Since amended in 1996, SDWA has authorized states to use up to 30% of their DWSRF capitalization grants to provide additional assistance. America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270) increased this proportion to 35% while conditionally requiring states to use at least 6% of their capitalization grants for these purposes. Congress amended the CWA in 2014, adding similar authority for states to provide additional subsidization, but not requiring it. In addition, the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5) required states to use at least 50% of their funds for additional subsidization. Since ARRA's enactment, appropriations acts have required states to use minimum percentages of their allotted SRF grants to provide additional subsidization. The FY2021 appropriations act (P.L. 116-260) requires states to use 10% of the CWSRF grants and 14% of their DWSRF grants for additional subsidization.

Enacted legislation in recent years has amended the CWA and SDWA to increase flexibilities within CWSRF and add new requirements to both the CWSRF and DWSRF programs. In the 113th Congress, the Water Resources Reform and Development Act of 2014 (WRRDA 2014; P.L. 113-121) amended the CWA to add a range of project types eligible for CWSRF assistance. In

[23] The CWA and SDWA require EPA to provide direct grants to the District of Columbia, the U.S. Virgin Islands, American Samoa, Guam, the Commonwealth of Northern Marianas, and Indian tribes for wastewater and drinking water infrastructure improvements (33 U.S.C. §1362 and §1377; 42 U.S.C. 300j-12(i) and (j)). The funding for the District of Columbia, U.S. territories, and Indian tribes is part of the SRF appropriations to EPA.

[24] 42 U.S.C. §300j-12(g)(4); 33 U.S.C. §1386. As initially established, the DWSRF authorized states to provide additional subsidization to certain communities. In 2014, similar provisions were added to the CWSRF by the Water Resources Reform and Development Act of 2014 (P.L. 113-121).

[25] For example, EPA collects data annually from the state SRF programs to document program progress and account for the use of federal funds through the National Information Management System reports, available at the respective EPA websites: https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports and https://www.epa.gov/dwsrf/drinking-water-state-revolving-fund-national-information-management-system-reports.

[26] 33 U.S.C. §1383(i); 42 U.S.C. §300j-12(d). In addition, states can use CWSRF grants to provide additional subsidization for specific types of infrastructure projects, including those that address water or energy efficiency.

addition, WRRDA 2014 authorized the Water Infrastructure Finance and Innovation Act (WIFIA) program, a federal loan program that provides an additional source of financing for water infrastructure projects.[27]

In the 115th Congress, AWIA added additional EPA-administered grant programs to the CWA and SDWA, and revised SDWA DWSRF provisions to make DWSRF assistance more accessible for disadvantaged communities, in part by authorizing states to provide an increased amount of additional subsidization.

In the 116th Congress, Members considered drinking water and wastewater infrastructure legislation (e.g., H.R. 2, S. 3590, and S. 3591) that would have, among other things, authorized EPA-administered grant programs to assist communities with water infrastructure affordability and revised EPA regulatory authorities to address certain contaminants.

Figure 1 illustrates the history of appropriations to the CWSRF and DWSRF programs from FY2000 through FY2021. From FY2000 through FY2009, annual appropriations averaged about $1.1 billion for the CWSRF and about $833 million for the DWSRF. ARRA provided in FY2009 $4.0 billion for the CWSRF and $2.0 billion for the DWSRF, in addition to the regular FY2009 appropriations. In nominal dollars (i.e., not adjusted for inflation), the annual appropriations for the SRF programs—especially for the CWSRF—increased after ARRA. Between FY2010 and FY2021, the annual appropriations averaged about $1.6 billion for the CWSRF and about $1.0 billion for the DWSRF.

Recent appropriations acts have also directed funds to assist communities with water infrastructure improvements as well as to help low-income individuals pay for their water service. In addition to providing regular appropriations for EPA water infrastructure programs,[28] the Consolidated Appropriations Act, FY2021 (P.L. 116-260) provided $638 million to the Department of Health and Human Services to make grants to states and Indian tribes to provide water or wastewater rate assistance for low-income households.[29]

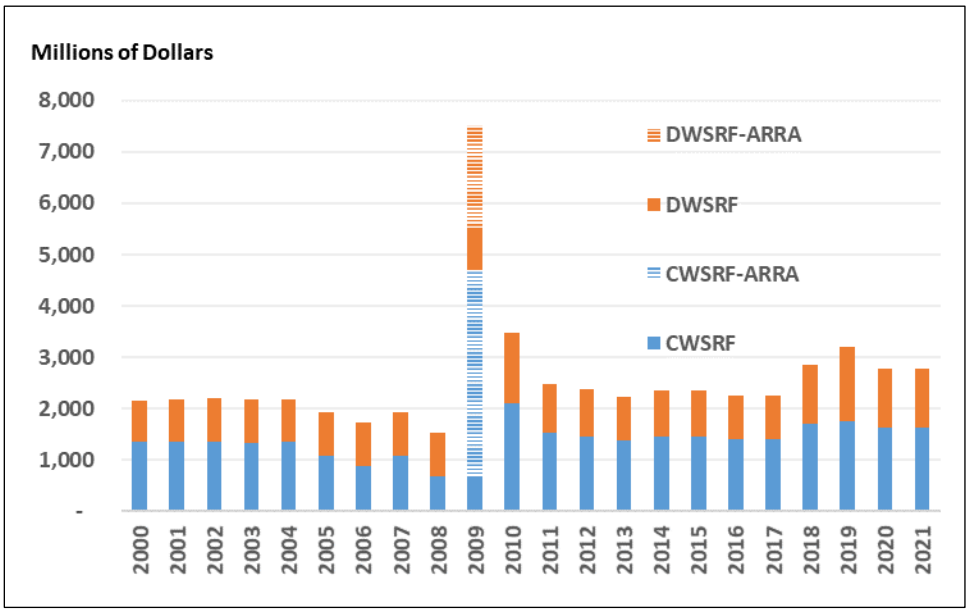
[27] For more information, see CRS Report R43315, *Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program*, by Jonathan L. Ramseur, Mary Tiemann, and Elena H. Humphreys.

[28] For more information, see CRS In Focus IF11724, *U.S. Environmental Protection Agency (EPA) Water Infrastructure Programs and FY2021 Appropriations*, by Elena H. Humphreys and Jonathan L. Ramseur.

[29] P.L. 116-260, §533. For more information, see CRS Insight IN11642, *Water Service Issues and COVID-19: Recent Congressional Funding*, by Elena H. Humphreys and Libby Perl.

Figure 1. CWSRF and DWSRF Appropriations: FY2000-FY2021

(not adjusted for inflation)



Source: Prepared by CRS using information from annual appropriations acts, ARRA, committee reports, and explanatory statements presented in the Congressional Record.

Notes: Amounts reflect applicable rescissions but do not include supplemental appropriations for specific locations in P.L. 116-20 and P.L. 116-113 or special purpose project grants (often referred to as "earmarks"). For more information, see CRS Report 96-647, *Water Infrastructure Financing: History of EPA Appropriations*, by Jonathan L. Ramseur and Mary Tiemann.

Table 1. Proposed Infrastructure Investment and Jobs Act: Emergency Supplemental Appropriations for EPA Water Infrastructure Programs

(dollars in millions)

Program	FY2022	FY2023	FY2024	FY2025	FY2026	Total	Funding Details	Notes
Clean Water State Revolving Fund Program General Program	$1,902	$2,202	$2,403	$2,603	$2,603	$11,713	For FY2022 and FY2023, each state would match 10% of its annual capitalization grant. For FY2024 through FY2026, the state match would return to 20%. 49% of the state's allotment of capitalization grant would be used to provide 100% principal forgiveness or grants, or a combination of these. For FY2022, up to 3%, and for FY2023 through FY2026, 2% would be reserved for salaries, expenses, and administration; and of that set-aside, 80% would be used by the U.S. Environmental Protection Agency (EPA) for activities other than hiring permanent employees. For FY2022 through FY2026, 0.35% shall be reserved for EPA Office of the Inspector General (OIG) oversight.	These funds would be additional to those provided through the regular appropriations process. Congress appropriated $1.639 billion in both FY2020 and FY2021 for the CWSRF program (**Figure 1**). For FY2022, the President requested $1.871 billion. Although the Clean Water Act (CWA) CWSRF program is generally a loan program, states have limited (generally up to 30%) and conditional authority to provide recipients with additional subsidization, such as forgiveness of principal. Appropriations acts in recent years have required states to use 10% of their federal grant amounts to provide additional subsidization. The American Recovery and Reinvestment Act of 2009 provided $4.0 billion for the CWSRF in supplemental funding in FY2009, waiving the 20% state match requirement for SRF grants.[a]
Clean Water State Revolving Fund Program Emerging Contaminants	$100	$225	$225	$225	$225	$1,000	Funds would be used for eligible activities in CWA Section 603(c) that address emerging contaminants. States would not have to match their capitalization grants. 100% of the state's allotment of capitalization grant would be used for 100% principal forgiveness or grants, or a combination of these.	IIJA, if enacted, would be the first time Congress specifically directed funding to address emerging contaminants within the framework of eligible CWSRF activities.

Program	FY2022	FY2023	FY2024	FY2025	FY2026	Total	Funding Details	Notes
							For FY2022, up to 3%, and for FY2023 through FY2026, 2% would be reserved for salaries, expenses, and administration. For FY2022 through FY2026, 0.5% would be reserved for EPA OIG oversight.	
Drinking Water State Revolving Fund Program General Program	$1,902	$2,202	$2,403	$2,603	$2,603	$11,713	For FY2022 and FY2023, each state would match 10% of its annual capitalization grant. For FY2024 through FY2026, the state match would return to 20%. 49% of the state's allotment of capitalization grant would be used for 100% principal forgiveness or grants, or a combination of these. For FY2022, up to 3%, and for FY2023 through FY2026, 2% would be reserved for salaries, expenses, and administration; and of that set-aside, 80% would be used by EPA for activities other than hiring permanent employees. For FY2022 through FY2026, 0.35% would be reserved for EPA OIG oversight.	These funds would be additional to those provided through the regular appropriations process. Congress appropriated $1.126 billion in both FY2020 and FY2021 for the DWSRF program (**Figure 1**). For FY2022, the President requested $1.358 billion. Although the Safe Drinking Water Act (SDWA) DWSRF program is generally a loan program, states are conditionally required to use at least 6% of their annual grants to provide eligible recipients with additional subsidization, such as forgiveness of principal. States have conditional authority to provide further subsidization (generally up to 35%). Appropriations acts in recent years have required states to use 14% of their federal grant amounts to provide additional subsidization. The American Recovery and Reinvestment Act of 2009 provided $2.0 billion for the DWSRF in supplemental funding in FY2009, waiving the 20% state match requirement for SRF grants.
Drinking Water State Revolving Fund Program Lead Service Line Replacement	$3,000	$3,000	$3,000	$3,000	$3,000	$15,000	Funds would be used for lead service line replacement projects and associated activities directly connected to the identification, planning, design, and replacement of lead service lines. 49% of the state's allotment of capitalization grant would be used for 100% principal	

Program	FY2022	FY2023	FY2024	FY2025	FY2026	Total	Funding Details	Notes
							forgiveness or grants, or a combination of these. States would not have to match their capitalization grants. For FY2022, up to 3%, and for FY2023 through FY2026, 2% would be reserved for salaries, expenses, and administration For FY2022 through FY2026, 0.5% would be reserved for EPA OIG oversight.	
Drinking Water State Revolving Fund Program Emerging Contaminants	$800	$800	$800	$800	$800	$4,000	Funds provided would be used to address emerging contaminants in drinking water with a focus on per- and polyfluoroalkyl substances as authorized by SDWA Section 1452(a)(2)(G). 100% of the state's allotment of capitalization grant would be used for 100% principal forgiveness or grants, or a combination of these. States would not have to match their capitalization grants. For FY2022, up to 3%, and for FY2023 through FY2026, 2% would be reserved for salaries, expenses, and administration. For FY2022 through FY2026, 0.5% would be reserved for EPA OIG oversight.	The SDWA authority to address emerging contaminants in Section 1452(a)(2)(G) was added by the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116-92).
SDWA Section 1459A Small and Disadvantaged Community Grant Program[b]	$1,000	$1,000	$ 1,000	$1,000	$1,000	$5,000	Funds provided to states may be used for projects that address emerging contaminants for small and disadvantaged communities. Funds provided would not be subject to the 45% matching requirement. For FY2022 through FY2026, up to 3% would be reserved for salaries, expenses, and administration.	These funds would be additional to those provided through the regular appropriations process. Congress established this program in 2016 and first provided appropriations for it in FY2018. In FY2021, the program received $26.4 million for this grant program; for FY2022, the President requested $41.41 million for this grant program.

Program	FY2022	FY2023	FY2024	FY2025	FY2026	Total	Funding Details	Notes
							For FY2022 through FY2026, 0.5% would be reserved for EPA OIG oversight.	

Source: Prepared by CRS based on S.Amdt. 2137 to H.R. 3684 (Infrastructure Investment and Jobs Act), which passed the Senate on August 10, 2021.

a. For more information, see CRS Report R46464, *EPA Water Infrastructure Funding in the American Recovery and Reinvestment Act of 2009*, by Jonathan L. Ramseur and Elena H. Humphreys.

b. In 2016, the Water Infrastructure Improvement for the Nation Act (WIIN Act; P.L. 114-322) authorized this grant program in new SDWA Section 1459A. SDWA Section 1459A directs EPA to establish a grant program to assist disadvantaged communities and small communities that are unable to finance projects needed to comply with SDWA. Eligible projects include investments needed for SDWA compliance, household water quality testing, and assistance that primarily benefits a community on a per-household basis. EPA must give funding priority to projects and activities that benefit underserved communities (i.e., communities that lack household water or wastewater services or that violate or exceed an SDWA requirement). EPA may make grants to public water systems, tribal water systems, and states on behalf of an underserved community. EPA may waive all or some of the 45% nonfederal share of project costs.

Table 2. Proposed Infrastructure Investment and Jobs Act: Drinking Water and Wastewater Infrastructure Provisions in Division E

(authorization and reauthorization of appropriations in bold text)

Section	Summary of Provisions	Notes
	Title I—Drinking Water	
Section 50101 Technical Assistance and Grants for Emergencies Affecting Public Water Systems	Amends Safe Drinking Water Act (SDWA) Section 1442(a) to direct EPA, within one year of the bill's enactment, to evaluate community water system and wastewater system compliance with the act; requires EPA to submit a report to Congress on SDWA compliance trends for community water systems and wastewater systems, as well as trends of community water system or wastewater system characteristics that correlate to SDWA compliance or noncompliance; as practicable, EPA should also determine whether community water systems and wastewater systems maintain asset management plans.	SDWA requirements apply to public water systems, which include community water systems but not wastewater systems. The Clean Water Act applies to wastewater systems.
	Amends SDWA Section 1442(b), which authorizes EPA to provide grants to states or drinking water systems in emergency situations "to assist in responding to and alleviating any emergency situation" to specifically include cybersecurity events and heightened exposure to lead; amends SDWA Section 1442(d) to **reauthorize appropriations at $35 million annually for FY2022 through FY2026 for the emergency grant program.**	SDWA Section 1442(b) includes the following provision: "no limitation on appropriations for any such other program shall apply to amounts appropriated under this subparagraph." P.L. 107-188 amended Section 1442(d) to authorize appropriations for such emergency assistance of not more than $35 million for FY2002 and such sums as may be necessary for each fiscal year thereafter. Congress has not appropriated funds to carry out SDWA Section 1442(b).

Section	Summary of Provisions	Notes
	Reauthorizes appropriations of $15 million annually for FY2022 through FY2026 for SDWA Section 1442(e), which authorizes EPA to make grants to nonprofit organizations to provide technical assistance to small public water systems; adds new Subsection 1442(f) to provide that state-based nonprofit organizations governed by community water systems are eligible for technical assistance under Section 1442(e); requires state-based nonprofit organizations to consult with the state prior to using such funding.	SDWA Section 1442(e)(5) authorized appropriations of $15 million for each of FY2015-FY2020.
Section 50102 Drinking Water State Revolving Loan Funds	Amends SDWA Section 1452, the Drinking Water State Revolving Loan Fund (DWSRF) program. Under this program, EPA receives annual appropriations for grants to states to capitalize their DWSRFs. Makes permanent the SDWA requirement to use American iron and steel products in projects supported by funds made available through the DWSRF by removing the fiscal year limitation on such requirement (SDWA §1452(a)(4)).	America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270) renewed the requirement to use American iron and steel products in projects that receive funds from a DWSRF during FY2019 through FY2023. Previously, Congress has required American iron and steel for DWSRF-financed projects for specified fiscal years. The Water Infrastructure Improvements for the Nation (WIIN) Act (P.L. 114-322) amended SDWA to require the use of American iron and steel for FY2017. In the American Recovery and Reinvestment Act of 2009 (ARRA; P.L. 111-5), Congress provided supplemental appropriations for the DWSRF and required the use of American-produced iron, steel, and manufactured goods in projects that received ARRA funding. Since FY2014, Congress has regularly required the use of American iron and steel for DWSRF-financed projects through appropriations acts.
	Amends SDWA Section 1452(m) to reauthorize appropriations for DWSRF capitalization grants. **The authorization of appropriations for DWSRF capitalization grants would be** • **$2.40 billion for FY2022,** • **$2.75 billion for FY2023,** • **$3.00 billion for FY2024,** • **$3.25 billion for each of FY2025 and FY2026.**	AWIA reauthorized DWSRF capitalization grants for FY2019-FY2021. The current authorization of appropriations for the DWSRF are approximately • $1.17 billion for FY2019, • $1.30 billion for FY2020, and • $1.95 billion for FY2021.
	Amends SDWA Section 1452(d) to expand forms of additional subsidization states may provide for projects serving disadvantaged communities. In addition to current authority to forgive loan principal, states may provide additional subsidies using "grants, negative interest loans, other loan forgiveness, and through buying, refinancing, or restructuring debt." Also conditionally requires states to use at least	Currently, states may use as much as 35% of their annual capitalization grant to provide additional subsidization. AWIA amended SDWA to conditionally require states to use at least 6% of their capitalization grant for this purpose. Section 1452(d) currently does not include the term "grant"; however, "forgiveness of principal" enables states to provide comparable

Section	Summary of Provisions	Notes
	12% of their capitalization grant for these subsidies; and excludes loans with zero or higher interest rates from the definition of "additional subsidization."	assistance. Appropriations acts in recent years have required states to use 14% of their federal grant amounts to provide additional subsidization.
Section 50103 Source Water Petition Program	Amends SDWA Section 1454, which authorizes states to establish source water quality protection partnership petition programs, in which public water system operators and the community members request state assistance to form a voluntary partnership to prevent source water degradation. Section 50103 authorizes counties, acting on behalf of unincorporated areas, to form such a partnership; and **reauthorizes appropriations for the source water quality protection partnership petition program at $5 million annually for FY2020 through FY2026.**	SDWA Section 1454(e) authorizes appropriations of $5 million for each of FY2020-FY2021, and provides that each state with a plan for a program approved under subsection (b) shall receive an equitable portion of the funds available for any fiscal year.
Section 50104 Assistance for Small and Disadvantaged Communities	Amends SDWA Section 1459A, which directs EPA to establish a grant program to assist disadvantaged communities and small communities that are unable to finance projects or activities needed to comply with SDWA. This section expands the projects and activities eligible for grants under this program to include (1) the purchase of point-of-entry or point-of-use filters and filtration systems; (2) investments necessary for providing information regarding use and maintenance of these devices, and options for replacing lead service lines or removing other lead sources; and (3) contracts with nonprofit entities on behalf of an eligible entity (or state on behalf of an eligible entity). It reduces the nonfederal cost-share of this grant program from not less than 45% to not less than 10%; and **reauthorizes appropriations for Subsections 1459A(a)-(j) at** • **$70 million for FY2022,** • **$80 million for FY2023,** • **$100 million for FY2024,** • **$120 million for FY2025, and** • **$140 million for FY2026.**	SDWA Section 1459A(k) authorizes appropriations for Section 1459A of $60 million for each of FY2017 through FY2021.
	Expands eligible entities for SDWA Section 1459A(j), which authorizes EPA to make grants to states to assist underserved communities to respond to imminent and substantial contamination.	SDWA Section 1442(b) authorizes EPA to make grants to states or publicly owned water systems to assist in responding to and alleviating emergency situations (42 U.S.C. §300j-1(b)). Specifically, grants authorized by this subsection may be used only to support actions that are necessary (1) to prevent, limit, or mitigate danger to the public health in an emergency, and (2) that would otherwise not be taken without such emergency assistance, as determined by the Administrator.

Section	Summary of Provisions	Notes
	Amends SDWA Section 1459A(l), which authorizes EPA to establish the Drinking Water System Infrastructure Resilience and Sustainability Program for small and disadvantaged public water systems, to direct EPA to establish this grant program. **It reauthorizes appropriations of $25 million annually for FY2022 through FY2026 for this grant program**; further amends Section 1459A(l) to establish a 10% cost share for eligible entities, which EPA may waive under certain circumstances.	SDWA Section 1459A(l)(5) authorizes appropriations for Section 1459A(1) of $4 million for each of FY2019 and FY2020.
	Adds SDWA Subsection 1459A(m) to direct EPA, subject to appropriations, to establish a new grant program to provide assistance to public water systems, or nonprofit entities on behalf of public water systems, to voluntarily connect individual households to public water systems; **authorizes appropriations of $20 million annually for FY2022 through FY2026 for this program**; requires EPA to report to Congress within three years of enactment regarding program implementation.	The U.S. Department of Agriculture (USDA) is authorized to provide grants to various eligible entities to provide water services, including connecting households to water systems to alleviate health risks (7 U.S.C. §1926c). USDA is also authorized to provide grants to communities to prepare for or recover from an emergency that threatens the availability of safe, reliable drinking water. Among the eligible uses, USDA may provide grants to connect households to water systems (7 U.S.C. §1926a).
	Adds SDWA Subsection 1459A(n) to direct EPA to establish a competitive grant program for states, giving priority to states with a high proportion of underserved communities; **authorizes appropriations of $50 million annually for FY2022 through FY2026**; requires EPA to submit a report to Congress within two years of enactment regarding program implementation.	
Section 50105 Reducing Lead in Drinking Water	Amends SDWA Section 1459B to revise the eligible entities for the existing lead reduction grant program to include "qualified nonprofit organizations with experience in lead reduction, as determined by the Administrator ..." rather than "a qualified nonprofit organization as determined by the Administrator, servicing a public water system.... " Expands the eligible uses of lead reduction grants to include replacement of privately owned lead service lines, and authorizes EPA to provide grant funds to "low-income homeowners, and landlords or property owners providing housing to low-income renters" with prioritization for disadvantaged communities based on state DWSRF affordability criteria; requires water systems to replace privately owned lead service lines at no cost to low-income customers, authorizes water systems to replace privately owned lead service lines at no cost to such customers, and requires water systems to notify the state of planned lead service line replacements; **increases and extends the authorization of appropriations**	Currently, SDWA Section 1459B directs EPA to establish a grant program for projects and activities that reduce lead in drinking water, including replacement of lead service lines and corrosion control. Under the current program, grants may be used to provide assistance to low-income homeowners to replace their portions of lead service lines. Under SDWA Section 1452(d)(3), the definition of a "disadvantaged community" means the service area of a public water system that meets affordability criteria established after public comment and review by the state. That is, affordability is established at the water system-level rather than at the individual household level. SDWA Section 1459B(d) authorizes appropriations of $60 million for each of FY2017-FY2021 to carry out this section.

Section	Summary of Provisions	Notes
	for this grant program from $60 million annually for FY2017 through FY2021 to $100 million annually for FY2022 through FY2026. Adds SDWA Subsection 1459B(d) to direct EPA to establish a grant program for water systems in which no less than 30% of the systems' service lines are known, or suspected, to contain lead, to carry out lead reduction projects, including "existing lead inventorying"; requires EPA to submit a report to relevant congressional committees within two years of the first grant award regarding the implementation of this grant program; authorizes appropriations of $10 million (available until expended) for this grant program.	
Section 50106 Operational Sustainability of Small Public Water Systems	Adds SDWA Section 1459E to direct EPA to establish a grant program for states; local governments; tribes; public corporations established by a unit of local government; nonprofit entities that own, operate, or provide technical assistance to public water systems; and other government entities to improve the "operational sustainability of one or more small water systems," subject to available appropriations. Eligible uses of the funds include various asset management activities. Requires EPA to report to Congress on the implementation of this grant program within two years of enactment; **authorizes appropriations of $50 million annually for FY2022 through FY2026**; requires eligible entities to provide a 10% match, which EPA may waive under certain circumstances.	
Section 50107 Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program	Adds SDWA Section 1459F to direct EPA to establish a grant program for public water systems serving 10,000 or more individuals to improve resilience to natural hazards and to address cybersecurity vulnerabilities. Eligible uses of funds would include various water conservation, desalination construction, and watershed management activities, among others. Requires EPA to report to Congress on the implementation of this grant program within two years of enactment; **authorizes appropriations of $50 million annually for FY2022 through FY2026**; directs EPA to use 50% of amounts available for grants for water systems serving 10,000 or more to 100,000 individuals, and 50% for systems serving more than 100,000 individuals.	AWIA amended SDWA Section 1459A to authorize EPA to establish the Drinking Water System Infrastructure Resilience and Sustainability Program, a grant program for small and disadvantaged public water systems. EPA is authorized to provide grants to eligible systems for projects that increase resilience to natural hazards, including hydrologic changes. Eligible projects include those that increase water use efficiency, enhance water supply through watershed management or desalination, and increase energy efficiency in the conveyance or treatment of drinking water. FY2020 was the first fiscal year that this program received funding ($3 million).

Section	Summary of Provisions	Notes
Section 50108 Needs Assessment for Nationwide Rural and Urban Low-Income Community Water Assistance	Requires EPA to assess and report to Congress on the prevalence of municipalities, public entities, or tribal governments with water service providers that serve a "disproportionate percentage ... of households with qualifying need," and as determined by EPA, the prevalence of municipalities, public entities, or tribal governments that "have taken on an unsustainable level of debt due to customer nonpayment" for drinking water and wastewater services.	
Section 50109 Rural and Low-Income Water Assistance Pilot Program	Requires EPA, within two years of enactment, to establish a grant program to provide household drinking water and/or wastewater rate assistance based on the results of the study performed under Section 50108 of the bill. Eligible uses of the funds would include direct household assistance, lifeline rates, bill discounting, percent of income billing, and special hardship provisions; directs EPA to make no more than 40 grants, which would be awarded as follows: • 8 to rural drinking water or wastewater systems or states, • 8 to eligible entities that own or operate a medium water service provider, • 8 to eligible entities that own or operate a large water provider serving between 100,001 to 500,000 individuals, • 8 to water service providers that serve more than 500,000 individuals, and • 8 to drinking water or wastewater or municipal storm sewer systems serving disadvantaged communities, This section does not include an authorization of appropriations. Requires EPA to report to Congress on the implementation of this grant program within two years of the first funds' disbursement and annually thereafter.	P.L. 116-260 provided $638 million for a new Low-Income Household Drinking Water and Wastewater Emergency Assistance Program (Division H, Title V, §533) to be administered by the Department of Health and Human Services (HHS). Congress appropriated an additional $500 million to HHS for low-income water assistance in the American Rescue Plan Act (P.L. 117-2, §2912).
Section 50110	Amends SDWA Section 1464(b) to require EPA to publish school lead testing guidance for public water systems.	

Section	Summary of Provisions	Notes
Lead Contamination in School Drinking Water	Amends SDWA Section 1464(d) to expand the existing Voluntary School and Child Care Program Lead Testing Grant Program to include activities such as compliance monitoring and lead remediation; expands eligible entities to include water systems, qualified nonprofit organizations, and tribal consortia; **reauthorizes appropriations for SDWA Section 1464(d) at** • **$30 million for FY2022,** • **$35 million for FY2023,** • **$40 million for FY2024,** • **$45 million for FY2025, and** • **$50 million for FY2026.**	Currently, SDWA Section 1464(d)(8) authorizes appropriations of $20 million for each of FY2017-FY2019, and $25 million for each of FY2020 and FY2021.
Section 50111 Indian Reservation Drinking Water Program	Revises the Indian Reservation Drinking Water Grant Program, authorized by AWIA Section 2001, which directs EPA—subject to appropriations—to establish a drinking water infrastructure grant program for 20 eligible projects (10 projects in the Upper Missouri River Basin and 10 projects in the Upper Rio Grande River Basin) to improve water quality, water pressure, or water services. This section directs EPA to establish such a grant program, establishes the federal share at 100% of project costs, and expands the eligible uses of the funds to either drinking water infrastructure improvements or wastewater system improvements; requires EPA to use 50% of funds for • 10 projects in the Upper Missouri River Basin, • 10 projects in the Upper Rio Grande River Basin, • 10 projects in the Columbia River Basin, • 10 projects in the Lower Colorado River Basin, and • 10 projects in the Arkansas-White-Red River Basin. Retains requirement that EPA select no less than two projects that serve more than one federally recognized Indian tribe; requires EPA to report to Congress on the implementation of this grant program within two years of enactment; **authorizes appropriations of $50 million annually for FY2022 through FY2026.**	AWIA Section 2001 directs EPA—subject to appropriations—to establish a drinking water infrastructure grant program for 20 eligible projects (10 projects in the Upper Missouri River Basin and 10 projects in the Upper Rio Grande River Basin) to improve water quality, water pressure, or water services. One of the 10 projects in the Upper Missouri River Basin must serve two or more tribes. To be eligible, the public water system must either be on a reservation or serve a federally recognized Indian tribe. Section 2001 authorizes an appropriation $20 million annually from FY2019 through FY2022 to support this program. To date, no funds have been appropriated for this purpose.

Section	Summary of Provisions	Notes
Section 50112 Advanced Drinking Water Technologies	Adds SDWA Section 1459G to require EPA, subject to appropriations, and within one year of enactment, to study existing and potential future technology, including cybersecurity vulnerabilities, that could enhance various aspects of the water provided by a public water system; requires EPA to establish a grant program for water systems either serving 100,000 or fewer individuals or small and disadvantaged water systems to identify, deploy, or identify and deploy technologies; requires EPA to report to Congress on the implementation of this grant program within two years of the first funds' disbursement and annually thereafter; **authorizes appropriations of $10 million annually for FY2022 through FY2026.**	AWIA Section 2007 directs EPA to administer a competitive grant program to accelerate the development of innovative water technology that addresses drinking water supply, quality, treatment, or security. Among the selection criteria for grants, EPA must prioritize projects that provide additional drinking water supplies with minimal environmental impact. AWIA authorizes $10 million to be appropriated each year for FY2019 and FY2020 to support this grant program. To date, no funds have been appropriated for this purpose.
Section 50113 Cybersecurity Support for Public Water Systems	Adds SDWA Section 1420A on cybersecurity. Requires EPA, in coordination with the Department of Homeland Security Cybersecurity and Infrastructure Security Agency (CISA) to develop a prioritization framework to identify public water systems (including systems' source water) that, if degraded or rendered inoperable due to an incident, would lead to significant impacts on the health and safety of the public, within 180 days of enactment; requires EPA and CISA to develop a Technical Cybersecurity Support Plan for public water systems, within 270 days of enactment; requires EPA to report to Congress within 10 additional days from the development of the prioritization framework and support plan (i.e., within 190 days and 280 days, respectively).	
Section 50114 State Response to Contaminants	Amends SDWA Section 1459A(j), authorizes a grant program to help states assist underserved communities to respond to imminent and substantial contamination; changes eligibility from "underserved community" to water systems eligible for SDWA Section 1459A (i.e., systems that serve a disadvantaged community, or a community that may become disadvantaged as a result of the project, or systems serving 10,000 or fewer individuals and do not have capacity to incur debt).	
Section 50115 Annual Study on Boil Water Advisories	Requires EPA to annually report to Congress, first within one year of enactment, on the national prevalence of, and reasons for, boil water advisories, as a part of the agency's budget request.	
	Title II—Clean Water	
Section 50201 Research, Investigations,	**Reauthorizes appropriations of $75 million annually for FY2022 through FY2026 for Clean Water Act (CWA) Section 104(u),** which includes grants to state water pollution control agencies (subsection (b)(3)), grants to nonprofit organizations for technical assistance (subsection (b)(8)), and grants to eligible	The grant programs in Section 104(b)(3) and 104(g) were established in 1972; Congress has not provided appropriations to these programs in recent years.

Section	Summary of Provisions	Notes
Training, and Information	entities for training projects (subsection (g)); not less than $50 million each fiscal year shall be used for the training project grants (subsection (b)(8)); directs EPA to submit a report describing implementation of these grant programs.	The grant program in Section 104(b)(8) was authorized in the America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270). Congress first provided $12 million in appropriations for this program for FY2020 (P.L. 116-94) and $18 million for FY2021 ($18 million in P.L. 116-260).
Section 50202 Wastewater Efficiency Grant Pilot Program	Adds Section 222 to the CWA, directing EPA to establish a wastewater efficiency grant program for publicly owned treatment works (POTW) to create or improve waste-to-energy systems; grants may not exceed $4 million per recipient; **authorizes appropriations of $20 million annually for FY2022 through FY2026.**	
Section 50203 Pilot Program for Alternative Water Source Projects	Amends CWA Section 220, a pilot program for alternative water source projects, to include stormwater as an eligible project type; **authorizes appropriations of $25 million annually for FY2022 through FY2026.**	To date, this program has not received appropriations.
Section 50204 Sewer Overflow and Stormwater Reuse Municipal Grants	Amends CWA Section 221 to include as an eligible project "notification systems to inform the public of combined sewer or sanitary overflows that result in sewage being released into rivers and other waters"; provides the federal cost share shall be not less than 90% in rural or financially distressed communities; EPA may increase federal share to 100%; **authorizes appropriations of $280 million annually for FY2022 through FY2026**; directs states to use not less than 25% of grants in rural or financially distressed communities.	Congress authorized this program in 2000 and provided the first appropriation in 2019, providing $28 million for FY2020 (P.L. 116-94), followed by $40 million for FY2021 (P.L. 116-260). EPA issued a proposed rule in the *Federal Register* regarding this program on August 4, 2020. To date, EPA has not issued any grants for this program.
Section 50205 Clean Water Infrastructure Resiliency and Sustainability Program	Adds Section 223 to the CWA, directing EPA to establish a clean water infrastructure resilience and sustainability grant program; a grant shall not exceed 75% of total project cost, but allows for 90% under certain conditions, including a population of fewer than 10,000 or a low-income community; the nonfederal cost share may be waived; applies CWA Section 608 (requirement to use American products iron and steel products) to grant projects; **authorizes appropriations of $25 million annually for FY2022 through FY2026**.	

Section	Summary of Provisions	Notes
Section 50206 Small and Medium Publicly Owned Treatment Works Circuit Rider Program	Adds Section 224 to the CWA, directing EPA to establish a circuit rider program to award grants to nonprofit entities to provide assistance to small and medium POTWs to carry out CWA Section 602(b)(13), which requires that an SRF recipient demonstrate it "has studied and evaluated the cost and effectiveness of the processes, materials, techniques, and technologies for carrying out the proposed project"; grants limited to $75,000; **authorizes appropriations of $10 million annually for FY2022 through FY2026**.	
Section 50207 Small Publicly Owned Treatment Works Efficiency Grant Program	Adds Section 225 to the CWA, directing EPA to establish a grant program to support projects that repair/replace equipment to improve water/energy efficiency of small POTWs, defined as a population of not more than 10,000 or a disadvantaged community; not less than 15% of grants must support POTWs that serve fewer than 3,300 people.	Section 50207 does not include an authorization of appropriations for this program.
Section 50208 Grants for Construction and Refurbishing of Individual Household Decentralized Wastewater Systems for Individuals with Low or Moderate Income	Adds Section 226 to the CWA, directing EPA to establish a grant program for private nonprofit organizations to construct, repair, or replace individual household (or multihousehold) decentralized wastewater systems; provides priority for funding to individuals that do not have access to sanitary disposal systems; **authorizes appropriations of $50 million annually for FY2022 through FY2026**.	The USDA's Rural Utilities Service provides direct and guaranteed loan and grant assistance to communities for waste disposal projects in eligible rural areas. Eligible areas include rural towns of 10,000 or less. Under the USDA program, long-term, low-interest loans are primary funding mechanisms. If funds are available, a grant may be combined with a loan to reduce borrower costs. In some cases funding may also be available for legal and engineering fees, land acquisition, and start-up operations. Project applications are scored on a point system, with smaller populations and lower median household incomes receiving priority (7 U.S.C. §1926). For additional information, see https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.
Section 50209 Connection to Publicly Owned Treatment Works	Adds Section 227 to the CWA, directing EPA to establish a grant program to help cover the costs of connecting low-income individuals to POTWs; grants go to POTWs or nonprofit entities; **authorizes appropriations of $40 million annually for FY2022 through FY2026**; not less than 15% of grants to go to systems serving fewer than 3,300 people.	
Section 50210	Amends clean water state revolving fund (CWSRF) provisions in CWA Section 603 to clarify that additional subsidization includes "forgiveness of principal, grants, negative interest loans, other loan forgiveness, and through buying, refinancing, or	Although the CWSRF program is generally a loan program, the CWSRF program allows states to provide SRF recipients additional subsidization. In addition, appropriations acts in recent

Section	Summary of Provisions	Notes
Clean Water State Revolving Funds	restructuring debt"; directs states to use at least 10% of their capitalization grant for additional subsidization; allows states to allocate 2% of capitalization grants to nonprofits to provide technical assistance to small, rural, and tribal POTWs.	years have required states to use specified minimum percentages of their federal grant amounts to provide additional subsidization. This trend began with the American Recovery and Reinvestment Act of 2009 (ARRA, P.L. 111-5), which required states to use at least 50% of their ARRA SRF funds for this purpose. Subsequent appropriations acts have included similar conditions, with varying percentages of mandatory subsidization. The FY2021 appropriations act requires states to use 10% of the CWSRF grants for additional subsidization.
	Reauthorizes appropriations for the CWSRF program as follows: • **$2.40 billion for FY2020;** • **$2.75 billion for FY2023;** • **$3.00 billion for FY2024;** • **$3.25 billion for each of FY2025 and FY2026.**	Although the authority for CWSRF appropriations expired in FY1994, Congress has continued to provide annual appropriations to the program. Congress appropriated $1.6 billion for both FY2020 and FY2021 for the CWSRF program.
Section 50211 Water Infrastructure and Workforce Investment	Amends AWIA Section 4304, which directs EPA, in consultation with USDA, to establish the Innovative Water Infrastructure Workforce Development program; expands the uses of grants provided in this program to include recruitment and promotion of diversity within the water sector, training for the water sector, and activities to improve water sector employee retention; expands eligible grant recipients to include public works departments and agencies; requires EPA to coordinate a federal interagency working group to address recruitment, training, and retention of the water sector workforce; requires EPA in coordination with the federal interagency working group to report to Congress within two years of enactment on potential solutions to workforce recruitment, training, and retention challenges in the water sector; **authorizes appropriations of $5 million annually for FY2022 through FY2026.**	
Section 50212 Grants to Alaska to Improve Sanitation in Rural and Native Villages	Reauthorizes appropriations for grants to Alaska to support rural and native villages (33 U.S.C. 1263a(e)); **authorizes appropriations of $40 million annually for FY2022 through FY2024, $50 million for FY2025, and $60 million for FY2026.**	Although authority for appropriations for this program expired at the end of FY2005, this program has continued to receive annual appropriations. Congress appropriated $36.2 million for this program for FY2021.

Section	Summary of Provisions	Notes
Section 50213 Water Data Sharing Pilot Program	Directs EPA to establish a grant pilot program to create systems that improve the sharing of information between states and local governments regarding water quality, infrastructure needs, and water technology; grants may be issued to states, counties, or local governments; states may establish regional consortia to carry out certain water projects; **authorizes appropriations annually for FY2022 through FY2026.**	
Section 50214 Final Rating Opinion Letters	Amends the Water Infrastructure Finance and Innovation Act of 2014 (WIFIA) to require loan applicants to submit one final rating option letter instead of two (33 U.S.C. 3907(a)(1)(D)(ii)).	
Section 50215 Water Infrastructure Financing Reauthorization	**Reauthorizes appropriations for subsidy costs of $50 million annually for FY2022 through FY2026 and administrative costs annually for FY2022 through FY2026.** Requires EPA to develop an outreach plan to promote the WIFIA program to small and rural communities.	Section 50215's reauthorization of appropriations matches the existing authority of appropriations for FY2021 (33 U.S.C. §3912). Congress provided $59.5 million for WIFIA subsidy costs in FY2021. EPA estimated that this FY2021 budget authority would provide approximately $5.5 billion in credit assistance (EPA, FY2021 Notice of Funding Availability, https://www.epa.gov/wifia/fy-2021-notice-funding-availability).
Section 50216 Small and Disadvantaged Community Analysis	Directs EPA to provide a report to Congress describing the CWSRF and DWSRF programs' historical distributions of funds to small and disadvantaged communities and identifying opportunities to improve distribution to low-income, rural, minority, and indigenous communities, in accordance with Executive Order 12898.	
Section 50217 Stormwater Infrastructure Technology	Directs EPA to establish a grant program to support the creation of centers of excellence for stormwater control infrastructure technologies at research institutions or nonprofit organizations; **authorizes appropriations annually for FY2022 through FY2026**; directs EPA to provide grants to state, local, and tribal governments to carry out stormwater infrastructure projects that involve new and emerging technologies; prioritizes grant awards to small, rural, and disadvantaged communities with municipal combined storm and sanitary systems; **authorizes appropriations of $10 million annually for FY2022 through FY2026.**	

Section	Summary of Provisions	Notes
Section 50218 Water Reuse Interagency Working Group	Directs EPA to establish a Water Reuse Interagency Working Group to develop and coordinate water reuse activities and resources through the implementation of a National Water Reuse Action Plan; directs EPA to submit a report to Congress on the working group's activities at least once every two years.	
Section 50219 Advanced Clean Water Technologies Study	Directs EPA to carry out and submit to Congress a study examining the state of existing and potential technologies that could enhance treatment, monitoring, affordability, efficiency, and safety of wastewater services provided by treatment works.	
Section 50220 Clean Watersheds Needs Survey	Adds Section 609 to the CWA, directing EPA to conduct an assessment of capital improvement needs for all projects eligible under the CWSRF program; directs EPA to complete such an assessment at least every four years; **authorizes an appropriation of $5 million (available until expended).**	Clean Water Act Section 516(b)(1)(B) requires EPA to prepare "a detailed estimate, biennially revised, of the cost of construction of all needed publicly owned treatment works in all of the States and of the cost of construction of all needed publicly owned treatment works in each of the States." Historically, EPA has produced this estimate approximately every four years, referred to as the Clean Water Needs Survey. The scope of this existing assessment is narrower than the proposed assessment in this section.
Section 50221 Water Resources Research Act Amendments	Amends the Water Resource Research Act to require each Water Resource Research Institute to provide a nonfederal match equivalent to the federal funds provided and submit an annual report to specified congressional committees regarding such matching funds; requires the Secretary of the Interior to complete an evaluation of each institute, every five years, and as a result of the evaluation, the Secretary is authorized to suspend/discontinue funding for such institute until the institute's qualifications are reestablished; **reauthorizes appropriations of $3 million annually for FY2022 through FY2025.**	

Section	Summary of Provisions	Notes
Section 50222 Enhanced Aquifer Use and Recharge	Adds Section 124 to the CWA to direct the EPA to provide funding to carry out groundwater research on enhanced aquifer use and recharge in support of sole-source aquifers; not less than 50% of funding is to be provided to a state, local government, or Indian tribe to carry out activities that would directly support that research, with the remaining funding allocated to an appropriate research center; requires a state, local government, or Indian tribe and the appropriate research center to form a research relationship for coordinating purposes; **authorizes appropriations of $5 million annually for FY2022 through FY2026.**	

Source: Prepared by CRS based on S.Amdt. 2137 to H.R. 3684 (Infrastructure Investment and Jobs Act), which passed the Senate on August 10, 2021.

Author Information

Elena H. Humphreys
Analyst in Environmental Policy

Jonathan L. Ramseur
Specialist in Environmental Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.