Congressional Research Service
Informing the legislative debate since 1914

Federally Supported Projects and Programs for Wastewater, Drinking Water, and Water Supply Infrastructure

July 30, 2020

Congressional Research Service
https://crsreports.congress.gov
R46471

CRS REPORT
Prepared for Members and
Committees of Congress

Congressional Research Service
Informing the legislative debate since 1914

Federally Supported Projects and Programs for Wastewater, Drinking Water, and Water Supply Infrastructure

SUMMARY

R46471

July 30, 2020

Jonathan L. Ramseur, Coordinator
Specialist in Environmental Policy

Tadlock Cowan
Analyst in Natural Resources and Rural Development

Elena H. Humphreys
Analyst in Environmental Policy

Julie M. Lawhorn
Analyst in Economic Development Policy

Anna E. Normand
Analyst in Natural Resources Policy

Charles V. Stern
Specialist in Natural Resources Policy

Megan Stubbs
Specialist in Agricultural Conservation and Natural Resources Policy

For decades, Congress has authorized and modified federal programs to help communities address water supply and water infrastructure needs, including both wastewater and drinking water. Departments and agencies that administer this assistance include the Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers (USACE), the Department of Agriculture (USDA), the U.S. Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), and the Department of Commerce's Economic Development Administration (EDA).

These agencies administer these programs in multiple ways. In terms of funding mechanisms, projects developed or assisted by Reclamation and USACE are often funded through direct, individual project authorizations from Congress. In contrast, the other agencies administer programs with standing authorizations that establish eligibility criteria rather than identify specific projects. A key practical difference is that with the individual project authorizations, there is no predictable assistance or even guarantee of funding after a project is authorized, because funding must be secured each year in the congressional appropriations process. The programs, on the other hand, have generally received some level of annual appropriations and have set program criteria and processes by which eligible parties can seek funding.

In terms of scope and mission, the primary responsibilities of the federal agencies discussed in this report cover a wide range. For example, EPA's authorities relate to protecting public health and the environment. The EDA and HUD focus on community and economic development. Likewise, the specific programs differ in several respects. Some are national in scope (those of USDA, EPA, and EDA, for example), while others are regionally focused (Reclamation's programs and projects). Some focus primarily on urban areas (HUD) and some on rural areas (USDA), and others do not distinguish based on community location or size (e.g., EPA, USACE, EDA).

Federal funding for these programs and projects varies greatly. Congressional funding for the water supply and wastewater and drinking water programs continue to compete with many other programs that are supported by discretionary spending. Stakeholders and others continue to call for increased appropriations for these programs. FY2020 appropriations highlights include the following:

- $1.126 billion for capitalization grants to states under EPA's State Revolving Fund (SRF) loan program for drinking water systems and $1.639 billion for EPA's SRF program for wastewater projects;
- $55 million for subsidy costs for the EPA-administered Water Infrastructure Finance and Innovation Act (WIFIA) program, allowing the agency to provide credit assistance for drinking water and wastewater infrastructure projects, not to exceed $11.5 billion;
- $443 million for grants and approximately $1.4 billion in loan authority for USDA's rural water and waste disposal program;
- $3.425 billion for HUD's Community Development Block Grant (CDBG) program (water and wastewater projects are among many eligible uses);
- $100 million for USACE environmental infrastructure projects; and
- $67 million for Reclamation's Title XVI reclamation/recycling projects.

Contents

Introduction 1
Department of the Interior 9
Bureau of Reclamation 9
"Traditional" Multipurpose Reclamation Projects 10
Rural Water Supply Projects 11
Title XVI Projects 12
Department of Defense 15
Army Corps of Engineers (Civil Works) 15
Storage of Municipal and Industrial Water at Multipurpose Reservoirs 15
Environmental Infrastructure Assistance 17
Department of Agriculture 19
Rural Utilities Service (Water and Waste Disposal Programs) 19
Water and Wastewater Loans and Grants 19
Emergency Community Water Assistance Grants 22
Rural Decentralized Water Systems Grants 22
Natural Resources Conservation Service 22
Watershed and Flood Prevention Operations 23
Small Watershed Loans 25
Small Watershed Rehabilitation 25
Environmental Protection Agency 26
Clean Water State Revolving Fund Loan Program 26
Drinking Water State Revolving Fund Loan Program 29
Water Infrastructure Finance and Innovation Act Program 31
Other EPA Water Infrastructure Funding Programs 34
Sewer Overflow and Stormwater Grant Program 34
Technical Assistance for Rural, Small, and Tribal Wastewater Systems 35
Technical Assistance for Small, Rural, and Tribal Drinking Water Systems 35
Small and Disadvantaged Communities Drinking Water Grant Program 35
Lead Reduction Projects Grant Program 36
Department of Housing and Urban Development 37
Community Development Block Grants 37
CDBG Section 108 Loan Guarantees 40
Department of Commerce 42
Economic Development Administration Public Works Programs 42
Economic Adjustment Assistance Program 44

Tables

Table 1. Wastewater, Drinking Water, and Water Supply Infrastructure: Federal Funding for Projects and Programs 3

Contacts

Author Information..... 46

Introduction

This report provides background and funding information on water infrastructure projects, including wastewater and drinking water, and water supply projects traditionally funded by the federal government. The report also discusses federal funding programs that provide assistance to communities to support these types of projects and related, eligible activities.

For decades, Congress has authorized and modified federal programs to help communities address water supply and water infrastructure needs. The agencies that administer these programs differ in multiple ways. For example, the funding mechanisms illustrate a key practical difference: Projects developed or assisted by the Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (USACE) often require direct, individual project authorizations from Congress. Under this funding mechanism, there is no predictable assistance or guarantee of funding after Congress authorizes a project, because funding must be secured each year in the congressional appropriations process.

In contrast, programs with standing authorizations generally have specific funding criteria and provide a process under which eligible applicants seek funding. Agencies administering such programs covered in this report include

- the Department of Agriculture (USDA),
- the Environmental Protection Agency (EPA),
- the Department of Housing and Urban Development (HUD), and
- the Department of Commerce's Economic Development Administration (EDA).

In terms of scope and mission, the primary responsibilities of the federal agencies discussed in this report cover a wide range. For example, EPA's statutory requirements generally focus on protecting public health and the environment. The EDA and HUD focus on community and economic development. Likewise, the specific programs discussed in this report—while all address either water supply or wastewater and drinking water infrastructure to some degree—differ in important respects. Some are national in scope (those of USDA, EPA, and EDA, for example), while others are regionally focused (Reclamation's programs and projects). Some focus primarily on urban areas (HUD), some on rural areas (USDA).

For each of the projects and programs discussed, this report describes purposes, financing mechanisms, eligibility requirements, recent funding, and statutory/regulatory authority. The report does not address special projects and programs aimed specifically at assisting Indian tribes, Alaska Native Villages, and c*olonias*[1] or other regional programs such as those associated exclusively with the Appalachian region or U.S. territories.

This report focuses on programs that support drinking water and wastewater infrastructure projects and also municipal and industrial (M&I) water supply projects and activities. This report generally does not address water projects and programs for irrigation, flood control, hydroelectricity, and recreation. However, in some cases (noted below), a federal program or agency (e.g., Reclamation and USDA) may primarily support one or more of these other objectives while providing some support for M&I activities, even if only incidentally.

[1] *Colonias* are typically rural, unincorporated communities or housing developments near the U.S.-Mexico border that lack some or all basic infrastructure, including plumbing and public water and sewer.

Other federal authorities (e.g., those of Reclamation and USACE) may be available to assist with the provision of emergency water and wastewater needs, such as improving access to water supplies during a drought. Such authorities are generally not discussed in this report.[2]

Table 1 summarizes financial and other key elements of the projects and program activities discussed in this report. As indicated in the table, federal funding for the programs and projects discussed in this report varies greatly. Congressional funding for the water programs discussed in this report continue to compete with many other federal programs supported by discretionary spending. Stakeholders and others continue to call for increased funding for these programs.

While Congress has maintained or increased federal support in recent years for some traditional financing tools—project grants, formula grants, capitalization grants, direct and guaranteed loans—policymakers have also considered alternative financing approaches and options to encourage private sector investments and public-private partnerships (e.g., the Water Infrastructure Finance and Innovation Act Program). Some supporters of these approaches see them as options to supplement or complement, but not replace, traditional financing tools. In addition, in recent years, Congress has revised some existing programs and authorized new grant programs in an effort to target water infrastructure needs of small and disadvantaged communities.

[2] These programs are summarized in CRS Report R43408, *Emergency Water Assistance During Drought: Federal Non-Agricultural Programs*, by Nicole T. Carter, Tadlock Cowan, and Joanna Barrett.

Table 1. Wastewater, Drinking Water, and Water Supply Infrastructure: Federal Funding for Projects and Programs

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
USDOI Bureau of Reclamation[b]	Multipurpose projects, which may include some M&I activities	De facto 40-50 year loan	0%/100%, with interest for M&I uses	Not applicable	Not readily available (Total agency approps. are $1.66 billion in current gross discretionary authority)	Not readily available (Total agency approps. request is nearly $1.12 billion)
USDOI Bureau of Reclamation (Title XVI, P.L. 102-575)[b]	Wastewater reclamation and reuse,[c] which may include some M&I activities	De facto grant	Up to 25%/75%; dollar limits may apply	Not readily available	$67.0 million	$3.0 million
USDOI Bureau of Reclamation Rural Water Supply[b]	Indian and non-Indian rural water supply	De facto grant, plus loan	Non-Indian projects: range from 75%/25% to 80%/20%; Indian projects: average of 100%/0%	Not applicable (see report text for detail)	$145.1 million	$30.3 million

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
USACE Multipurpose Reservoirs with Storage for M&I Water[b]	Reservoirs may provide M&I water storage through permanent or temporary storage agreements	Up-front federal financing of reservoirs; M&I storage is repaid through fees collected from nonfederal entities	0%/100%, with interest	Not applicable	$7.0 million for USACE to administer water supply storage activities	$6.0 million for USACE to administer water supply storage activities
USACE Environmental Infrastructure Assistance	Assistance is typically for public drinking water and wastewater infrastructure and source water protection and development	Technical/planning and design services or grants; design and construction services or grants	75%/25% generally; some authorities are 65%/35%	Varies (see report text for detail)	$100.0 million	None
USDA Rural Utilities Service, Water and Waste Disposal Program	Municipal water supply and treatment, wastewater facilities, and waste disposal	Loans and grants to eligible entities	Up to 75%/25% for grants 0%/100% for loans	Grants (FY2019): $1.3 million Direct loans: $2.3 million Guaranteed loans: $1.4 million	Grants: $443.0 million Direct loans: $1.40 billion loan authority; $63.8 million subsidy Guaranteed loans: $50.0 million total loan authority; $70,000 subsidy	Grants: $463.0 million Direct loans: $1.27 billion loan authority; $0 subsidy Guaranteed loans: 58.0 million loan authority; $0 subsidy
USDA Rural Utilities Service, Rural Decentralized Water Systems Program	Construction, refurbishing, and servicing of individual household water well systems and decentralized wastewater systems	Grants to private nonprofit organizations for the purpose of providing loans and subgrants to eligible individuals	100%/0%	Loans and subgrants are limited to $15,000 per well or wastewater system	$5 million	$5 million
USDA Rural Utilities Service, Emergency Community Water Assistance Grants	For water treatment, storage, or distribution projects to secure adequate	Grants for public or private nonprofit entities	100%/0%	Maximum grant award is $1,000,000.	$15 million	$17.6 million

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
	quantities of safe water					
USDA Watershed and Flood Prevention Operations Program	Multiple activities but must generally include flood control measures	Project grants and technical advisory services	100%/0% Varies according to purpose of improvement activity	Not applicable	$225 million ($175 million discretionary, $50 million mandatory)	$50 million ($0 discretionary, $50 million mandatory)
USDA Small Watershed Rehabilitation Program	Dam rehabilitation	Project grants and technical advisory services	100%/0% Varies according to purpose of improvement activity	Not applicable	$10 million	$0
EPA, Clean Water State Revolving Fund (SRF) Loan Program	Municipal wastewater treatment and other eligible projects and activities	Grants to states to capitalize loan funds SRF loans made by states to local project sponsors	80%/20% for grants to states to capitalize SRFs 0%/100%[d] (project loans are repaid 100% to states)	Average capitalization grant to state: $30 million (FY2020) Average assistance from SRF: $3.9 million (FY2019)	Capitalization grants: $1.639 billion	Capitalization grants: $1.120 billion

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
EPA, Drinking Water State Revolving Fund (SRF) Loan Program	Public water supply projects needed to meet federal drinking water standards and to address serious health risks	Grants to states to capitalize loan funds SRF loans made by states to local project sponsors	80%/20% for grants to states to capitalize SRFs 0%/100%[d] (project loans are repaid 100% to states)	Average capitalization grant to state: $20.77 million (through FY2019) Average assistance from SRF: $2.59 million (FY20119)	Capitalization grants: $1.126 billion	Capitalization grants: $863 million
EPA, Water Infrastructure Finance and Innovation Act (WIFIA) Program	Wastewater and drinking water projects with costs of $20 million or larger (or $5 million for rural areas)	Loans or loan guarantees	In general, WIFIA funding cannot exceed 49% of project costs	$230 million (average of 16 closed loans)	$55 million approps. to cover subsidy costs; authorized to provide no more than $11.5 billion in credit assistance	$20 million approps. to cover subsidy costs; authorized to provide no more than $4.2 billion in credit assistance
EPA, Sewer Overflow and Stormwater Grant Program	Sewer overflow or stormwater infrastructure projects, with priority for financially distressed communities	Grants to states, which make grants to municipalities	55%/45%	No assistance provided to date	$28 million	$61.5 million
EPA, Small and Disadvantaged Communities Drinking Water Grant Program	Drinking water projects needed to meet federal drinking water standards, household water quality testing, assistance that benefits a community on a per-household basis	Grants to states on behalf of an underserved community, public water systems, tribal water systems	55%/45% for grants (EPA may waive match under certain circumstances)	No assistance provided to date	$25.4 million	$0

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
EPA, Lead Reduction Projects Grant Program	Drinking water projects and activities to reduce lead in drinking water; replacement of lead service lines; corrosion control activities	Grants to community water systems, tribal water systems, states, schools, and municipalities	80%/20% for grants (EPA may waive match under certain circumstances)	No assistance provided to date	$19.5 million	$20 million
EPA, Technical Assistance for Rural, Small, and Tribal Wastewater Systems	Assist rural, small, and tribal publicly owned treatment works and decentralized wastewater treatment systems to comply with the Clean Water Act and apply for financing from the clean water SRF	Grants to qualified nonprofits to provide technical assistance	100%/0%	No assistance provided to date	$12 million	$7.5 million
EPA, Technical Assistance for Rural, Small, and Tribal Drinking Water Systems	Assist public water systems and particularly small systems (serving 25-10,000 customers) with SDWA compliance	Grants to qualified nonprofits to provide technical assistance	100%/0%	FY2019 funds were allocated to two nonprofits, average grant amount was $7.5 million	$15 million	$0
HUD, Community Development Block Grant Program	Multipurpose community development projects; may include water and waste disposal	Formula grants, 70% of which are reserved for urban areas, 30% for state grants	100%/0%	Entitlement formula grants: $1.9 million; average award to state programs: $19 million (for subawards to communities) in FY2019	$3.425 billion	$0

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2020 Funding[a]	FY2021 Funding Request
Commerce, EDA, Public Works and Economic Adjustment Assistance	Multipurpose economic development projects; may include water and sewer	Project grants	Generally 50%/50%	Average Public Works grant $1.4 million; average Economic Adjustment Assistance grant $650,000 (FY 2020)	$118.5 million allocated for the Public Works program and $37 million for the Economic Adjustment Assistance program	$0 for program activities

a. In some cases, funding amounts may address other objectives.

b. These projects must generally be authorized by Congress prior to construction. Municipal water supply is not the primary purpose of these projects.

c. Title XVI supports what is generally considered water reuse and reclamation. Reclamation is treatment of wastewater or other impaired surface water (e.g., seawater) or groundwater (e.g., groundwater with high levels of contaminants, such as arsenic or salts) to make it usable or reusable for nonpotable or indirect potable use (e.g., potable use after storage and recovery, such as after groundwater recharge). Reuse connotes planned beneficial use (e.g., landscape watering, agricultural irrigation, and industrial cooling) of treated municipal wastewater.

d. This ratio does not account for additional subsidization. Under certain conditions, states may provide additional subsidization, including principal forgiveness, negative interest loans, or a combination. In addition, appropriations acts in recent years have required states to use minimum percentages of their allotted funds to provide additional subsidization, including grants.

Department of the Interior[3]

Bureau of Reclamation[4]

The Bureau of Reclamation was established to implement the Reclamation Act of 1902, which authorized the construction of water works to provide water for irrigation in arid western states.[5] Reclamation owns and manages 475 dams and 337 reservoirs, which are capable of storing 245 million acre-feet of water.[6] These facilities serve approximately 31 million people, delivering a total of approximately 28.5 million acre-feet[7] of water annually in nondrought years. Of this amount, M&I water deliveries total approximately 2.8 million acre-feet annually and have more than doubled since 1970.

Reclamation primarily provides M&I water supplies as part of larger, multipurpose reclamation projects serving irrigation, flood control, power supply, and recreation purposes. However, since 1980, Congress has individually authorized construction of "rural water supply" projects.

In 1992, Congress authorized reclamation wastewater and reuse/recycling projects. These projects, discussed below, are known as Title XVI projects because they were first authorized in 1992 under Title XVI of P.L. 102-575. This title also authorized Reclamation to undertake specific and general feasibility studies for reclamation wastewater and reuse projects and to research, construct, and operate demonstration projects. Even so, these projects remain a small part of the overall Reclamation portfolio.

Historically, Reclamation constructed projects with federal funds, then established a repayment schedule based on the amount of total construction costs allocated to specific project purposes. Reclamation project authorizations typically require 100% repayment, with interest, for the M&I portion of water supply facilities, which makes Reclamation assistance a de facto long-term loan.[8] However, for M&I projects under rural water and Title XVI authorities, Congress has established terms providing some or all federal funding for projects on a nonreimbursable basis (i.e., a de facto grant). For example, the federal government fully funds rural water projects serving Indian populations. For non-Indian rural water supply projects, Congress has authorized nonreimbursable federal funding of as much as 75%-85% of project costs.[9] The federal share of costs for Title XVI projects is generally much lower than for rural water projects. It is limited to a

[3] This section was prepared by Charles V. Stern, Specialist in Natural Resources Policy, Resources, Science, and Industry Division; and Anna E. Normand, Analyst in Natural Resources Policy, Resources, Science, and Industry Division.

[4] For more information on Bureau of Reclamation water supply authorities and activities, CRS Report R46303, *Bureau of Reclamation: History, Authorities, and Issues for Congress*, by Charles V. Stern and Anna E. Normand.

[5] Reclamation is generally authorized to construct projects only in the 17 western states (Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming) unless otherwise directed by Congress. For example, in 1986, Congress authorized Reclamation to also work in U.S. territories (P.L. 99-396) and in 2005 to construct three water reuse facilities in Hawaii (P.L. 109-70).

[6] U.S. Department of the Interior, *Budget Justifications and Performance Information, Fiscal Year 2016: Bureau of Reclamation*, February 2015, p. 2, http://www.usbr.gov/budget/2016/FY16_Budget_Justifications.pdf.

[7] An acre-foot is the amount of water needed to cover one acre of land one foot deep, or 325,851 gallons.

[8] Repayment obligations are typically spread over a 40- or 50-year repayment term. In contrast to M&I repayment, Reclamation-built irrigation facilities are generally repaid without interest over similar time periods.

[9] Personal correspondence between CRS and Reclamation on January 9, 2020.

maximum of 25% of total project costs or, for projects authorized since 1996, a maximum of $20 million per project authorization.

"Traditional" Multipurpose Reclamation Projects[10]

Unlike many other programs described in this report, Reclamation undertakes projects largely at the explicit direction of Congress. Local project sponsors may approach Reclamation or Congress with proposals for project construction and funding. However, except where blanket feasibility study authorizations exist (e.g., certain program areas described below), specific project feasibility studies must first be authorized by Congress.[11] Once a feasibility study is completed, congressional authorization is typically sought prior to a request for construction appropriations.[12] Because there is no "program" per se, there are no general eligibility or program criteria for selecting large, multipurpose projects. Rather, Congress relies on information provided in feasibility studies, including cost-benefit, engineering, and environmental analyses and policy considerations.

Project Purposes

Individual authorization statutes establish project purposes. Generally, M&I projects are part of larger, multipurpose projects such as those built for irrigation water supply, flood control, and hydropower purposes. Projects may be authorized under the rural water supply or Title XVI water reuse programs described below.

Financing Mechanism

Projects are financed and constructed up front by the federal government, and costs for M&I portions of such projects are generally scheduled to be repaid 100%, with interest, via "repayment" or "water service" contracts. Irrigation districts must also repay their share of project benefits, but such payments are not subject to interest charges.

Eligibility Requirements

Generally, local governments and organizations such as irrigation, water, or conservation districts may approach Reclamation and/or Congress for project support. All construction project funding must be appropriated by Congress. As noted earlier, Reclamation only works on projects located in the 17 western states (32 Stat. 388; 43 U.S.C. §391 et seq.) unless otherwise specifically authorized.

---

[10] This section discusses "traditional" authority for Reclamation to construct water resources projects. Reclamation also has a similar (but separate) authority to construct new surface water storage projects under Section 4007 of the Water Infrastructure Improvements for the Nation Act (P.L. 114-322). For more information about how this authority differs from Reclamation's traditional construction authority, see CRS In Focus IF10626, *Reclamation Water Storage Projects: Section 4007 of the Water Infrastructure Improvements for the Nation Act*, by Charles V. Stern.

[11] See Section 8 of the Federal Water Project Recreation Act of 1965 (P.L. 89-72, 16 U.S.C. §460*l*-19).

[12] Section 9(a) of the Reclamation Project Act of 1939 (53 Stat. 1193; 43 U.S.C. §485h(a)) provides that, if the Secretary of the Interior finds that the allocable benefits of the project equal or outweigh anticipated costs, then the project shall be deemed authorized. Even so, the Secretary of the Interior has first sought congressional approval for large construction projects in recent decades. In any case, Congress would need to provide appropriations for any new project construction.

Funding

Funding information for the M&I portions of multipurpose projects is not readily available. Total discretionary Reclamation appropriations (gross current authority, not including permanent funding) for FY2020 were $1.660 billion. The total FY2021 budget request for Reclamation was $1.128 billion.[13]

Statutory and Regulatory Authority

Reclamation generally carries out its water supply activities in 17 western states as authorized by the Reclamation Act of 1902, as amended (32 Stat. 388; 43 U.S.C. §391 et seq.), as well as through hundreds of individual project authorization statutes.

Rural Water Supply Projects[14]

Similar to its traditional multipurpose projects, Reclamation has undertaken individual rural water projects largely at the explicit direction of Congress. In most cases, Congress has prioritized appropriation of funding for already-authorized projects rather than fund new rural water construction projects.

In lieu of the project-based approach to authorizing new rural water projects, in 2006 Congress authorized a rural water supply program (P.L. 109-451). Under the program, Reclamation was authorized to work with rural communities and Indian tribes to identify municipal and industrial water needs and options to address such needs through appraisal investigations and, in some cases, feasibility studies. In 2008, Reclamation published an interim final rule establishing future program criteria.[15] According to Reclamation, between 2006 and 2016, it used this authority to study approximately 22 projects to varying extents. It did not recommend any projects for construction, as authorized by Congress. No projects have been constructed under this authority, which expired at the end of FY2016 and has not been renewed. However, Congress continues to provide funding for previously authorized rural water projects. As of early 2020, Reclamation reported that $1.2 billion would be required to construct authorized, ongoing rural water projects.[16]

Project Purposes

Individual authorization statutes have established rural water project purposes. Some rural water project authorizations meet obligations under Indian water settlements or otherwise provide benefits to Indian tribes.

Financing Mechanism

Projects are generally cost-shared between the federal government and local sponsors. The federal government pays up to 100% of the cost of Indian rural water supply projects, and the federal cost share for current nontribal projects ranges from 75% to 80%. Reclamation requests and distributes funding from Congress generally based on prioritization criteria aimed to reflect both

[13] These amounts include funding for Rural Water and Title XVI programs, discussed below.

[14] See also CRS Report R46308, *Bureau of Reclamation Rural Water Projects*, by Anna E. Normand.

[15] 43 C.F.R. §404.

[16] Personal correspondence with Bureau of Reclamation, February 21, 2020.

the priorities identified in the statutes that authorized individual projects and the goals of the Rural Water Supply Act of 2006.

Eligibility Requirements[17]

Local governments and organizations such as water and conservation districts or associations, including tribes, may approach Reclamation and/or Congress for project support. Currently, all construction project funding must be authorized at the project level and appropriated by Congress. As noted earlier, Reclamation works only on projects located in the 17 western states (32 Stat. 388; 43 U.S.C. §391 et seq.) unless specifically authorized by Congress.

Reclamation previously published an interim final rule (43 C.F.R. Part 404) that established criteria for developing new rural supply projects. However, the authority for the program has since expired, and Congress last authorized a project in 2009.[18] The rule does not apply to previously authorized projects. As previously stated, ongoing rural water construction activities are limited to ongoing, previously authorized projects.

Funding

Enacted funding for rural water supply projects in FY2020 was $145.1 million. This amount is $117.4 million above the Administration's FY2020 budget request. The Administration proposed to allocate funding at the project level by Reclamation in the subsequent work plan for FY2020. For FY2020, the Administration's budget proposal requested $30.3 million for six ongoing authorized rural water projects.

Statutory and Regulatory Authority

The Rural Water Supply Program was authorized by the Rural Water Supply Act of 2006 (P.L. 109-451, Title I; 120 Stat. 3345; 43 U.S.C. §§2401-2408 note). This programmatic authority expired at the end of FY2016 and has not been renewed. Construction and operations and maintenance are ongoing for several geographically specific projects that were previously authorized under various individual acts.

Title XVI Projects

Title XVI of the Reclamation Projects Authorization and Adjustment Act of 1992 (P.L. 102-575) directs the Secretary of the Interior to develop a program to "investigate and identify" opportunities to reclaim and reuse wastewater and naturally impaired ground and surface water. Water reclaimed via Title XVI projects is primarily used for M&I water supply (nonpotable and indirect potable purposes only). Other uses include irrigation supply, groundwater recharge, fish and wildlife enhancement, or outdoor recreation.

The original Title XVI legislation authorized construction of five reclamation wastewater projects and six wastewater and groundwater recycling/reclamation studies. The act was amended in 1996 (P.L. 104-266) to authorize another 18 construction projects and an additional study and has been

[17] For more information, see Reclamation's "Frequently Asked Questions" website: http://www.usbr.gov/ruralwater/general/faq.html.

[18] Department of the Interior, "Reclamation Rural Water Supply Program," 73 *Federal Register* 67778-67791, November 7, 2008, http://edocket.access.gpo.gov/2008/pdf/E8-26584.pdf. Under the rule, priority was given to domestic, residential, and municipal uses. Communities or groups of communities with populations under 50,000 were also eligible. The use of water for commercial irrigation purposes was not allowed.

amended several times since, resulting in a total of 53 projects individually authorized for construction. Most recently, amendments to Title XVI enacted in December 2016 in the Water Infrastructure Improvements for the Nation Act (WIIN Act, P.L. 114-322) made changes to the program, including authorizing the Secretary of the Interior to accept and review nonfederal feasibility studies for potential planning, design, and construction projects.[19] As of August 2019, 54 projects had been approved under the WIIN Act authority. The WIIN Act also authorized a competitive grant program for construction of projects approved under this authority, including an authorization of $50 million in appropriations.[20] Based on agency data, CRS estimates that as of early 2020, the backlog of remaining federal funding needed to construct the 107 authorized Title XVI projects (i.e., both "traditional" and WIIN Act authorized projects) exceeded $1 billion.[21]

Project Purposes

The general purpose of Title XVI projects is to provide supplemental water supplies by recycling/reusing agricultural drainage water, wastewater, brackish surface and groundwater, and other sources of contaminated water. Projects may be permanent or for demonstration purposes.

Financing Mechanism

Title XVI projects are funded through partial de facto grants. The funding is part of the larger Reclamation WaterSMART program, which also provides grants for water conservation and river basin studies under separate authority granted in the Secure Water Act (P.L. 111-11, Subtitle B). Title XVI project construction costs are shared by the federal government and a local project sponsor or sponsors. The federal share is generally limited to a maximum of 25% of total project costs and is nonreimbursable, resulting in a de facto grant to the local project sponsor(s). In 1996, Congress limited the federal share of individual projects to $20 million in 1996 dollars (P.L. 104-266).

The federal share of feasibility studies is limited to 50% of the total study cost except in cases of "financial hardship." However, the federal share must be reimbursed. The Secretary may also accept in-kind services that are determined to positively contribute to the study.

Eligibility Requirements

Similar to other Reclamation activities, the Title XVI water reclamation and wastewater recycling program is limited to projects and studies in the 17 western states unless otherwise specified.[22] Authorized recipients of program assistance include "legally organized non-federal entities," such as irrigation districts, water districts, municipalities, and Indian tribes. Prior to enactment of the WIIN Act, Administration requests for construction funding had generally been limited to projects where (1) an appraisal investigation and feasibility study have been completed and approved by the Secretary, (2) the Secretary determined that the project sponsor was capable of funding the nonfederal share of project costs, and (3) the local sponsor entered into a cost-share agreement with Reclamation. The WIIN Act provided the Department of Interior with additional authority to accept nonfederal feasibility studies and to approve and consider these projects for

[19] These guidelines were published in Reclamation Manual Directive and Standard WTR 11-01, February 8, 2017, https://www.usbr.gov/recman/wtr/wtr11-01.pdf.

[20] FY2017 and FY2018 guidelines for distribution of grants under the WIIN Act authority were the same as those for "traditional" Reclamation projects, but the two groups of projects were allocated funding amounts separately (i.e., they do not have to compete against one another).

[21] CRS analysis of Bureau of Reclamation data and reporting on Title XVI projects, February 2020.

[22] For example, Congress has authorized three projects for construction in Hawaii (P.L. 109-70).

construction funding if they meet Title XVI program criteria. These criteria require that (1) the study comply with federal laws and regulations applicable to water reuse and recycling studies, and (2) the project is technically and financially feasible and provides a federal benefit in accordance with Reclamation laws. The WIIN Act authority has essentially rendered unnecessary the prior practice of obtaining specific authorizations for individual Title XVI projects before Reclamation can pursue funding.

Over time, Reclamation has issued and revised multiple documents outlining evaluation criteria for prioritizing Title XVI projects. The most recent evaluation criteria for Title XVI projects were posted in March 2018.[23]

Funding

The total regular appropriation for the Title XVI program in FY2020 was $67.0 million, with $20 million of this funding designated as being available for WIIN Act–authorized projects. The Administration's FY2021 request for Title XVI was $3.0 million.

Funding for projects authorized prior to 1996 ranged in size from $152 million ($38 million for Reclamation's share) to $690 million ($172 million for Reclamation's share). Post-1996 project authorizations have been smaller, ranging from $6.6 million ($1.65 million for Reclamation's share) to $319 million ($20 million for Reclamation's share).

Statutory and Regulatory Authority

The original statutory authority for the Reclamation wastewater and reuse program is the Reclamation Wastewater and Groundwater Study and Facilities Act, Title XVI of P.L. 102-575, as amended (43 U.S.C. §390h et seq.). Other statutes that authorized Title XVI projects include the Reclamation Recycling and Water Conservation Act of 1996 (P.L. 104-266); the Oregon Public Land Transfer and Protection Act of 1998 (P.L. 105-321); the 1999 Water Resources Development Act (WRDA, P.L. 106-53, §595); the Consolidated Appropriations Act for FY2001 (P.L. 106-554, Division B, §106); a bill amending the Reclamation Wastewater and Groundwater Study and Facilities Act (P.L. 107-344); the Consolidated Appropriations Act for FY2003 (P.L. 108-7, Division D, §211); the Emergency Wartime Supplemental Appropriations Act of 2003 (P.L. 108-11); the Irvine Basin Surface and Groundwater Improvement Act of 2003 (P.L. 108-233); the Williamson County Water Recycling Act of 2004 (P.L. 108-316); the Hawaii Water Resources Act of 2005 (P.L. 109-70); the Consolidated Appropriations Act, 2008 (P.L. 110-161); the Consolidated Natural Resources Act of 2009 (P.L. 110-229); the Omnibus Public Land Management Act of 2009 (P.L. 111-11; Title IX, Subtitle B); and the WIIN Act (P.L. 114-322, Title III, Subtitle J).

[23] Bureau of Reclamation, *Title XVI Water Reclamation and Reuse Program, Updated Evaluation Criteria for Review and Comment*, March 2018, https://www.usbr.gov/watersmart/title/docs/2018/Title%20XVI-Evaluation-Criteria-Review.pdf.

Department of Defense[24]

Army Corps of Engineers (Civil Works)

As part of its civil works activities, USACE operates water resource projects throughout the country. USACE civil works projects and authorities are concentrated on three principal missions—navigation, flood damage reduction, and aquatic ecosystem restoration. Some USACE activities may also support M&I water supply storage, hydroelectric generation, fish and wildlife, and recreation. The most common way that USACE infrastructure supports M&I water supply is through providing storage of M&I water at a USACE reservoir.[25] M&I water supply is generally not a USACE reservoir's or project's primary purpose.

Congress has authorized two USACE civil works projects to have significant water supply components. Both are located in Arkansas and address groundwater overdraft: the Grand Prairie Area Demonstration Project and the Bayou Meto Basin Project. These projects received $1.35 million in FY2020.

At the direction of Congress, USACE also provides assistance for municipal environmental infrastructure, which typically consists of assistance with municipal drinking water and wastewater infrastructure projects and municipal source water protection and development.

Storage of Municipal and Industrial Water at Multipurpose Reservoirs

A total of 136 USACE reservoirs have roughly 9.8 million acre-feet of storage designated for M&I water. Most of this water was allocated to M&I purposes when the projects were constructed. Around 0.9 million acre-feet of this storage space has been assigned to M&I use from existing USACE reservoirs using USACE's general water supply authorities. The storage of M&I water at USACE reservoirs, as discussed below, is subject to availability of storage space, and the associated costs are 100% a local, nonfederal responsibility. For its projects, USACE policy is that the agency does not acquire water rights for either M&I or agricultural water supply and conservation purposes. Rather, the water user is responsible for securing water rights.

Congress has given USACE limited general authority for M&I water supply under two different statutes:

- The Water Supply Act of 1958 authorized USACE (and Reclamation) to recommend economically justified M&I water supply storage space in new or existing reservoirs.

[24] This section was prepared by Anna E. Normand, Analyst in Natural Resources Policy, Resources, Science, and Industry Division.

[25] Prior to the enactment of the WIIN Act (P.L. 114-322), USACE participated in water conservation at its reservoirs in two ways. Congress had authorized specific USACE projects to have water conservation as a purpose for project operations. This allowed USACE to provide for seasonal M&I use of storage space at those USACE reservoirs. The use could be either as a direct withdrawal from the reservoir or for enhancing groundwater supplies (e.g., the USACE dam would release water in a way that would benefit passive or active groundwater recharge efforts). Second, according to USACE planning guidance, "project operations may be modified to enhance ground water replenishment, to increase downstream flows, or to otherwise enhance usage of projects for M&I purposes. Modifications must be consistent with authorized project purposes and law" (USACE, *Planning Guidance Notebook*, Engineer Regulation 1105-2-100, April 22, 2000, pp. 3-34). With enactment of WIIN Act (Sections 1116, 1117, and 1118), Congress provided some general authority for USACE to operate reservoirs for "water conservation," including groundwater recharge.

- The Flood Control Act of 1944 authorizes USACE to provide, through temporary agreements, surplus water from USACE reservoirs. Surplus water contracts have generally been limited to five-year terms with options to extend.

Pursuant to these statutes, the agency can enter into agreements with nonfederal entities for water supply storage.

Project Purposes

As previously noted, Congress authorized USACE to allocate a portion of its multipurpose reservoirs for permanent M&I storage or to provide M&I water from USACE reservoirs under temporary agreements for surplus water. Neither authority allows USACE to sell or allocate quantities of water. Instead, USACE M&I agreements are for space in a reservoir and provide no guarantee of a fixed quantity of water to be delivered in a given year. Under these authorities, USACE delivers water if it is available in the storage space and if delivery does not substantially affect other authorized purposes.

Financing Mechanism

Most agreements for new M&I water supply storage are associated with existing USACE reservoirs and require nonfederal entities to make annual payments for M&I water storage services at USACE reservoirs. USACE construction projects are financed up front by the federal government, and costs for M&I project purposes are repaid 100%, with interest, via long-term (typically 30 years) agreements, unless specified otherwise in law. The fees collected from nonfederal entities pursuant to water supply agreements are deposited into a general account at the U.S. Treasury.

Eligibility Requirements

For new USACE projects with M&I water supply, existing law and agency policy require that (1) water supply benefits and costs be equitably allocated among multiple purposes, (2) repayment by state or local interests be agreed to before construction, (3) the water supply allocation for anticipated demand at any project not exceed 30% of the total estimated cost, (4) repayment shall be either during construction (without interest) or over 30 years (with adjustable interest rates), and (5) users reimburse USACE annually for all associated operation and maintenance or replacement costs. Congress has enacted occasional exceptions to USACE's general authority, which is generally limited to storage of water supply at existing projects that does not "seriously affect" other project purposes.[26]

Funding

USACE primarily uses annual appropriations for administration of its water supply authorities. From FY2020 annual appropriations, USACE planned to use $7 million for USACE's costs for implementing its water supply authorities. The Administration's FY2021 budget request included $6 million for USACE's implementation costs.

[26] 43 U.S.C. §390b(e).

Statutory Authority

Statutory authority is provided in the Water Supply Act of 1958 (Title III, 72 Stat. 320, as amended; 43 U.S.C. §390b);[27] the Flood Control Act of 1944 (§6, 58 Stat. 890, as amended, 33 U.S.C. §708); and project-specific authorities in WRDAs or similar legislation.

Environmental Infrastructure Assistance

Project Purpose

Federal policy is generally that community water supply is a local and state responsibility. However, communities, particularly rural and small communities, have increasingly sought federal water supply assistance. Since 1992, Congress has enacted more than 350 authorizations allowing USACE to provide designated communities, counties, and states with design and construction assistance for drinking water and wastewater infrastructure (including treatment and distribution/collection facilities) and source water protection and development. These activities are known as *environmental infrastructure* (EI) projects or programs. The authorizations of federal appropriations for these activities has varied widely from $0.5 million to $25 million for planning and design assistance and from $0.2 million to $435 million for construction assistance. As with Reclamation's rural water supply and Title XVI projects, congressional funding of these authorizations has enlarged the scope of USACE's activities. Like many USACE activities, congressional support for specific EI assistance authorizations and appropriations is complicated by the authorities' geographic specificity, which is problematic under congressional earmark bans and moratoria.

Financing Mechanism

Under most USACE EI assistance authorizations, federal assistance typically requires a 75% federal and 25% nonfederal cost-share (some authorities are 65% federal and 35% nonfederal). Congress typically provides the federal portion in annual Energy and Water Development Appropriations acts. How USACE and nonfederal financing is managed varies according to the specifics of the authorization. USACE may perform the authorized design or construction work and can often use appropriated funds to reimburse nonfederal sponsors for work the sponsors perform, subject to the availability of appropriations.

Eligibility Requirements

Because EI assistance activities are not part of a national USACE program per se, there are no general eligibility criteria. Most USACE EI authorities specify a specific geographic location (e.g., a city, county, or state) and types of projects (e.g., municipal drinking water) as the principal eligibility requirements. Consequently, USACE evaluates an activity's eligibility by identifying whether there is an authorization for the geographic area of the activity and whether the type of activity is eligible under that authorization. Based on a review of enacted legislation likely to include EI assistance authorities, CRS identified authorized EI assistance in at least 44 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the Northern Mariana Islands. CRS did not identify authorities for EI assistance in Delaware, Hawaii, Maine, Nebraska, Vermont, Washington, and other U.S. territories. Because this assistance is not associated with a

[27] For information on USACE's civil works program, see http://www.usace.army.mil/Services/Pages/Services.aspx.

traditional USACE water resources projects, it is not subject to USACE planning requirements (e.g., a benefit-cost analysis is not performed).

Funding

Only a subset of authorized USACE EI activities has received appropriations. Since 1992, Congress has provided USACE roughly $2 billion in funds for EI assistance. Congress provided USACE with $77 million for EI assistance activities in FY2019 and $100 million in FY2020. These funds are part of the "additional funding" provided by Congress in appropriations acts. The Administration follows guidance provided in the appropriations acts and accompanying reports to guide its use of these funds for authorized EI assistance activities. USACE identifies selected EI assistance activities in the agency's Work Plan for the fiscal year, which is typically available within two months after enactment of appropriations.[28] Funds are generally used to continue ongoing EI assistance, but in FY2020, one authority received funding for the first time since FY2010.[29]

The Trump Administration requested no funding for these activities in its FY2021 request. Since the first authorization for EI assistance in 1992, no Administration has asked for funding for USACE EI assistance.

Statutory Authority

Prior to 1992, USACE was generally not widely involved with municipal drinking water treatment and distribution and wastewater collection and treatment. The agency is now authorized to contribute to more than 350 EI projects and programs. A WRDA or similar legislation is the typical legislative vehicle for USACE authorizations.[30] Beginning with Sections 219 and 313 of WRDA 1992 (P.L. 102-580), Congress has authorized USACE to assist local interests with planning, design, and construction assistance for EI projects. Subsequent USACE authorization bills included new EI assistance activities and raised the authorized funding ceilings for previously authorized projects. Policies limiting congressionally directed spending have limited recent congressional authorizing activity of EI assistance. In WRDA 2016 and WRDA 2018, Congress expanded the process for nonfederal entities to propose modifications to existing authorities for EI assistance. For those proposals that meet the criteria established by Congress, the Administration transmits those proposals to Congress for its consideration as part of deliberations regarding USACE authorization legislation.[31]

---

[28] EI assistance is funded through the agency's Construction account in Energy and Water Appropriations acts. USACE Work Plans for recent fiscal years are published at this USACE website http://www.usace.army.mil/Missions/Civil-Works/Budget/. For more information on USACE appropriations, see CRS Report R46320, *U.S. Army Corps of Engineers: Annual Appropriations Process and Issues for Congress*, by Anna E. Normand and Nicole T. Carter.

[29] For more information, see CRS In Focus IF11184, *Army Corps of Engineers: Environmental Infrastructure Assistance*, by Anna E. Normand.

[30] For more on this public proposal process, see CRS Insight IN11118, *Army Corps of Engineers: Section 7001 Annual Report on Future Studies and Projects*, by Anna E. Normand; and this USACE website: http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/WRRDA-7001-Proposals/.

[31] For more on this public proposal process, see CRS Insight IN11118, *Army Corps of Engineers: Section 7001 Annual Report on Future Studies and Projects*, by Anna E. Normand; and this USACE website: http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/WRRDA-7001-Proposals/.

Department of Agriculture

Rural Utilities Service (Water and Waste Disposal Programs)[32]

USDA administers a variety of water and waste disposal[33] programs that provide loans and grants for drinking water, sanitary sewer, and storm drainage facilities in rural communities. Eligibility is limited to rural communities of 10,000 population or fewer for grants and direct loans and 50,000 or fewer for guaranteed loans. These programs are administered at the national level by the Rural Utilities Service (RUS) at USDA. RUS allocates program funds to the USDA State Rural Development offices through an allocation formula based on rural population, poverty, and unemployment. Loans originate at the USDA's State Rural Development offices.

Between 2009 and 2016, RUS funded $13.9 billion for nearly 5,825 projects for water and wastewater facilities.[34] According to an RUS FY2016 annual report (most recent available), 46% of $1.8 billion in investments in that year were for water systems, 49% were for wastewater systems, and the remaining 5% were for combined projects. There is heavy demand for water and wastewater disposal funds for small rural communities. At the end of FY2018, USDA reported a $2.5 billion backlog of requests for water and wastewater projects.[35]

Water and Wastewater Loans and Grants

Program Purpose

The purpose of these programs is to provide basic human amenities, alleviate health hazards, and promote the orderly growth of the nation's rural areas by meeting the need for new and improved rural water and waste disposal facilities. Eligible projects can include drinking water facilities, sanitary sewers, and stormwater drainage and disposal facilities. Funds may be used for installation, repair, improvement, or expansion of rural water facilities, including costs of distribution lines and well-pumping facilities.

USDA is required to use a portion of the water and waste grants appropriation to make grants to qualified nonprofits to provide technical assistance and training to help communities identify solutions to water and waste problems, prepare applications for grants and loans, and improve operation and maintenance of existing water and waste disposal facilities in rural areas.[36] The 2018 farm bill (P.L. 115-334) directed the Secretary to reserve 3%-5% of total water and waste grant funding for this technical assistance and training. This activity has received $18 million to $20 million annually in recent years. For FY2020, Congress specified that funding for technical assistance for water and waste disposal facilities may not exceed $30 million.[37] In addition, the

[32] This section was prepared by Tadlock Cowan, Analyst in Natural Resources and Rural Development Policy, Resources, Science, and Industry Division.

[33] The programs' official titles contain "Waste Disposal," but note that the vast majority of the waste disposal projects are for wastewater infrastructure. A very small amount of funding, typically less than 1%, goes to technical assistance related to solid waste management, although Congress authorizes annual appropriations for solid waste management grants.

[34] USDA, "Water and Environmental Program: FY2016 Progress Report," https://www.rd.usda.gov/files/WEP-AnnualProgressReport2016Final.pdf.

[35] Personal communication with RUS staff.

[36] 7 U.S.C. §1926(a)(14), Rural Water and Wastewater Technical Assistance Training Programs.

[37] P.L. 116-94, Further Consolidated Appropriations Act, 2020.

similar Circuit Rider technical assistance program has an appropriation of $19.6 million for FY2020.[38] The 2018 farm bill authorized appropriations for this program at $25 million annually for FY2019-FY2023.

Financing Mechanism

Direct loans, guaranteed loans, and grants provide USDA support for water and waste disposal projects. USDA prefers making direct loans. Grants are made only when necessary to reduce average annual user charges to a reasonable level, particularly for lower-income communities. The split between loans and grants distributed from the regular infrastructure program, which is the large majority of spending, was about 75-25 in 2015 and 2016.[39] There is no statutory distribution formula. USDA allocates funds to states based upon rural population, number of households in poverty, and unemployment. There are no matching requirements for states.

Water and Waste Disposal Loans

The Rural Development Act of 1972 authorized establishment of the Rural Development Insurance Fund under the Consolidated Farm and Rural Development Act. Among other activities, this fund is used for loans (direct and guaranteed) for projects for the development, storage, treatment, purification, or distribution of water or the collection, treatment, or disposal of waste in low-income rural areas. Loans are repayable in not more than 40 years or the useful life of the facilities, whichever is less. USDA makes either direct loans to applicants or guarantees up to 90% of loans made by third-party lenders such as banks and savings and loan associations.

Loan interest rates are based on the community's economic capacity and health environment. Interest rates are designated poverty, market, or intermediate. Poverty interest rate loans are made in areas where the median household income (MHI) falls below 80% of the statewide nonurban MHI or the poverty level, whichever is higher, and where the project is needed to meet health or sanitary standards. By law, this rate is set at 60% of the market rate. The market rate is adjusted quarterly and is set using the average of a specified 11-bond index. It applies to loans to applicants where the MHI of the service area exceeds the statewide nonurban MHI. The intermediate rate applies to loans that do not meet the criteria for the poverty rate and do not have to pay the market rate. By law, this rate is set at 80% of the market rate.[40] Interest rates on guaranteed loans are negotiated between the borrower and the lender. The 2014 farm bill (P.L. 113-79) amended (1) the water and waste disposal direct and guaranteed loan programs to encourage financing by private or cooperative lenders to the maximum extent possible; (2) use of loan guarantees where the population exceeds 5,500; and (3) use of direct loans where the impact of a guaranteed loan on rate payers would be significant. The average direct loan amount for FY2019 was $2.3 million. The average guaranteed loan amount was $1.4 million.

Water and Waste Disposal Grants

Grants for water and waste disposal projects in rural areas are also authorized under the Consolidated Farm and Rural Development Act. Only communities with poverty and intermediate-rate incomes qualify for USDA grants. An eligible project must serve a rural area that is not likely to decline in population below the level for which the project was designed and constructed so that adequate capacity will or can be made available to serve the reasonably foreseeable growth needs of the area. The 2018 farm bill (P.L. 115-334) authorized appropriations

[38] 7 U.S.C. §1926(a)(22). Congress has authorized similar rural water technical assistance programs under the Safe Drinking Act, Section 1442(e), and the Federal Water Pollution Control Act, Section 104(b)(8), as discussed below.

[39] USDA, "Water and Environmental Program."

[40] For current interest rates, see http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.

at $15 million annually for FY2019-FY2023 for these grants. The appropriation for water and wastewater grants for FY2020 is $443 million. The average grant award in FY2019 was $1.3 million.

Grant funds may be available for up to 75% of the cost of a project and should be used only to reduce user costs to a reasonable level. Grants are made only after RUS determines the maximum amount of loan that a community can afford and still have reasonable user rates. Grants, which typically provide 35%-45% of project costs, may be used to supplement other funds borrowed or furnished by applicants for project costs and may be combined with USDA loans when the applicant is able to repay part, but not all, of the project costs. Priority is given to projects serving populations of less than 5,500.

Eligibility Requirements

Eligible entities are municipalities, counties, and other political subdivisions of a state; associations, cooperatives,[41] and organizations operated on a not-for-profit basis; Indian tribes on federal and state reservations; and other federally recognized tribes. USDA's loan and grant programs are limited to community service areas (including areas in cities or towns) with population of 10,000 or fewer for grants and direct loans and 50,000 or fewer for guaranteed loans. To be eligible for assistance, communities must be unable to get reasonable credit through normal commercial channels. Also, communities must be below certain income levels. Loans and grants are made for projects needed to meet health or sanitary standards, including Clean Water Act and Safe Drinking Water Act standards and requirements.

Funding

FY2020 appropriations for USDA's water and waste disposal programs and related programs were included in the Further Consolidated Appropriations Act, 2020 (P.L. 116-94). Title III of Division B provided $659.5 million in total for FY2020, including $443.0 million in grants, $63.8 million in direct loan subsidies ($1.40 billion in loan authority), and $70,000 in subsidy to support guaranteed loans ($50.0 million in loan authority). Out of the total FY2020 funds, USDA has appropriations of $1.0 million for grants to capitalize revolving loans for water and waste disposal systems and $68.0 million to support water and waste disposal projects in the *colonias*, Alaska Native communities, and Hawaiian Native communities. For FY2021, the Administration is requesting $1.27 billion in direct loan authority, $58.0 million for guaranteed loans, and $463 million for water and waste disposal grants. No appropriation for supporting loan subsidies was requested.

Statutory and Regulatory Authority

Statutory authority for the water and waste disposal loan and grant programs, water technical assistance, and other rural water assistance programs is the Consolidated Farm and Rural Development Act, as amended, (§306, 7 U.S.C. §1926). Regulations for these programs are codified at Title 7, Parts 1779-1780, of the *Code of Federal Regulations*.[42]

---

[41] Rural electric cooperatives (coops) are private entities that build and manage rural utility systems. The 1990 farm bill (P.L. 101-624) authorized rural coops to expand from their traditional electricity and telephone services. An estimated 80-90 rural electric coops (fewer than 10% of the total number of coops nationwide) are currently involved in some aspect of drinking water or wastewater management, with the majority dealing with drinking water management.

[42] For additional information on RUS water and environmental programs, see http://www.rd.usda.gov/programs-

Emergency Community Water Assistance Grants

RUS is also authorized to help eligible communities prepare for or recover from an emergency that threatens the availability of safe, reliable drinking water.[43] Grants, ranging from $10,000 to a maximum of $1 million are provided for projects to serve a rural area with a population of 10,000 or fewer that has an MHI not in excess of the statewide nonmetropolitan MHI. Grants for repairs, partial replacement, or significant maintenance of an established system cannot exceed $150,000. Communities use the funds for new systems, waterline extensions, construction of water source and treatment facilities, and repairs or renovation of existing systems and may be awarded for 100% of project cost. Applicants compete on a national basis for available funding. Funding for this program is provided primarily through a reservation of 5%-7% of appropriated water and waste disposal grant funds. The 2018 farm bill (P.L. 115-334) also authorized the appropriation of an additional $50 million per year through FY2023 for this program. Amounts provided through this program have been quite variable over time, depending on need. In FY2014, $14.7 million was distributed in 14 states. In FY2015, $2.5 million was distributed in 14 states. Congress appropriated $15 million for the program for both FY2019 and FY2020.

Statutory authority for the emergency community water assistance grant program is the Consolidated Farm and Rural Development Act, as amended, Section 306A (7 U.S.C. §1926a). Regulations for this program are codified at Title 7, Part 1778, of the *Code of Federal Regulations*.

Rural Decentralized Water Systems Grants

USDA is also authorized to make grants to private nonprofit organizations for the purpose of providing loans and subgrants to eligible individuals for construction, refurbishing, and servicing of "individual household water well systems and individually owned decentralized wastewater systems."[44] Loans and subgrants are limited to $15,000 per water well or decentralized system. The 2018 farm bill (P.L. 115-334) authorized $20.0 million for the program through FY2023. Appropriations for the program for FY2020 are $5.0 million and for FY2019 were $1.5 million.

Statutory authority for the rural decentralized water systems grant program is the Consolidated Farm and Rural Development Act, as amended, Section 306E (7 U.S.C. §1926e). Regulations for this program are codified at Title 7, Part 1776, of the *Code of Federal Regulations*.

Natural Resources Conservation Service[45]

The USDA provides assistance for watershed activities under four closely related authorities that are administered by the Natural Resources Conservation Service (NRCS). The Watershed and Flood Prevention Operations Program (WFPO) consists of two authorities—P.L. 83-566 and P.L. 78-534. Projects funded under these authorities are referred to as P.L. 566 and P.L. 534 projects, respectively. These authorize NRCS to provide technical and financial assistance to state and local organizations to plan and install measures to prevent erosion, sedimentation, and flood damage and to conserve, develop, and utilize land and water resources. Dams constructed under

services/water-waste-disposal-loan-grant-program.

[43] 7 U.S.C. §1926a.

[44] 7 U.S.C. §1926e.

[45] This section was prepared by Megan Stubbs, Specialist in Agricultural Conservation and Natural Resources Policy, Resources, Science, and Industry Division.

the WFPO program may also be eligible to receive assistance under the Small Watershed Rehabilitation Program, authorized by Congress in 2000. The fourth watershed authority is an emergency program that is not discussed in this report.[46]

Watershed and Flood Prevention Operations

The WFPO program consists of projects built under two authorities—the Watershed Protection and Flood Prevention Act of 1954 (P.L. 83-566) and the Flood Control Act of 1944 (P.L. 78-534). The vast majority of the projects (referred to as P.L. 566 projects) have been built pursuant to the authority of P.L. 83-566, which authorizes the chief of the NRCS to approve construction of smaller projects (discussed below). Larger projects must be approved by Congress. In FY2019, NRCS funded the following P.L. 566 projects: 37 new projects, 18 backlog projects, and five remedial projects.[47]

Eleven specific projects were authorized under P.L. 78-534 (referred to as P.L. 534 projects). They are much larger and more expensive than P.L. 566 projects. In total, the P.L. 534 projects encompass almost 37.9 million acres and are divided into component projects in subwatersheds. Approximately 90% of the work on the P.L. 534 projects is complete. With the exception of the two smallest projects, the estimated federal costs for each of these projects range from $40 million to more than $275 million. Three of the projects have been completed, and work on the remainder continues in one or more subwatersheds.

The FY2020 Further Consolidated Appropriations Act (P.L. 116-94, Division B) appropriated $175 million in FY2020. Amendments in the 2018 farm bill (P.L. 115-334) permanently authorized an additional $50 million annually from mandatory sources to the WFPO program.

Program Purpose

The purpose of the WFPO program is to provide technical and financial assistance to states and local organizations to plan and install watershed projects. Both P.L. 566 and P.L. 534 projects have similar objectives and are implemented following similar procedures. Both project types fund land treatment and nonstructural and structural facilities for flood prevention, erosion reduction, agricultural water management, public recreation development, fish and wildlife habitat development, and municipal or industrial water supplies. Structural measures can include dams, levees, canals, and pumping stations. Local sponsors agree to operate and maintain completed projects.

Financing Mechanism

USDA provides partial project grants plus technical advisory services. Financing for water projects under the WFPO program varies depending on project purposes. The federal government pays all costs related to construction for flood control purposes only. Costs for nonagricultural water supply must be repaid by local organizations. However, up to 50% of costs for land, easements, and rights-of-way allocated to public fish and wildlife and recreational developments may be paid with program funds. Additionally, sponsors may apply for RUS Water and Waste

[46] The Emergency Watershed Protection (EWP) program is used to restore the natural functions of a watershed after a natural disaster has occurred and to minimize the risks to property and life posed by floods by purchasing easements on flood plains. For more information on the EWP program, see CRS Report R42854, *Emergency Assistance for Agricultural Land Rehabilitation*, by Megan Stubbs.

[47] USDA, *FY2021 USDA Budget Congressional Justification*, "2021 USDA Explanatory Notes—Natural Resources Conservation Service," p. 29-82, https://www.obpa.usda.gov/explan_notes.html.

Program loans to finance the local share of project costs. Participating state and local organizations pay all operation and maintenance costs.

Eligibility Requirements

P.L. 566 has been called the small watershed program because no project may exceed 250,000 acres, and no structure may exceed more than 12,500 acre-feet of floodwater detention capacity or 25,000 acre-feet of total capacity.[48] The Senate and House Agriculture Committees must approve projects that need an estimated federal contribution of more than $25 million for construction or include a storage structure with a capacity in excess of 2,500 acre feet. If the storage structure will have a capacity in excess of 4,000 acre feet, approval is also required from the Senate Environment and Public Works Committee and the House Transportation and Infrastructure Committee. There are no population or community income-level limits on applications for P.L. 566 projects, but at least 20% of the total benefits of the project must directly relate to agriculture (including rural communities).

Funding

The enacted FY2020 appropriation provided WFPO with $175 million. Of the $175 million, $70 million is required to be allocated to projects and activities that (1) can "commence promptly;" (2) address regional priorities for flood prevention, agricultural water management, inefficient irrigation systems, fish and wildlife habitat, or watershed protection; or (3) address ongoing P.L. 534 projects. The FY2021 Administration's request proposes no discretionary funding for the WFPO program.

Beginning in FY2014, Congress has annually directed a portion of the appropriation for the Conservation Operations account to fund WFPO projects.[49] The Conservation Operations account funds general conservation technical assistance offered by NRCS. This congressionally directed amount is in addition to the funds made available for the program as a whole.

In addition to discretionary funding through appropriations, the 2018 farm bill permanently authorizes $50 million annually from mandatory sources.[50] This mandatory funding will be available unless otherwise amended by Congress. Mandatory funds are authorized for P.L. 566 projects as well as rehabilitation work under the Small Watershed Rehabilitation Program.

Statutory and Regulatory Authorities

The WFPO program consists of two authorities: the Flood Control Act of 1944, P.L. 78-534, as amended, 58 Stat. 905 (33 U.S.C. §701b-1); and the Watershed Protection and Flood Prevention Act of 1954, P.L. 83-566, as amended, 68 Stat. 666 (16 U.S.C. §§1001-1008). Regulations are codified at Title 7, Part 622, of the *Code of Federal Regulations*.[51]

---

[48] The enacted FY2020 appropriation included a policy provision that waives the 250,000-acre project limit when the project's primary purpose is something other than flood prevention. This provision did not amend the WFPO authorization. Therefore, it is effective only for the funds provided during the FY2020 appropriation year.

[49] Congressionally directed amounts of Conservation Operations funding for WFPO projects include $3 million in FY2014, $5.6 million in FY2015, $10.6 million in FY2016, and $5.6 million annually in FY2017-FY2020.

[50] The 2018 farm bill authorizes mandatory funding from the Commodity Credit Corporation, a government-owned entity that finances programs supporting U.S. agriculture. For more information, see CRS Report R44606, *The Commodity Credit Corporation: In Brief*, by Megan Stubbs.

[51] For information on the program, see NRCS, "Watershed and Flood Prevention Operations Program," https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wfpo/.

Small Watershed Loans

As part of its lending responsibilities, RUS makes loans to local organizations to finance the local share of the cost of installing, repairing, or improving facilities, purchasing sites and easements, and related costs for P.L. 566 and P.L. 534 projects (see discussion above). Loans are limited to $10 million, they must be repaid within 50 years, and the cost-share assistance may not exceed the rate of assistance for similar projects under other USDA conservation programs. NRCS and the local organization must also agree on a plan of work before a loan is obligated. Over the life of the program, 495 RUS loans have been made at a value of almost $176 million.

Small Watershed Rehabilitation

Some of the oldest P.L. 566 projects that have exceeded their design life (dams were constructed starting in 1948) need rehabilitation work to continue to protect public health and safety by reducing any possibility of dam failure and to meet changing resource needs. By December 2019, approximately 6,470 watershed dams had reached the end of their originally designed life spans. By the end of 2020, 6,578 watershed dams will have reached the end of their designed life spans. In response to this concern, Congress created a dam rehabilitation program, known as the Small Watershed Rehabilitation Program, in Section 313 of the Grain Standards and Warehouse Improvement Act of 2000 (P.L. 106-472), which revised the WFPO program. From 2000 to 2019, the program authorized the rehabilitation of 355 dams in 37 states. Of this total, 161 projects are complete, 87 are in progress, and the remaining projects are waiting for funding.

Program Purpose

The purpose of rehabilitation is to extend the service life of the dams and bring them into compliance with applicable safety and performance standards or to decommission the dams so they no longer pose a threat to life and property.

Financing Mechanism

Partial project grants, plus provision of technical advisory services, are provided. NRCS may provide 65% of the total rehabilitation costs but no more than 100% of the actual construction cost and is prohibited from funding operation and maintenance expense. Rehabilitation projects also provide an opportunity to modify projects to provide additional benefits, including municipal water supplies. Local watershed project sponsors provide 35% of the cost of a rehabilitation project and obtain needed land rights and permits. The source of these funds varies from state to state and may include bonds, local taxing authority, state appropriations, or in-kind technical services.

Eligibility Requirements

Only dams constructed under the P.L. 83-566 authority, the Resource Conservation and Development program, and pilot watershed projects authorized in the Agriculture Appropriations Act of 1953 are eligible for assistance under the Small Watershed Rehabilitation Program.

Funding

Since FY2000, Congress has appropriated more than $700 million for rehabilitation projects. The Trump Administration is seeking no funding for the Small Watershed Rehabilitation program for FY2021, citing the Administration's position that the maintenance, repair, and operation of these

dams are the responsibility of local project sponsors. Similar positions were cited under the George W. Bush and Obama Administrations.

The Small Watershed Rehabilitation Program has discretionary funding authority of up to $85 million annually. The program has received an average annual appropriation of $10.8 million over the last five years, including $10 million in FY2020.

In the past, the program was authorized through omnibus farm bills to receive mandatory funding to remain available until expended. This funding was frequently restricted through annual appropriations and used to offset other discretionary spending.[52] The FY2018 appropriations act (P.L. 115-141) was the first to not restrict the remaining mandatory carryover, thereby making approximately $55 million available for obligation. The 2018 farm bill reauthorized discretionary funding authority of $85 million annually for the program, but no additional mandatory funding authority was provided.[53]

Statutory and Regulatory Authorities

The Small Watershed Rehabilitation Program is authorized by the Watershed Protection and Flood Prevention Act of 1954, P.L. 83-566, as amended by Section 313 of the Grain Standards and Warehouse Improvement Act of 2000, P.L. 106-472, 114 Stat. 2077 (16 U.S.C. §1012). Regulations are codified at Title 7, Part 622, of the *Code of Federal Regulations*.[54]

Environmental Protection Agency

Clean Water State Revolving Fund Loan Program[55]

In 1987, Congress amended the Clean Water Act (CWA)[56] to establish the Clean Water State Revolving Fund (CWSRF) program.[57] All 50 states, plus Puerto Rico, participate in the CWSRF program.[58] EPA receives annual appropriations to support the CWSRF program and distributes grants to the states based on a CWA statutory formula.[59] States provide matching funds equal to 20% of the federal grant to capitalize the CWSRF and use their funds primarily to provide loans to cities and other eligible recipients. Over the long term, the loan programs are intended to be sustained through repayment of loans to states, thus creating a continuing source of assistance for other communities. According to the most recent formal estimate by EPA and states (prepared in

[52] For additional information on past reductions to mandatory programs, see CRS In Focus IF10041, *Reductions to Mandatory Agricultural Conservation Programs in Appropriations Law*, by Megan Stubbs.

[53] For additional information, see CRS Report R45525, *The 2018 Farm Bill (P.L. 115-334): Summary and Side-by-Side Comparison*, coordinated by Mark A. McMinimy.

[54] For information on the program, see NRCS, "Watershed Rehabilitation Program," http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wr/.

[55] This section was prepared by Jonathan Ramseur, Specialist in Resources and Environmental Policy, Resources, Science, and Industry Division.

[56] The official statutory name is the Federal Water Pollution Control Act (P.L. 92-500), as amended, codified at Title 33, Section 1251 et seq, of the *U.S. Code*.

[57] Prior to 1989 (when the CWSRF program became effective), EPA states used their annual allotment to make grants to cities and other eligible recipients.

[58] U.S. territories, Indian tribes, and the District of Columbia receive grants from EPA under separate CWA authorities.

[59] For more information, see CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Jonathan L. Ramseur.

2016), an additional $271 billion nationwide is needed over the next 20 years for all types of projects eligible for funding through the CWSRF program.[60]

EPA data indicate that since 1988, 68% of all awarded loans and other assistance have gone to assist communities with 10,000 people or fewer. These loans and assistance have accounted for 23% of total CWSRF funding.[61]

Program Purpose

The CWSRF program provides assistance in constructing and upgrading publicly owned municipal wastewater treatment plants and related equipment (including stormwater infrastructure), implementing nonpoint pollution management programs, developing and implementing management plans under the National Estuary Program, and supporting a range of other eligible activities that were added to the program in 2014.

Financing Mechanism

EPA grants (from appropriated funds) and state matching funds help capitalize state CWSRF programs. These programs may provide seven general types of financial assistance: making loans; buying or refinancing existing local debt obligations; guaranteeing or purchasing insurance for local debt obligations; guaranteeing CWSRF debt obligations (i.e., to be used as security for leveraging the assets in the CWSRF); providing loan guarantees for local government revolving funds; earning interest on fund accounts; and supporting reasonable costs of administering the CWSRF. Loans are made at or below market interest rates, including zero interest loans, as determined by the state in negotiation with the applicant.

Although the CWSRF program is generally a loan program, states may (under certain conditions) provide "additional subsidization"—such as principal forgiveness, negative interest loans, or a combination—to municipalities that meet the state's affordability criteria and for particular projects, such as those that implement water or energy efficiency goals or mitigate stormwater runoff. In addition, appropriations acts in recent years have required states to use minimum percentages of their allotted funds to provide additional subsidization. This trend began with the American Recovery and Reinvestment Act of 2009 (P.L. 111-5), which required states to use at least 50% of their funds for this purpose. Recent appropriations acts included an identical condition, requiring 10% of the CWSRF grants be used "to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these)."

All principal and interest payments on loans must be credited directly to the SRF, and loans are to be repaid within 30 years of a project's completion, not to exceed the project's useful life. States are required to ensure that CWSRF-funded projects use American iron and steel products and apply the prevailing wage requirements of the Davis-Bacon Act.[62]

Eligibility Requirements

Eligible loan recipients for CWSRF assistance are any municipal, intermunicipal, interstate, or state agency. Private utilities are not eligible to receive funds for construction of wastewater treatment works and most other eligible activities, but in some cases, privately owned projects are

[60] EPA, *Clean Watersheds Needs Survey 2012*, 2016, https://www.epa.gov/cwns.

[61] EPA, "Did You Know," https://www.epa.gov/cwsrf (accessed February 21, 2020).

[62] For more information, see the Department of Labor website at https://www.dol.gov/whd/govcontracts/dbra.htm.

eligible for certain types of activities (e.g., decentralized wastewater treatment projects; projects to manage, reduce, or treat stormwater; or development of watershed management projects).

Projects or activities eligible for funding were initially those needed for constructing or upgrading (and planning and designing) publicly owned municipal wastewater treatment plans. As defined in Clean Water Act Section 212,[63] devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage are eligible. These include construction or upgrading of secondary or advanced treatment plants; construction of new collector sewers, interceptor sewers, or storm sewers; and projects to correct existing problems of sewer system rehabilitation, infiltration/inflow of sewer lines, and combined sewer overflows. Operation and maintenance are not eligible activities. All funds in the CWSRF resulting from federal capitalization grants are first to be used to assure compliance with enforceable deadlines, goals, and requirements of the act, including municipal compliance. After satisfying the "first use" requirement, funds may be used to implement other eligible uses, which initially included nonpoint source management programs and estuary activities in approved State Nonpoint Management Programs and estuarine Comprehensive Conservation and Management Plans, respectively.[64]

In 2014, the Water Resources Reform and Development Act of 2014 (WRRDA; P.L. 113-121) amended the list of eligible projects by adding several projects and activities, including

- replacement of decentralized treatment systems (e.g., septic tanks);
- energy-efficiency improvements at treatment works;
- reuse and recycling of wastewater or stormwater; and
- security improvements at treatment works.

In 2018, the America's Water Infrastructure Act of 2018 (AWIA; P.L. 115-270) amended the list of eligible activities to allow qualified nonprofits to provide assistance to certain individuals for the repair or replacement of existing decentralized wastewater treatment systems or for the connection of an individual household to a centralized publicly owned treatment works.

Funding

Since the first appropriations for the CWSRF program in FY1989, Congress has provided more than $48 billion in grants to states and Puerto Rico to capitalize their CWSRFs. According to EPA's national CWSRF funding data report, federal funds—together with state matching contributions, repaid loans, and other funds—have provided $138 billion in SRF assistance to support more than 41,000 SRF loans and debt refinance agreements.[65]

For both FY2016 and FY2017, Congress provided $1.394 billion for the CWSRF program. For each of FY2018 and FY2019, Congress increased the appropriation to the CWSRF program, providing $1.694 billion. For FY2020, Congress appropriated $1.639 billion (P.L. 116-94). For FY2021, the President requested $1.120 billion for the CWSRF program.

[63] 33 U.S.C. §1292.

[64] For a detailed breakdown of SRF funding by category, see EPA, Clean Water SRF Program Information, National Summary, (updated annually), https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports.

[65] EPA, Clean Water SRF Program Information, National Summary, data through June 30, 2019 (accessed February 21, 2020), https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports.

Through a separate process, EPA provides direct grants for the District of Columbia, the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of Northern Marianas.[66] EPA also provides direct grants to Indian tribes.[67] The funding for the District of Columbia, U.S. territories, and Indian tribes is part of the SRF appropriation to EPA.

Statutory and Regulatory Authority

Statutory authority for the clean water SRF program is the Clean Water Act, as amended, Sections 601-607 (33 U.S.C. §§1381-1387). Regulations are codified at Title 40, Section 35.3100, of the *Code of Federal Regulations*.

Drinking Water State Revolving Fund Loan Program[68]

The Safe Drinking Water Act (SDWA) requires public water systems to comply with federal drinking water regulations promulgated by EPA.[69] Through these regulations, EPA has set standards to control the levels of more than 90 contaminants in drinking water, and more regulations are under development. To help communities meet these federal mandates and to meet the act's public health objectives, Congress amended the SDWA in 1996 to establish a drinking water state revolving fund (DWSRF) loan program. The program is patterned closely after the CWSRF and authorizes EPA to make grants to states to capitalize drinking water state revolving loan funds. States use their DWSRFs to provide assistance to public water systems for infrastructure and other drinking water projects.[70] States may use a portion of their annual grants to administer the DWSRF program and to implement other SDWA requirements. States must match 20% of the federal capitalization grant.

Each year, states are required to develop an "intended use plan" that includes a list of projects the state intends to fund through the DWSRF. The law generally directs states to give funding priority to projects that (1) address the most serious health risks; (2) are needed to ensure compliance with SDWA regulations; and (3) assist systems most in need on a per household basis, according to state affordability criteria. The law also directs states to make available at least 15% of their annual allotment to public water systems that serve 10,000 or fewer persons (to the extent the funds can be obligated to eligible projects). Over the life of the program, roughly 71% of DWSRF assistance agreements and 38% of funds have gone to these smaller systems. Capitalization grants are allotted among the states according to the results of the most recent quadrennial survey of the capital improvements needs of eligible water systems. Needs surveys are prepared by EPA and the states, and the most recent survey indicates that public water systems need to invest at least $472.6 billion on infrastructure improvements over 20 years ($23.63 billion annually) to ensure the provision of safe drinking water and compliance with federal standards.[71]

---

[66] See 33 U.S.C. §1384 note.

[67] See 33 U.S.C. §1377.

[68] This section was prepared by Elena Humphreys, Analyst in Environmental Policy, Resources, Science, and Industry Division.

[69] See CRS Report RL31243, *Safe Drinking Water Act (SDWA): A Summary of the Act and Its Major Requirements*, by Mary Tiemann.

[70] Private, residential wells are not regulated under the SDWA and are not eligible for assistance through this program.

[71] EPA, *Drinking Water Infrastructure Needs Survey and Assessment: Sixth Report to Congress*, March 2018, https://www.epa.gov/sites/production/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf.

Program Purpose

This state-administered program provides assistance for infrastructure projects and other expenditures that facilitate compliance with federal drinking water regulations or that promote public health protection. The SDWA directs states to give funding priority to infrastructure projects that are needed to achieve or maintain compliance with SDWA requirements, protect public health, and assist systems with economic need. Further, states may use a portion of the capitalization grant for specified purposes, including programs for protecting sources of drinking water and improving the managerial and technical capacity of water systems.

Financing Mechanism

States may use the DWSRF to make low- or zero-interest loans to public water systems, and loan recipients must generally repay the entire loan plus any interest to the state. DWSRFs may also be used to buy or refinance local debt obligations, guarantee or purchase insurance for a local obligation, provide revenue or security for payment of principal and interest on state revenue or general obligation bonds if the proceeds of bond sale are deposited into the DWSRF, and earn interest on DWSRF accounts.

The statute authorizes states to use up to 35% of their annual DWSRF grants to provide additional subsidies (e.g., principal forgiveness and negative interest rate loans) to help economically disadvantaged communities of any size.[72] (A disadvantaged community is one in which the service area of a public water system meets state-established affordability criteria.) The Consolidated Appropriations Act, 2020 (P.L. 116-94), requires states to use 14% of their DWSRF capitalization grants "to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these)."

Eligibility Requirements

Drinking 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. Federally owned systems are not eligible to receive assistance from this program.

Projects eligible for DWSRF assistance include (1) capital investments to rehabilitate or replace infrastructure in order to continue providing the public with safe drinking water (e.g., storage facilities and transmission and distribution pipes); (2) projects needed to address violations of SDWA regulations (e.g., treatment facilities); and (3) project design and planning and associated preconstruction activities. Assistance may also be available for construction of new wells to replace contaminated wells, source water protection, land acquisition, security measures (including infrastructure improvements), and consolidation of water supplies (e.g., in cases where individual homes or public water systems have a water supply that is contaminated or a system is unable to maintain compliance for financial or managerial reasons).

Projects and activities not eligible for funding include projects primarily intended to serve future growth or to provide fire protection, construction of dams or reservoirs (except reservoirs for treated water), monitoring, and operation and maintenance. Ineligible systems include those that lack the financial, technical or managerial capacity to maintain SDWA compliance and systems in significant noncompliance with any SDWA regulation (unless the project is likely to ensure compliance).

[72] SDWA Section 1452(d)(2)(B) (42 U.S.C. §300j-12(d)(2)(B)) conditionally requires states to use at least 6% of their capitalization grants to further subsidize DWSRF loans.

Funding

For FY2019, the President requested $863.2 million for the state DWSRF capitalization grants, and Congress appropriated $1.164.0 billion (P.L. 116-6, Title II and Title IV).[73] For FY2020, the President requested $863.2 million, and Congress provided $1,126.0 million. For FY2021, the President again requested $863.2 million for state DWSRF capitalization grants. AWIA reauthorized DWSRF appropriations for FY2019-FY2021.[74] In recent years, the estimated average state grant has been roughly $20.77 million per fiscal year. The estimated average grant to territories was $4.14 million per fiscal year.[75]

From FY1997 through FY2019, cumulative appropriations for the DWSRF program reached $23.23 billion. Adjusted for set-asides, cumulative net federal contributions totaled $22.12 billion. When combined with the 20% state match ($4.11 billion), bond proceeds, loan principal repayments, and other funds, the total DWSRF investment through FY2018 had reached $43.14 billion, and the program had provided more than $41.11 billion in assistance. Over the same period, more than 15,867 projects had received assistance, and 11,140 had been completed.[76]

Statutory and Regulatory Authority

The statutory authority for the DWSRF program is the Safe Drinking Water Act Amendments of 1996 (P.L. 104-182, Section 1452, 42 U.S.C. §300j-12). Regulations are codified at Title 40, Section 35.3500, of the *Code of Federal Regulations*.[77]

Water Infrastructure Finance and Innovation Act Program[78]

Localities are primarily responsible for providing water infrastructure services, which include both drinking water and wastewater infrastructure. According to the most recent estimates by states and EPA, funding needs for projects eligible for CWSRF or DWSRF funding—described in the sections above (i.e., projects needed to address water quality and public health-related problems or regulations)—total over $840 billion over a 20-year period.[79] However, many water infrastructure capital needs are ineligible for assistance through the SRF programs or are too large or otherwise not suited for those programs.

The Water Infrastructure Finance and Innovation Act (WIFIA) authorizes EPA to provide credit assistance—secured (direct) loans or loan guarantees—for a broad range of drinking water and

[73] In P.L. 116-20, an additional $296.1 million was appropriated for DWSRF capitalization grants for states and territories in EPA regions 4, 9, and 10 that were affected by Hurricanes Florence and Michael, Typhoon Yutu, and wildfires and earthquakes in calendar year 2018.

[74] SDWA §1452(m); 42 U.S.C. §300j-12(m). The authorized appropriations are $1.174 billion in FY2019, $1.300 billion in FY2020, and $1.950 billion in FY2021.

[75] Code of Federal Domestic Assistance, Capitalization Grants for Drinking Water State Revolving Funds, No. 66.468, https://beta.sam.gov/fal/569f9cce42834328941b19aea8b9e2e6/view.

[76] Detailed national and state program data are available at https://www.epa.gov/drinkingwatersrf/drinking-water-state-revolving-fund-national-information-management-system-reports.

[77] DWSRF program information, regulations, facts, and statistics are available at http://www.epa.gov/safewater/dwsrf.html.

[78] This section was prepared by Jonathan Ramseur, Specialist in Environmental Policy, Resources, Science, and Industry Division.

[79] EPA published its most recent estimate of capital needs for *wastewater* infrastructure in 2016. See EPA, *Clean Watersheds Needs Survey 2012*, Report to Congress, 2016. EPA issued the most recent EPA needs estimate for *drinking water* infrastructure in 2018. See EPA, *Drinking Water Infrastructure Needs Survey and Assessment*, 2018.

wastewater projects.[80] In contrast to SRF programs, EPA provides credit assistance directly to eligible recipients. Thus far, EPA has provided credit assistance in the form of secured loans, and the agency does not expect much demand for loan guarantees.[81]

WRRDA also authorizes USACE to provide similar assistance under WIFIA for water resource projects, such as flood control or hurricane and storm damage reduction.[82] Congress has provided funds to EPA to implement WIFIA, and as of the date of this report, Congress has not yet appropriated funds (nor has the Administration requested funds) that would enable USACE to begin making WIFIA loans under the authority in WRRDA. However, as of mid-2020, USACE had advanced its efforts to develop its WIFIA program. USACE would implement the agency's WIFIA program upon receipt of an appropriation.

Program Purpose

WIFIA provides an additional source of funding for water infrastructure projects, including projects eligible for CWSRF and DWSRF assistance. Some stakeholders have argued that the clean water and drinking water SRF programs are structured in a way that makes them useful primarily for smaller communities and smaller projects. The WIFIA program can provide credit assistance to large water infrastructure projects that otherwise have difficulty obtaining financing. Moreover, SRF funding is generally limited to projects that promote CWA or SDWA compliance and other statutory objectives. WIFIA can provide capital at a low cost to the borrower, because even though the interest on 30-year Treasury securities is taxable, Treasury rates can be less expensive than rates on traditional tax-exempt municipal debt.

Financing Mechanism

In federal budgetary terms, WIFIA assistance has much less of an impact on federal spending than a grant, which is not repaid to the U.S. Treasury. The volume of loans and other types of credit assistance that the programs can provide is determined by the size of congressional appropriations and calculation of the subsidy amount. WIFIA defines the *subsidy amount* as follows:

> The amount of budget authority sufficient to cover the estimated long-term cost to the Federal Government of a Federal credit instrument, as calculated on a net present value basis, excluding administrative costs and any incidental effects on governmental receipts or outlays in accordance with the Federal Credit Reform Act of 1990 (2 U.S.C. §661 *et seq.*).[83]

---

[80] In 2014, WRRDA established a five-year WIFIA pilot program. In 2018, AWIA (P.L. 115-270) amended the WIFIA provisions to remove the pilot designation from the program. For more details, 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.

[81] See EPA, *WIFIA Program Handbook*, 2019, footnote 24.

[82] Section 4201 of AWIA (P.L. 115-270) amended WIFIA to authorize EPA to enter into agreements with relevant federal agencies to administer and service loans that such agencies are authorized to make. Section 4301 of AWIA directs EPA and Reclamation to enter into such an agreement. In October 2019, EPA and Reclamation entered into a memorandum of understanding for administering and servicing credit instruments. Under this agreement, EPA is responsible for providing support in administering and servicing Reclamation federal credit instruments, including determining project creditworthiness and loan terms, among other responsibilities. See https://www.epa.gov/wifia/mou-administering-and-servicing-federal-credit-instruments.

[83] 33 U.S.C. §3901(13).

Although subsidy rates are project-specific, in the Trump Administration's FY2021 budget proposal, OMB estimated a 0.91% subsidy rate for WIFIA in FY2020.[84] This equates to a 1:110 ratio. At this subsidy rate, a $10 million appropriation could support direct loans totaling $1.1 billion. Thus, one advantage of the WIFIA program is that it can provide a large amount of credit assistance relative to the amount of budget authority provided.

Eligibility Requirements

WIFIA credit assistance is available to state infrastructure financing authorities for a group of projects and individual project sponsors, which may include

- a corporation;
- a partnership;
- a joint venture;
- a trust; or
- a federal, state, local, or tribal government (or consortium of tribal governments).

Categories eligible for assistance by EPA include

- wastewater treatment and community drinking water facilities;
- enhanced energy efficiency of a public water system or wastewater treatment works;
- repair or rehabilitation of aging wastewater and drinking water systems;
- desalination, water recycling, aquifer recharge, or development of alternative water supplies to reduce aquifer depletion;
- prevention, reduction, or mitigation of the effects of drought;[85] or
- a combination of eligible projects.

The act authorizes EPA to provide credit assistance for a range of wastewater and drinking water projects. Generally, project costs must be $20 million or larger to be eligible for credit assistance. For projects in less populous communities (defined by WIFIA as populations of 25,000 or fewer), project costs must be $5 million or more.

Funding

For FY2019, the Consolidated Appropriations Act, 2019 (P.L. 116-6), provided $68 million for the WIFIA program (including $5 million for administrative costs). For FY2020, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), enacted December 20, 2019, provided $60 million for this program (including $5 million for administrative costs). For FY2021, the President requested $25 million (including $5 million for administrative costs).

To receive funding, a prospective borrower submits a letter of interest to EPA. The letter must document project eligibility, financial creditworthiness, engineering feasibility, and alignment

[84] OMB, *Budget of the United States Government, FY2021*, Federal Credit Supplement, Table 1, https://www.govinfo.gov/content/pkg/BUDGET-2021-FCS/pdf/BUDGET-2021-FCS.pdf.

[85] The WIIN Act (P.L. 114-322) expanded WIFIA eligibility to include projects involving aquifer recharge; development of alternative water supplies to reduce aquifer depletion; and prevention, reduction, or mitigation of the effects of drought.

with EPA's policy priorities. From these submittals, the agency selects projects for funding.[86] On March 29, 2019, EPA announced a third round of WIFIA funding. EPA estimated that its FY2019 budget authority ($63 million) would provide approximately $6 billion in credit assistance.[87]

Statutory and Regulatory Authority

The statutory authority for the WIFIA program is WRRDA (P.L. 113-121, Title V, codified at 33 U.S.C. §§3901-3914). The Fixing America's Surface Transportation Act (FAST Act, P.L. 114-94) and AWIA amended WIFIA provisions in 2015 and 2018, respectively. EPA promulgated an interim final rule for the program on December 19, 2016 (81 *Federal Register* 91822). Regulations are codified at Title 40, Section 35.10000, of the *Code of Federal Regulations*.

Other EPA Water Infrastructure Funding Programs[88]

In recent WRDAs, Congress has authorized several new drinking water and wastewater infrastructure funding programs. These programs are discussed below.[89]

Sewer Overflow and Stormwater Grant Program

In 2000, the Consolidated Appropriations Act, 2001, authorized EPA to establish a new grant program in the CWA to address overflows from municipal combined sewer systems and from municipal separate sanitary sewers ("wet weather" projects). At that time, Congress authorized annual appropriations of $750 million for FY2002 and FY2003, but the program never received appropriations.

In 2018, AWIA Section 4106 amended the grant program by modifying the eligibility provisions to include stormwater infrastructure, among other changes. In addition, AWIA reauthorized appropriations for the grant program for $225 million for FY2019 and FY2020.

Funding

For FY2020, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), provided $28 million, the first appropriation for this program. As of the date of this report, EPA has not issued any grants for this program. For FY2021, the President requested $61.5 million for this program.

Statutory Authority

The statutory authority for this program is CWA Section 221 (codified at 33 U.S.C. §1301). The Consolidated Appropriations Act, 2001 (P.L. 106-554), amended the CWA in 2000 to provide this authority. CWA Section 221 was subsequently amended in 2018 by AWIA (P.L. 115-270).

[86] For more up-to-date details of project selection, see EPA's WIFIA website at https://www.epa.gov/wifia.

[87] EPA, FY2019 Notice of Funding Availability, https://www.epa.gov/wifia/how-apply-wifia-assistance-0#notice.

[88] This section was prepared by Elena Humphreys, Analyst in Environmental Policy, Resources, Science, and Industry Division; and Jonathan Ramseur, Specialist in Environmental Policy, Resources, Science, and Industry Division.

[89] Other drinking water grant programs include the Voluntary Lead Testing in Drinking Water at Schools and Child Care Program Grant Program (authorized in SDWA Section 1464(d), added by P.L. 114-322 Section 2107) and the Drinking Water Fountain Replacement for Schools Grant Program (authorized in SDWA Section 1465, added by P.L. 115-270, Section 2006(b)).

Technical Assistance for Rural, Small, and Tribal Wastewater Systems

In 2018, AWIA amended the CWA to authorize EPA to make grants to qualified nonprofits to provide technical assistance to help rural, small, and tribal publicly owned treatment works and decentralized wastewater treatment systems to comply with the CWA and apply for financing from the CWSRF. For this purpose, AWIA authorized appropriations of $25 million per year for FY2019-FY2023.

Funding

For FY2020, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), enacted December 20, 2019, provided $12 million for this program. For FY2021, the President requested $7.5 million for this program.

Statutory Authority

The statutory authority for this technical assistance is CWA Section 104(b)(8) (codified at 33 U.S.C. §1254(b)(8)). This provision was added to the CWA in 2018 by AWIA (P.L. 115-270, §4106).

Technical Assistance for Small, Rural, and Tribal Drinking Water Systems

Added in 1996, SDWA Section 1442(e) authorizes EPA and states to provide compliance assistance to public water systems and particularly to small systems (serving 25-10,000 customers). Accounting for 92% of community water systems, these small systems frequently lack both economies of scale and the financial, managerial, and technical capacity to meet statutory requirements.

The technical assistance is intended to enable small systems to achieve and maintain compliance with drinking water regulations and may include circuit-rider and multi-state regional technical assistance programs, training, and assistance in implementing regulations, source water protection plans, monitoring plans, water security enhancements, etc. The WIIN Act (P.L. 114-322) amended Section 1442 to specify that technical assistance grants to tribes may be used for operator training and certification.

Funding

For FY2020, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), enacted December 20, 2019, provided $15 million for this program. For FY2021, the President did not request funds for this program.

Statutory Authority

The statutory authority for this technical assistance is SDWA Section 1442(e) (codified at 42 U.S.C. §300j-1(e)).

Small and Disadvantaged Communities Drinking Water Grant Program

In 2016, Congress amended SDWA to add a drinking water grant program to help assist disadvantaged or small communities afford projects needed to comply with SDWA regulations. Eligible projects include investments needed for SDWA compliance, household water quality testing, and assistance that benefits a community on a per-household basis. Eligible grant recipients include public water systems or tribal water systems that serve a disadvantaged

community or a community of 10,000 or fewer individuals or a state on behalf of an underserved community. For the purposes of this grant program, *underserved community* is defined to mean "a political subdivision of a State that, as determined by the Administrator, has an inadequate system for obtaining drinking water."[90] This grant program requires a cost share of 45% of total project costs in the form of monetary funding, services, materials, supplies, or other in-kind services. EPA may waive this matching requirement if the grant recipient would experience significant financial hardship from providing the nonfederal share.

In April 2019, EPA announced the distribution of FY2018 and FY2019 funding for these grants among the states and territories, using a formula similar to the DWSRF allotment formula, with a 2% allotment for tribes.[91] EPA reports that states will need to develop a list of fundable projects that meet the grant program's eligibility criteria to receive their allotment of funding.[92]

Funding

Beginning in FY2018, Congress has appropriated funds to support this grant program for small and disadvantaged communities. For FY2018, Congress provided $20.0 million to support these grants (P.L. 115-141). For FY2019, the Consolidated Appropriations Act, 2019 (P.L. 116-6) provided $25.0 million for this grant program. For FY2020, Congress provided $25.4 million in the Further Consolidated Appropriations Act, 2020 (P.L. 116-94). For FY2021, the President did not request funding for this grant program.

Statutory Authority

The statutory authority for the Assistance for Small and Disadvantaged Communities Drinking Water Grant program is SDWA Section 1459A (codified at 42 U.S.C. §300j-19a, added by the WIIN Act, P.L. 114-322, §2104).

Lead Reduction Projects Grant Program

In 2016, Congress amended SDWA to direct EPA to establish a grant program for projects and activities that reduce lead in drinking water. Grants may be used to replace a publicly owned lead service line; to test, plan, or perform other relevant activities to control lead in drinking water; and to provide assistance to low-income homeowners to replace their portions of lead service lines. Eligible grant recipients include public water systems; tribal water systems; qualified nonprofits serving water systems; and local, state, or municipal governments. This grant program generally requires recipients to provide a 20% match. EPA may waive this matching requirement for reasons of affordability.

EPA provided the first opportunity for applications for this grant program on February 19, 2020.[93]

---

[90] 42 U.S.C. §300j-19a(a)(1).

[91] EPA, Final Allotments of FY2018 and FY2019 Appropriations for the Assistance to Small and Disadvantaged Communities Grants, Authorized under Section 2104 of the Water Infrastructure Improvements for the Nation Act, April 29, 2019, https://www.epa.gov/sites/production/files/2019-04/documents/wiin_2104_allotment_memo_april_2019.pdf.

[92] EPA, *Assistance for Small and Disadvantaged Communities Drinking Water Grant Program: Grant Implementation Document*, August 2019, https://www.epa.gov/sites/production/files/2019-08/documents/assistance_for_small_and_disadvantaged_communities_grant_implementation_document_08_27_19.pdf.

[93] EPA, *Funding Opportunity Number: EPA-OW-OGWDW-19-01: Reduction in Lead Exposure Via Drinking Water*, February 19, 2020, https://www.epa.gov/sites/production/files/2020-02/documents/wiin_reduction_in_lead_rfa_-_2-19-2020.pdf.

Funding

Congress first appropriated funds for this grant program in FY2018. In FY2018, the Consolidated Appropriations Act, 2018 (P.L. 115-141), provided $10.0 million to support these grants. In FY2019, the Consolidated Appropriations Act, 2019 (P.L. 116-6), provided $15.0 million for this grant program. In FY2020, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94), provided $19.5 million to support this grant program. For FY2021, the President requested $20.0 million.

Statutory Authority

The statutory authority for the Reducing Lead in Drinking Water grant program is SDWA Section 1459B (codified at 42 U.S.C. §300j-19b, added by the WIIN Act, P.L. 114-322, §2105).

Department of Housing and Urban Development[94]

Community Development Block Grants

HUD administers assistance in support of state and local government neighborhood revitalization and related community and economic development activities, including infrastructure improvements, primarily under the Community Development Block Grant (CDBG) program. The program's primary objective is to develop viable communities by providing decent housing and a suitable living environment and by expanding economic opportunities, principally for persons of low and moderate income. State and local governments use CDBG funds for a broad range of neighborhood revitalization and community and economic development activities intended to meet one of three national objectives. Specifically, eligible activities must

1. principally benefit low- or moderate-income persons,
2. aid in preventing or eliminating slums and blight, or
3. address an imminent threat to the health and safety of residents.

Program policy requires that at least 70% of funds must benefit low- and moderate-income persons.

The block nature of the CDBG program provides local government discretion in selecting the eligible activities to be undertaken in pursuit of national objectives. Water and waste disposal needs compete with many other eligible activities for this assistance, including historical preservation, energy conservation, economic development, lead-based paint abatement, public facilities, and public service activities. Since it began in 1974, the CDBG program has invested over $150 billion in communities nationwide. Congress has also used the program to provide supplemental appropriations to assist communities and states in response to natural disasters, the mortgage foreclosure crisis of 2008, economic recessions, and terrorist attacks. Since 1992, Congress has appropriated approximately $89.7 billion in supplemental CDBG funding to assist targeted states and local governments in their recovery efforts as CDBG-Disaster Recovery (CDBG-DR) funding.[95]

[94] This section was prepared by Julie Lawhorn, Analyst in Economic Development Policy, Government and Finance Division.

[95] HUD, CDBG Grant History Report (as of June 2019), https://www.hudexchange.info/programs/cdbg-dr/reports/.

After subtracting amounts specified in appropriations acts for special-purpose activities, 70% of CDBG funds are allocated by formula to approximately 1,209 entitlement communities nationwide.[96] Entitlement communities are defined as central cities of metropolitan areas; metropolitan cities with populations of 50,000 or more; and statutorily defined urban counties (the entitlement program). These funds are not available for projects in rural communities. The remaining 30% of CDBG funding is allocated by formula to the states for distribution to nonentitlement communities (the state program) for use in areas that are not part of a CDBG entitlement community allocation. These funds, which are administered by each state, may be available for rural community water projects. The 70/30 split and allocation formulas are provided for in law. Between FY2015 and FY2019, disbursements by CDBG recipients for water and sewer improvements have averaged $372.5 million per year.[97]

Funds from both the state ("regular") and the entitlement CDBG programs are disbursed across several broad categories, including the acquisition and demolition of real property, planning and administrative activities, housing, public services, and public improvements such as water and wastewater treatment facilities. From FY2015 to FY2019, CDBG expenditures for public improvement—including water and sewer improvements—accounted for approximately 35% of all CDBG funds expended.[98] Water and sewer improvements accounted for an average of 11% of total CDBG expenditures during the same five-year span.

Program Purpose

The primary goal of this program is the development of viable communities by providing decent housing, a suitable living environment, and expanding economic opportunities, principally for low- and moderate-income persons. Funds may also be used to aid in preventing or eliminating slums and blight or to address an imminent threat to residents of the impacted area.

Financing Mechanism

CDBG program funds are allocated by formula. After amounts specified in an appropriations act are allocated to Section 107 special-purpose activities, 70% of the remaining funds are allocated by formula to entitlement communities and 30% to the states for distribution to nonentitlement communities. Funds are awarded to entitlement communities based on the higher yield from one of two weighted formulas. The first of two formulas uses population, overcrowded housing, and poverty data, while the second formula allocates funds based on an entitlement community's relative share of poverty, housing built before 1940, and the lag in population growth rate relative to the total for all entitlement communities. Similar formulas are used to allocate nonentitlement funds to states.

As a condition of receiving CDBG funds, an entitlement community must submit a consolidated plan at least 45 days before the beginning of its program year detailing the proposed use of funds over a five-year period. Each entitlement community's multiyear consolidated plan (ConPlan) must include a citizen participation plan, a housing needs assessment, and an annual community development plan. In addition to an annual action plan, each jurisdiction must annually submit to

[96] HUD, *Community Development Block Grant Program*, https://www.hud.gov/program_offices/comm_planning/communitydevelopment/programs.

[97] HUD, National Expenditure Report, FY2001-FY2019, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

[98] HUD, *CDBG Expenditure Reports*, National Expenditure Reports (FY2001-FY2019), All CDBG Disbursements, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

HUD a Comprehensive Annual Performance Evaluation Report (CAPER) detailing progress it has made in meeting the goals and objectives outlined in its action plans.

States do not actually undertake eligible CDBG activities but act as pass-through agents charged with three distinct responsibilities: (1) determining the method or methods to be used to distribute funds to nonentitlement communities, including seeking the input of affected local governments; (2) selecting local governments that will receive funds; and (3) monitoring local government grant recipient project implementation to ensure compliance with rules governing the program. In addition, each state is required to submit to HUD a ConPlan that includes a five-year housing and homeless needs assessment, a housing market analysis, a strategic plan that includes proposed housing and nonhousing community development activities, and a one-year action plan. Also, each state must submit to HUD a CAPER detailing progress it has made in meeting the goals and objectives outlined in its action plans.

Eligibility Requirements

There are three categories of recipients eligible for direct allocations of CDBG program funds: entitlement communities (including insular areas), states, and recipients of Section 107 special project grants. According to HUD, there are approximately 1,209 general units of local government and states.[99] States include the 50 states and Puerto Rico. Before funds are allocated to states and entitlement communities, a specific amount established by Congress is set aside annually for the U.S. territories or insular areas of Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands. These funds are awarded annually based on each insular area's relative share of aggregate population for all insular areas.

Eligible activities include a wide range of projects such as public facilities and improvements, housing, public services, economic development, and brownfields redevelopment. State grantees must ensure that each activity meets one of the program's three national objectives: benefitting low- and moderate-income persons (the primary objective), aiding in the prevention or elimination of slums or blight, or assisting other community development needs that present a serious and immediate threat to the health or welfare of the community. Under the state program that assists smaller communities, states develop their own program and funding priorities and have considerable latitude to define community eligibility and criteria, within general criteria in law and regulations.

Funding

The Consolidated Appropriations Act, 2019 (P.L. 116-6), appropriated $3.365 billion for the HUD-administered Community Development Fund,[100] including $2.305 billion for entitlement communities, $988 million for states to distribute to nonentitlement communities, $7 million for insular areas, and $65 million for Indian tribes. The Consolidated Appropriations Act, 2020 (P.L. 116-94), appropriated $3.425 billion for the Community Development Fund, including $3.4 billion for the CDBG entitlement/nonentitlement formula funds. The act appropriated $25 million of the $3.425 billion for activities authorized under the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (the SUPPORT for Patients and Communities Act), P.L. 115-271. Of the amount appropriated for CDBG formula grants, $2.375 billion was allocated to entitlement communities, $1.018 billion to states for

[99] HUD, *Community Development Block Grant Program*.

[100] The CDBG program is funded in an account called the Community Development Fund.

distribution to nonentitlement communities, $7 million to insular areas, and $70 million for Indian tribes.[101] The President's budget did not request funds for CDBG in the Administration's budget request for FY2021, as in the FY2017-FY2020 requests. In proposing termination of the program in FY2021, as in FY2020, the Administration cited its intent to redefine the proper role of the federal government in support of community and economic development by devolving responsibility to state and local governments.[102]

Statutory and Regulatory Authority

Statutory authority for the CDBG program is Title I of the Housing and Community Development Act of 1974, as amended (42 U.S.C. §5301 et seq.). Regulations are codified at Title 24, Part 570, of the *Code of Federal Regulations*. Regulations covering the CDBG state program for nonentitlement communities are codified at Title 24, Part 570, Subpart I (§570.480).[103]

CDBG Section 108 Loan Guarantees

Authorized under the same title (Title I of the Housing and Community Development Act of 1974) as the formula-based CDBG program, the Section 108 loan guarantees allow an entitlement community or a state, on behalf of a nonentitlement community, to leverage its annual CDBG allocation in support of large-scale economic development and housing rehabilitation projects and the construction, reconstruction, or installation of public facilities.

Program Purpose

Consistent with the goals and objectives of the CDBG program, Section 108 loan guarantees are intended to supplement CDBG program activities. The program allows entitlement communities and states to extend the reach of the formula-based CDBG program, giving them access to additional financial resources to undertake large-scale, transformative neighborhood revitalization efforts.

Eligible activities include acquiring and rehabilitating publicly owned real property; housing rehabilitation; economic development activities, including those carried out by for-profit and nonprofit entities; debt service reserves; payment of interest on the guaranteed loan; issuance cost of the public offering; and the acquisition, construction, reconstruction, and installation of public facilities, including water and sewer improvements.

---

[101] HUD's Office of Community Planning and Development (CPD) administers the CDBG program. CPD's Appropriations Budget/Allocations table provides the FY2020 amount of funding allocated for entitlement (called "local governments" in the table) and state CDBG programs. See https://www.hud.gov/program_offices/comm_planning/appropriations_budget_allocations. The FY2020 CPD Appropriations Budget/Allocations table suggests that CDBG funding for Indian tribes is no longer handled through CPD. FY2020 funding for the Indian CDBG program is appropriated under HUD's Office of Public and Indian Housing in the Consolidated Appropriations Act of 2020 (P.L. 116-94). See FY2020 Joint Explanatory Statement, https://docs.house.gov/billsthisweek/20191216/BILLS-116HR1865SA-JES-DIVISION-H.pdf.

[102] OMB, *A Budget for America's Future: Budget of the U.S. Government for Fiscal Year 2021: Analytical Perspectives*, p. 582, https://www.whitehouse.gov/wp-content/uploads/2020/02/appendix_fy21.pdf.

[103] For more program information on CDBG entitlements grants, see https://beta.sam.gov/fal/4bec434fc21387e84d49f8f12a9bfa4c/view. For information on the CDBG state program, see https://beta.sam.gov/fal/530a3538a33c41b6b1ea235d457a5553/view?keywords=14.228&sort=-relevance&index=&is_active=true&page=1.

Financing Mechanism

Section 108 loan guarantees are financed through public offerings. Under the program, states and communities are allowed to float bonds, notes, or debentures worth up to five times their annual CDBG allocation, minus any existing Section 108 commitments or outstanding principal balances, with a repayment period of up to 20 years. States and entitlement communities must pledge their current and future CDBG allocations as security against default of the bonds or notes. Section 108 funds are made available on an ongoing basis, allowing communities to apply for funds any time during the year. Section 108 loan funds are made available to eligible public entities that may re-loan the funds to private participants in a redevelopment project. Applicants are encouraged to meet with HUD staff prior to submitting a formal application.

Eligibility Requirements

Section 108 loan guarantees may be accessed only by CDBG entitlement communities and states on behalf of a CDBG nonentitlement community. All eligible activities must meet one of the three national objectives of the regular CDBG program: principally benefit low- and moderate-income persons, aid in eliminating or preventing slums and blight, or address an imminent threat to the health and safety of residents. The program has an open application process, allowing entitlement communities and states to submit applications anytime during the year. The application process governing the Section 108 program can be grouped into several distinct stages: application presubmission, citizen participation, application submission, application review and notification, award allocation, and reporting.

When submitting formal applications, states and entitlement communities must include a description of activities to be carried out, financing structure, source of loan repayment, citizen participation plan, anti-displacement strategy, and a pledge of the applicant's CDBG allocation as security for the Section 108 guaranteed loan. In general, HUD attempts to review an application within 90 days. HUD field offices are encouraged to complete applications within 45 days, with HUD headquarters attempting to complete its review within 45 days. Recipients receiving Section 108 funds are required to file annual performance reports with HUD detailing progress made in meeting the objectives of their community development plans, including Section 108 activities. Between FY2014 and FY2018, HUD issued loan guarantee commitments totaling $411.9 million to 72 projects, including

- $110.4 million to support 17 projects in FY2014,
- $123.3 million to support 20 projects in FY2015,
- $80.7 million to support 10 projects in FY2016,
- $38.9 million to support 13 projects in FY2017, and
- $58.6 million to support 12 projects in FY2018.[104]

Funding

For FY2019, Congress authorized a loan commitment ceiling of $300 million and directed HUD to collect fees from borrowers that result in a credit subsidy cost of zero for guaranteeing Section 108 loans.[105] Until FY2015, Congress appropriated an amount necessary to cover the estimated

[104] HUD, *Section 108 Loan Guarantee Program*, Section 108 Project Summaries 2010-2018, https://www.hudexchange.info/programs/section-108/.

[105] P.L. 116-6.

long-term liability to the federal government of a Section 108 loan guarantee (credit subsidy). The Department of Housing and Urban Development Appropriations Act of FY2014[106] changed that arrangement, allowing HUD to collect a fee from the borrower to cover the cost of the credit subsidy. The amount of the fee is determined annually by HUD based on a percentage of the principal amount of the Section 108 guaranteed loan. The Consolidated Appropriations Act of 2020 (P.L. 116-94) included $300 million in Section 108 loan guarantee authority. For FY2021, as in FY2019 and FY2020, the Administration requested no new loan guarantee authority for the Section 108 program.[107]

Statutory and Regulatory Authority

Statutory authority for the Section 108 program is Title I of the Housing and Community Development Act of 1974, as amended (42 U.S.C. §5308). Regulations are codified at Title 24, Part 570, Subpart M, of the *Code of Federal Regulations*.

Department of Commerce[108]

Economic Development Administration Public Works Programs

The Department of Commerce's Economic Development Administration (EDA) is authorized to provide development assistance to areas experiencing substantial economic distress. EDA grants for community water and sewer projects are available through its Public Works program. Such assistance is also available under the agency's Economic Adjustment Assistance program.

Under the Public Works program, grants are awarded competitively to eligible applicants to revitalize, expand, and upgrade their physical infrastructure. These investments in public works improvements must be linked to projects intended to enable communities to attract new industry, encourage business expansion and retention, diversify local economies, and generate or retain private sector jobs in EDA-designated distressed regions. Grants may be used for a wide range of purposes but frequently have a sewer or water supply element.

The types of projects funded include industrial parks, expansion of port and harbor facilities, redevelopment of brownfields, and water and wastewater facilities primarily serving industry and commerce. Federal law requires that units of government retain ownership of EDA-funded projects. Because EDA grants must directly encourage employment generation, these grants are generally not available for rural *residential* sewer and water supply development.

Program Purpose

The purpose of the program is to promote long-term economic development and assist in the construction of public works and development facilities needed to initiate and support the creation or retention of permanent private sector jobs in areas experiencing long-term economic deterioration and distress. EDA's Public Works program supports investments that help distressed areas address their competitive disadvantages. Funded projects must be part of an EDA-certified

[106] P.L. 113-76, 128 Stat. 617.

[107] OMB, *A Budget for America's Future*, p. 586.

[108] This section was prepared by Julie Lawhorn, Analyst in Economic Development Policy, Government and Finance Division.

Comprehensive Economic Development Strategy (CEDS) or equivalent EDA-accepted regional economic development strategy.

Financing Mechanism

EDA competitively awards public works grants directly to approved applicants. Generally, EDA investment assistance may not exceed 50% of the project cost. Projects may receive an additional amount, not to exceed 30%, based on the relative needs of the region in which the project will be located, as determined by EDA. In the case of certain Indian tribes, nonprofit organizations that have exhausted their effective borrowing capacity, or a state or political subdivision of a state that has exhausted its effective taxing and borrowing capacity, grants totaling 100% of a project's cost may be awarded. Credit may be given toward the nonfederal share for in-kind contributions, including contributions of space, equipment, and services. No minimum or maximum project amount is specified in law.

Eligibility Requirements

Public works grants may be made to states, cities, counties and other political subdivisions of states, institutions of higher education or a consortium of such institutions, and private or public not-for-profit organizations acting in cooperation with officials of a political subdivision of a state. Under this program, the term *state* includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau. For-profit, private sector entities do not qualify.

Qualified projects must fill a pressing need of the area and must (1) be intended to improve the opportunities for the successful establishment of businesses, (2) assist in the creation of additional long-term private sector employment, and (3) benefit long-term unemployed or underemployed persons and low-income families. Projects must also be consistent with the area's CEDS and have an adequate share of local funds. In addition, eligible projects must be located in areas that meet at least one of the following criteria: low per-capita income, unemployment above the national average, or "special need" as determined by EDA.[109]

Funding

The Consolidated Appropriations Act, 2018 (P.L. 115-141), appropriated $262.5 million for EDA programs, including $117.5 million for EDA's Public Works grant program. The Consolidated Appropriations Act, 2019 (P.L. 116-6), appropriated $265 million for EDA programs, including $117.5 million for the Public Works grant program. The Further Consolidated Appropriations Act, 2020 (P.L. 116-94), included $292.5 million for EDA programs and an additional $40.5 million for salaries and expenses. Of the amount appropriated for EDA programs in FY2020, $118.5 million was allocated for the Public Works program. For FY2018-FY2021, the President's budget requested no funding for the Public Works program. The Administration's FY2021 budget requested no new funding for EDA program activities but does request $31.6 million to cover the costs associated with closing down the agency.[110]

[109] Notice of Funding Opportunity, EDA Public Works and Economic Adjustment Assistance Programs, FY2020, https://www.grants.gov/web/grants/view-opportunity.html?oppId=321695.

[110] OMB, *A Budget for America's Future*, p. 191.

Statutory and Regulatory Authority

The statutory authority for the Public Works program is the Public Works and Economic Development Act of 1965, as amended, P.L. 89-136 (42 U.S.C. §3121 et seq.). Regulations are codified at Title 13, Chapter III, Parts 302, 305, 316, and 317, of the *Code of Federal Regulations*.

Economic Adjustment Assistance Program

EDA, through its Economic Adjustment Assistance (EAA) grant program, awards development assistance to areas experiencing long-term economic deterioration and distress or sudden and substantial economic dislocation. This may include assisting communities/regions affected by natural disasters, natural resource depletion, mass layoffs, and other severe economic shocks that communities experience in restructuring and diversifying their regional economies. Funds have also been made available to aid communities experiencing chronic unemployment and underinvestment and communities impacted by military base realignments and closures.

EAA funds are competitively awarded to qualified applicants to assist them in developing and implementing a five-year CEDS. EAA may be used to fund four types of activities:

1. Strategic planning activities that include short-term action plans intended to stabilize a distressed community and regionally oriented, long-term development strategies intended to assess and redirect the region's economic future;
2. Technical assistance, including feasibility studies;
3. Capitalization of revolving loan funds, which would allow qualifying businesses to borrow funds at favorable interest rates; and
4. Financing of physical infrastructure projects, including water and sewer facilities, industrial parks, and business incubators.

Program Purpose

The purpose of the program is to promote long-term economic development in areas experiencing sudden economic dislocation or long-term economic distress. EDA's EAA program supports investments intended to help distressed areas address their competitive disadvantages and evaluate their economic futures. In general, funds may be used to develop CEDS, and funded projects must be part of an EDA-certified CEDS or equivalent EDA-accepted regional economic development strategy.

Financing Mechanism

EDA competitively awards EAA grants directly to eligible applicants. Generally, EAA investment assistance may not exceed 50% of the project cost. Projects may receive an additional amount, not to exceed 30%, based on the relative needs of the region in which the project will be located, as determined by EDA. In the case of certain Indian tribes and nonprofit organizations that have exhausted their effective borrowing capacity, or a state or political subdivision of a state that has exhausted its effective taxing and borrowing capacity, grants totaling 100% may be awarded. Credit may be given toward the nonfederal share for in-kind contributions, including contributions of space, equipment, and services. No minimum or maximum project amount is specified in law.

Eligibility Requirements

EAA grants may be made to states, cities, counties and other political subdivisions of states, institutions of higher education or consortia of such institutions, and private or public nonprofit organizations acting in cooperation with officials of political subdivisions of a state. Under this program, the term *state* includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau. For-profit, private sector entities do not qualify.

Qualified projects must fill a pressing need of the area and must (1) be intended to improve the opportunities for the successful establishment of businesses, (2) assist in the creation of additional long-term private sector employment, and (3) benefit long-term unemployed or underemployed persons and low-income families. Projects must also be consistent with the area's CEDS and have an adequate share of local funds. In addition, eligible projects must be located in areas that meet at least one of the following criteria: low per-capita income, unemployment above the national average, or "special need" as determined by EDA.[111]

Funding

In FY2018-FY2020,[112] Congress provided appropriations of $37 million for EDA's EAA grant program. For FY2018, FY2019, and FY2020 the President's budget requested $0 for the EAA program. For FY2021, the Administration seeks to terminate EDA and its programs, including the EAA.

In FY2017-FY2020,[113] Congress appropriated an additional $30 million to EDA for the Assistance to Coal Communities program "to support communities and regions that have been negatively impacted by changes in the coal economy."[114] These grants are administered under the authority of EDA's EAA program and can be used for a variety of eligible activities, including water, wastewater, and infrastructure projects.[115]

Statutory and Regulatory Authority

The statutory authority for the Public Works program is the Public Works and Economic Development Act of 1965, as amended, P.L. 89-136 (42 U.S.C. §3121 et seq.). Regulations are codified at Title 13, Chapter III, Parts 302, 305, 316, and 317 of the *Code of Federal Regulations*.

[111] Notice of Funding Opportunity, EDA Public Works and Economic Adjustment Assistance Programs, FY2020, https://www.grants.gov/web/grants/view-opportunity.html?oppId=321695.

[112] P.L. 115-141, P.L. 116-6, and P.L. 116-94, respectively.

[113] P.L. 115-31, P.L. 115-141, P.L. 116-6, and P.L. 116-94, respectively.

[114] See EDA website at https://www.eda.gov/coal/2017/.

[115] Notice of Funding Opportunity, EDA Public Works and Economic Adjustment Assistance Programs, FY2020, https://www.grants.gov/web/grants/view-opportunity.html?oppId=321695.

Author Information

Jonathan L. Ramseur, Coordinator
Specialist in Environmental Policy

Tadlock Cowan
Analyst in Natural Resources and Rural Development

Elena H. Humphreys
Analyst in Environmental Policy

Julie M. Lawhorn
Analyst in Economic Development Policy

Anna E. Normand
Analyst in Natural Resources Policy

Charles V. Stern
Specialist in Natural Resources Policy

Megan Stubbs
Specialist in Agricultural Conservation and Natural Resources 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.