Congressional Research Service
Informing the legislative debate since 1914

Federally Supported Water Supply and Wastewater Treatment Programs

Updated May 3, 2019

Congressional Research Service
https://crsreports.congress.gov
RL30478

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

For more than four decades, Congress has authorized and refined several programs to help communities address water supply and wastewater problems. The agencies that administer these programs differ in multiple ways. In terms of funding mechanisms, projects developed by the Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (USACE) typically require direct, individual project authorizations from Congress.

In contrast, standing program authorizations provide project funding for other agencies, including

- the Department of Agriculture (USDA),
- the U.S. Environmental Protection Agency (EPA),
- the Department of Commerce, and
- the Department of Housing and Urban Development (HUD).

The 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 set program criteria, are generally funded from year to year, and provide a process under which project sponsors compete for funding.

In terms of scope and mission, the primary responsibilities of USACE are to maintain inland navigation, provide for flood and storm damage reduction, and restore aquatic ecosystems, while EPA's mission relates to protecting public health and the environment. The Department of Commerce and HUD focus on community and economic development. Likewise, the specific programs—while all address water supply and wastewater treatment to some degree—differ in important respects. Some are national in scope (those of USDA, EPA, and the Department of Commerce, 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 size (e.g., EPA, USACE).

Federal funding for the programs and projects discussed in this report varies greatly. Collectively, congressional funding for these programs in recent years has been somewhat eroded by overall competition among the many programs that are supported by discretionary spending, despite the continuing pressure from stakeholders and others for increased funding. FY2019 appropriations highlights include the following:

- $1.164 billion for capitalization grants to states under EPA's State Revolving Fund (SRF) loan program for drinking water systems and $1.694 billion for EPA's SRF program for wastewater projects;
- $60 million in subsidy costs for the EPA-administered Water Infrastructure Finance and Innovation Act (WIFIA) program, allowing the agency to provide approximately $5.5 billion in credit assistance for drinking water and wastewater infrastructure projects;
- $400 million for USDA's rural water and waste disposal grant program and direct loan authority of approximately $1.4 billion;
- $3.4 billion for HUD Community Development Block Grant (CDBG) funds (water and wastewater projects are among many eligible uses); and
- $58.6 million for Reclamation's Title XVI reclamation/recycling projects.

Contents

Introduction 1
Department of the Interior 6
Bureau of Reclamation 6
"Traditional" Multipurpose Reclamation Projects 7
Rural Water Supply Projects 8
Title XVI Projects 9
Department of Defense 12
Army Corps of Engineers (Civil Works Program) 12
Municipal and Industrial (M&I) Water Supply 12
Environmental Infrastructure Assistance 14
Department of Agriculture 15
Rural Utilities Service (Water and Waste Disposal Programs) 15
Natural Resources Conservation Service 18
Watershed and Flood Prevention Operations 19
Small Watershed Loans 21
Small Watershed Rehabilitation 21
Environmental Protection Agency 22
Clean Water State Revolving Fund Loan Program 22
Drinking Water State Revolving Fund Loan Program 25
Water Infrastructure Finance and Innovation Act Program 28
Department of Housing and Urban Development 30
Community Development Block Grants 30
CDBG Section 108 Loan Guarantees 33
Department of Commerce 35
Community Development Block Grants 35
CDBG Section 108 Loan Guarantees 38
Department of Commerce 40
Economic Development Administration (Public Works and Economic Development Facilities Program) 40
Economic Adjustment Assistance (EAA) 41

Tables

Table 1. Federal Water Supply Program/Project Funding 2

Contacts

Author Information 43

Introduction

This report provides background information on the types of water supply and wastewater treatment projects traditionally funded by the federal government and the several existing programs to assist communities with water supply and wastewater treatment.

For more than four decades, Congress has authorized and refined several programs to help communities address water supply and wastewater problems. The agencies that administer these programs differ in multiple ways. For example, in terms of funding mechanisms, projects developed by the Bureau of Reclamation (Reclamation) and the U.S. Army Corps of Engineers (USACE) typically require direct, individual project authorizations from Congress.

In contrast, standing program authorizations provide project funding for other agencies, including

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

The 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 set program criteria, are generally funded from year to year, and provide a process under which project sponsors compete for funding.

In terms of scope and mission, the primary responsibilities of USACE are to maintain inland navigation, provide for flood and storm damage reduction, and restore aquatic ecosystems, while EPA's mission relates to protecting public health and the environment. Further, the Department of Commerce and HUD focus on community and economic development. Likewise, the specific programs discussed in this report—while all address water supply and wastewater treatment to some degree—differ in important respects. Some are national in scope (those of USDA, EPA, and the Department of Commerce, 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, Alaskan Native Villages, and c*olonias*,[1] or other regional programs such as those associated with the Appalachian region or U.S. Territories.

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

Other federal authorities of USDA's Rural Utilities Service, Reclamation, and USACE may be available to assist with the provision of emergency water and wastewater needs, such as

[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.

improving access to water supplies during a drought. These authorities are 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. Collectively, congressional funding for these programs in recent years has been somewhat eroded by overall competition among the many programs that are supported by discretionary spending, despite the continuing pressure from stakeholders and others for increased funding. While federal support for some traditional financing tools—project grants, formula grants, capitalization grants, direct and guaranteed loans—has declined, policymakers have begun to consider alternative financing approaches, such as trust funds, new types of federal loans, and options to encourage private sector investments in water infrastructure through public-private partnerships. Supporters of some of these newer ideas (e.g., the "Water Infrastructure Finance and Innovation Act Program") see them as options to supplement or complement, but not replace, traditional financing tools.

State and local contributions are the most significant source of total funds available to communities for drinking water and wastewater treatment improvements. According to the Congressional Budget Office, spending by state and local governments on drinking water and wastewater has increased much faster than spending by the federal government, especially since the mid-1970s. In 2017, the state and local share of such projects (both capital and operation and maintenance spending) was 96%, while the federal share was 4%.[3]

Table 1. Federal Water Supply Program/Project Funding

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2019 Funding[a]	FY2020 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[c]	Not applicable	Not readily available (Total agency approps. are $1.57 billion in current gross discretionary authority)	Not readily available (Total agency approps. request is nearly $1.11 billion)
USDOI Bureau of Reclamation (Title XVI of P.L. 102-575**)**[b]	Wastewater reclamation and reuse,[d] which may include some M&I activities	*De facto* grant	Up to 25%/75%; dollar limits may apply	Not readily available	$58.6 million	$3.0 million

[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.

[3] Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure, 1956 to 2017*, 2018, p. 22.

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2019 Funding[a]	FY2020 Funding Request
USDOI Bureau of Reclamation[b]	Indian and non-Indian rural water supply	*De facto* grant, plus loan	Non-Indian projects: average of 64%/36%; Indian projects: average of 100%/0%	Not applicable (see report text for detail)	$132.7 million	$27.7 million
USACE (general)[b]	Multipurpose water projects, which may include permanent M&I water storage or temporary surplus water contracts	Up-front federal financing of projects, which is repaid through fees collected from M&I water users pursuant to storage agreements	0%/100%, with interest[c]	Not applicable	$12.0 million	$7.0 million
USACE (multiple sections of WRDAs and select Energy and Water Development Approps. acts)[b]	"Environ-mental infrastruc-ture" assistance	Technical/ planning and design services or grants; design and construction services or grants	75%/25% generally	Not applicable (see report text for detail)	$77.0 million	None
USDA Rural Utilities Service, Water and Waste Disposal Program	Municipal water supply and waste disposal	Loans and grants to eligible entities	0%/100% for loans Up to 75%/25% for grants	Grants (FY2018): $953,000 total	Grants: $400.0 million	Grants: $322.3 million
				Direct loans: $2.1million	Direct loans: $1.40 billion loan authority; $2.0 million subsidy	Direct loans: $1.20 billion
				Guaranteed loans: $845,000	Guaranteed loans: $50 million total loan authority; $190,000 subsidy	Guaranteed loans: $0
USDA Watershed and Flood Prevention	Multiple activities, but generally must include	Project grants and technical	100%/0% Varies according to purpose of	Not applicable	$200 million ($150 million discretionary,	$0

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2019 Funding[a]	FY2020 Funding Request
Operations Program	flood control measures	advisory services	improvement activity		$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	80%/20% for grants to states to capitalize SRFs	Average capitalization grant to state: $30.1 million (FY2018)	Capitalization grants: $1.694 billion	Capitalization grants: $1.120 billion
		SRF loans made by states to local project sponsors	0%/100%[e] (Project loans are repaid 100% to states)	Average assistance from SRF: $4.4 million (FY2018)		

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2019 Funding[a]	FY2020 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	80%/20% for grants to states to capitalize SRFs	Average capitalization grant to state: $17.2 million (through FY2018)	Capitalization grants: $1.164 billion	Capitalization grants: $863 million
		SRF loans made by states to local project sponsors	0%/100%[c] (Project loans are repaid 100% to states)	Average assistance from SRF: $2.6 million (FY2018)		
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)	Credit assistance (e.g., loans or loan guarantees)	In general, WIFIA funding cannot exceed 49% of project costs	No assistance provided to date	$60 million approp. to cover subsidy costs; estimated to provide $5.5 billion in credit assistance	$20 million approp. to cover subsidy costs; estimated to provide $4.2 billion in credit assistance
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: $2.15 million; state grants: $920 million	$3.4 billion	$0
Commerce, Economic Development Administration, Public Works and Economic Development Program	Multipurpose economic development projects; may include water and sewer	Project grants	Generally 50%/50%	Average grant $1.7 million (FY2011)	$117 million allocated for the public works program	$0 for program activities

a. Funding amounts may include M&I activities as well as other objectives, such as irrigation, flood control, and recreation.

b. These projects generally must be authorized by Congress prior to construction.

c. Although the ultimate federal cost-share may be 0%, unless otherwise stated, the federal government may provide 100% of initial construction costs allocated to M&I use, to be repaid over the life of the loan via repayment contracts (typically 40-50 years). In addition, 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.

d. 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.

e. 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, to municipalities that meet the state's affordability criteria and for particular projects. 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

Bureau of Reclamation

The Bureau of Reclamation (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.[4] Reclamation owns and manages 475 dams and 337 reservoirs, which are capable of storing 245 million acre-feet of water.[5] The agency's inventory of 4,000 "constructed real property assets" has a current replacement value of nearly $100 billion.[6] Overall, these facilities serve approximately 31 million people, delivering a total of approximately 28.5 million acre-feet of water (an acre-foot is enough to cover one acre of land one foot deep, or 325,851 gallons) annually in nondrought years. Reclamation-funded municipal and industrial (M&I) water deliveries total approximately 2.8 million acre-feet and have more than doubled since 1970.

Reclamation primarily manages M&I water supply facilities 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, as well as reclamation wastewater and reuse/recycling projects.[7] 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 authorized

[4] 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).

[5] 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.

[6] Ibid.

[7] 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.

[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.

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. The federal share of costs for Title XVI projects is generally much lower than for rural water projects; it is limited to a 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[9]

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—for example, for certain program areas described below—specific project feasibility studies must be first authorized by Congress.[10] Once a feasibility study is completed, congressional authorization is typically sought prior to construction.[11] Because there is no "program" per se, there are no clear and concise 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 political 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 hydro power purposes, or are 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

[9] 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.

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

[11] Although it appears that the Secretary of the Interior has the authority to move forward with project construction if allocable benefits of the project equal or outweigh anticipated costs (Section 9(a) of the Reclamation Project Act of 1939 (53 Stat. 1193; 43 U.S.C. 485h(a)), 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.

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.

Funding

Funding information for the M&I portions of multipurpose projects is not readily available. Total regular Reclamation appropriations (gross current authority; not including permanent funding) for FY2019 were $1.571 billion. The total FY2020 budget request for Reclamation was $1.109 billion.[12]

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

Similar to its traditional multipurpose projects, Reclamation has undertaken individual rural water projects largely at the explicit direction of Congress. Generally speaking, Congress has in most cases prioritized appropriation of funding for already authorized projects rather than funds for 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.[13] According to the bureau, between 2006 and 2016, it used this authority to study approximately 26 projects to varying extents, although no projects were recommended for construction and authorized by Congress. This authority expired at the end of FY2016 and has not been renewed since. However, Reclamation continues to pursue authorized rural water projects that were previously authorized at the project level. As of early 2019, Reclamation reported that $1.3 billion was still needed to construct authorized, ongoing rural water projects.[14]

Project Purposes

Historically, individual authorization statutes established rural water project purposes. Nearly half of the rural water supply projects authorized to date are somehow connected to previously authorized irrigation facilities under the Pick-Sloan Missouri Basin Program (PSMBP), or otherwise related to water service anticipated but not received under earlier PSMBP authorizations. Many rural water project authorizations are also linked to Indian water settlements or otherwise provide benefits to Indian tribes.

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

[13] 43 C.F.R. §404.

[14] Bureau of Reclamation, *FY2020 Budget Stakeholder's Briefing*

Financing Mechanism

Projects are generally cost-shared between the federal government and local sponsors. In the past, the federal cost-share for these projects has averaged 64%, and ranged from 15% to 80% for non-Indian rural water supply projects. As previously noted, the federal government pays up to 100% of the cost of Indian rural water supply projects. Assistance is generally provided on a competitive basis under the interim final rule's financial criteria. In accordance with the programmatic criteria provided in the rule, a nonfederal cost-share would be required, consistent with any future construction authorization for those projects.

Eligibility Requirements[15]

Local governments and organizations such as water and conservation districts or associations, including Indian 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 only works 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, but the authority for the program has since expired.[16] 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 FY2019 was $132.7 million. This included $98 million in additional funding above the Administration's FY2019 budget request to be allocated at the project level by Reclamation in a subsequent work plan for FY2019. For FY2020, the Administration's budget proposal requested $27.7 million for five 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 note). This programmatic authority expired at the end of FY2016 and has yet to be renewed. Construction and operations and maintenance is ongoing for several geographically specific projects that were previously authorized under various individual acts.

Title XVI Projects

Title XVI of 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. Generally speaking, water reclaimed via Title XVI projects may be used for M&I water supply (nonpotable and indirect potable purposes only), irrigation supply, groundwater recharge, fish and wildlife enhancement, or outdoor recreation.

---

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

[16] See 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. However, the use of water for commercial irrigation purposes is not allowed.

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 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.[17] As of February 2019, 47 projects had been authorized 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.[18] Based on agency data, CRS estimates that as of early 2018, the backlog of remaining federal funding for the 94 authorized Title XVI projects (i.e., both "traditional" and WIIN Act authorized projects) was over $1 billion.[19]

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, 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.[20] 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 have 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

[17] 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.

[18] 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).

[19] CRS analysis of Bureau of Reclamation data and reporting on Title XVI projects, April 2019.

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

agreement with Reclamation. The WIIN Act provided DOI with additional authority to accept nonfederal feasibility studies and approve and consider these projects for construction funding if they meet Title XVI program criteria, including that (1) the study complies 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 geographically specific authorizations for individual Title XVI projects before they 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 (for FY2018 funding) was posted for review and comment in March 2018.[21]

Funding

The total regular appropriation for the Title XVI program in FY2019 was $58.6 million, with $20 million of this funding designated as being available for WIIN Act–authorized projects. The Administration's FY2020 request for Title XVI was $3.0 million.

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 in size, 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 (P.L. 106-53, Section 595); the Consolidated Appropriations Act for FY2001 (P.L. 106-554, Division B, Section 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, Section 211); the Emergency Wartime Supplementals Act of 2003 (P.L. 108-11); the Irvine Basin Surface and Groundwater Improvement Act of 2003 (P.L. 108-233); a bill amending the Reclamation Wastewater and Groundwater Study and Facilities Act (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 Water Infrastructure Improvements for the Nations Act (P.L. 114-322, Title III, Subtitle J).

[This section was prepared by Charles V. Stern, Specialist in Natural Resources Policy, Resources, Science, and Industry Division.]

[21] 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

Army Corps of Engineers (Civil Works Program)

Under its civil works program, USACE operates water resource projects throughout the country. USACE civil works activities are concentrated on three principal missions—navigation, flood damage reduction, and aquatic ecosystem restoration. Many USACE activities also support municipal and industrial (M&I) water supply, environmental infrastructure, hydroelectric generation, fish and wildlife, and recreation.

Municipal and Industrial (M&I) Water Supply

A total of 136 USACE reservoirs have roughly 9.8 million acre-feet of storage designated for M&I water.[22] 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 allocated to M&I use from existing USACE reservoirs using USACE's general water supply authorities.[23] The provision of M&I water from USACE reservoirs, as discussed below, is subject to availability, and the associated costs are 100% a local, nonfederal responsibility.

Additionally Congress has chosen to authorize a small number of USACE projects primarily for water supply. In the WIIN Act, Congress expanded the agency's authorities related to "water conservation" at its projects.[24] USACE also has authorities related to water supply provision as part of emergency and disaster relief, including during droughts. For all of its projects, USACE policy is that it does not acquire water rights for these water supply and conservation uses; the water user is responsible for securing water rights. Congress has given USACE limited general authority for M&I water supply. A 1958 authority is for permanent allocation of water storage for M&I applications, and a 1944 authority provides for temporary contracts for surplus water from USACE reservoirs. 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. USACE also has authority for the short-term provision of surplus water as specified in the Flood Control Act of 1944; surplus water contracts have generally been limited to five-year terms, with options to extend.

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

[22] M&I water supply is generally not a USACE reservoir's or a USACE project's primary purpose.

[23] For issues related to reallocations of water storage to M&I use under the 1958 authority, see CRS Report R42805, *Reallocation of Water Storage at Federal Water Projects for Municipal and Industrial Water Supply*, by Cynthia Brown and Nicole T. Carter.

[24] Prior to P.L. 114-322, USACE participated in water conservation at its reservoirs in two ways. First, 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" (U.S. Army Corps of Engineers, *Planning Guidance Notebook*, Engineer Regulation 1105-2-100, April 22, 2000, pp. 3-34). P.L. 114-322 included multiple sections that expand the agency's ability to participate in water conservation, including groundwater recharge. These include Sections 1116, 1117, and 1118.

temporary contacts for surplus water. Neither authority allows USACE to significantly modify its projects or to seriously affect the authorized purposes for which the project operates in order to provide for M&I water supply, nor allows USACE to sell or allocate quantities of water. Instead, USACE M&I contracts 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 seriously affect other authorized purposes.

Financing Mechanism

No federal money is provided to nonfederal entities through USACE for this work; instead, it is nonfederal entities that pay USACE for M&I water storage. 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 30-50 years) repayment contracts, unless specified otherwise in law. Through annual contract payments, nonfederal entities pay for the M&I water supply storage services provided. Most agreements for new M&I water supply storage are associated with existing USACE reservoirs and are managed through agreements requiring annual payments.

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 operation and maintenance or replacement costs. Occasional exceptions to USACE's general authority have been enacted by Congress. Allocation of water supply at existing projects is limited to actions that do not seriously affect project purposes.

Funding

The fees collected from nonfederal entities pursuant to water supply agreements are deposited into a general account at the U.S. Treasury. The agency uses the federal funds primarily for administration of its water supply authorities. From FY2018 appropriations, USACE used $8 million to implement its water supply authorities and $1 million for two authorized USACE water supply construction projects to address groundwater depletion in Arkansas. From FY2019 annual appropriations, USACE planned to use $7 million for its water supply authorities, $3 million for the ground water depletion projects in Arkansas, and $2 million a water supply reservoir reallocation study as part of an expansion of a USACE reservoir in Colorado. The Administration's FY2020 budget request included $7 million for USACE's water supply storage activities.

Statutory Authority

Water Supply Act of 1958 (Title III, 72 Stat. 320, as amended; 43 U.S.C. §390b);[25] Flood Control Act of 1944 (Section 6, 58 Stat. 890, as amended, 33 U.S.C. §708); and project specific authorities in Water Resources Development Acts or similar legislation.

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

Environmental Infrastructure Assistance

Project Purpose

Federal policy generally is that community water supply is a local and state responsibility. However, communities, particularly rural and small communities, increasingly have sought federal water supply assistance. Since 1992, Congress has enacted more than 400 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* projects. The authorizations of federal appropriations for these activities vary widely from $0.5 million to $25 million for planning and design assistance, to $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 the agency's activities. Like many USACE activities, congressional support for specific environmental infrastructure 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 environmental infrastructure assistance authorizations, federal assistance typically requires a 75% federal and 25% nonfederal cost-share. The federal portion typically is provided by Congress to USACE in annual Energy and Water Development Act appropriations legislation. How USACE and nonfederal financing is managed varies according to the specifics of the authorization. Sometimes USACE is responsible for performing the assistance or for contracting out the work; under other authorizations, USACE uses appropriated funds to financially assist by reimbursing nonfederal sponsors for their work.

Eligibility Requirements

Because environmental infrastructure assistance activities are not part of a national USACE program per se, there are no clear and/or consistent general eligibility criteria. Most of USACE environmental infrastructure 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, an activity's eligibility is evaluated 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. Because this assistance is not associated with a 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 environmental infrastructure activities has received appropriations. Since 1992, Congress has provided USACE roughly $2 billion in funds for environmental infrastructure assistance. Congress provided USACE with $70 million for environmental infrastructure assistance activities in FY2018 and $77 million in FY2019. These funds are part of the "additional funding" provided by Congress in enacted appropriations bills. After enactment of an appropriations bill, the Administration follows guidance provided in the bill and accompanying reports to guide its use of these funds on authorized environmental infrastructure assistance activities. The selected environmental infrastructure assistance activities

are identified in the agency's Work Plan for the fiscal year, which is typically available within two months after enactment of appropriations.[26] Recent funds have been used to continue ongoing environmental infrastructure assistance. Interpretation of limitations on initiating new USACE activities in appropriations bills and accompanying reports appear to be limiting initiation of USACE funding for the environmental infrastructure activities that do not have a broad geographic scope.[27]

The Trump Administration requested no funding for these activities in its FY2020 request. Since the first authorization for environmental infrastructure assistance in 1992, no Administration has asked for funding for USACE environmental infrastructure assistance.

Statutory Authority

Prior to 1992, USACE generally was 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 400 environmental infrastructure projects and programs. A Water Resources Development Act or similar legislation is the typical legislative vehicle for USACE authorizations. 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 environmental infrastructure projects. Subsequent USACE authorization bills included new environmental infrastructure assistance activities, and raised the authorized funding ceilings for previously authorized projects. Policies limiting congressionally directed spending have limited recent congressional authorizing activity of environmental infrastructure assistance. In December 2016, Congress expanded a process for nonfederal entities to propose modifications to existing authorities for environmental infrastructure 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.[28]

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

Department of Agriculture

Rural Utilities Service (Water and Waste Disposal Programs)

The USDA has a variety of water and waste disposal[29] programs to 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 less. These programs are administered at the national level by the Rural Utilities Service (RUS) at USDA. RUS allocates program funds to the

[26] Environmental infrastructure assistance is funded through the agency's Construction account. USACE Work Plans for recent fiscal years are published at this USACE website http://www.usace.army.mil/Missions/Civil-Works/Budget/.

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

[28] For more on this public proposal process, see this USACE website: http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/WRRDA-7001-Proposals/.

[29] The programs' official titles refer to "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.

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 had funded $13.9 billion for nearly 5,825 projects for water supply and wastewater facilities.[30] According to an RUS FY2016 annual report, 46% of $1.8 billion in investments in that year were for water supply, 49% were for wastewater systems, and the remaining 5% were for combined projects. There is heavy demand for water supply and wastewater disposal funds for small rural communities. At the end of FY2016, USDA reported a $2.5 billion backlog of requests for water and wastewater projects.[31]

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. The law directs that USDA make grants of 1% to 3% of total grant funding to qualified nonprofits to provide technical assistance and training to help communities in preparing applications for grants and loans and to help problem solving operation and maintenance of existing water and waste disposal facilities in rural areas. This has totaled $18 million to $20 million annually in recent years. For FY2018, technical assistance for water and waste disposal facilities will increase to $40 million.

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.[32] There is no statutory distribution formula. Funds are allocated 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) to develop storage, treatment, purification, or distribution of water or 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 and health environment and are designated poverty, market, or intermediate. Poverty interest rate loans are made in areas where the median household income (MHI) falls below the higher of 80% of the statewide nonurban MHI, or the poverty level, and the project is needed to meet health or sanitary standards; by law,

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

[31] Personal communication with Rural Utilities Service staff.

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

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 which do not have to pay the market rate; by law, this rate is set at 80% of the market rate.[33] Interest rates on guaranteed loans are negotiated between the borrower and the lender. The 2014 farm bill (P.L. 113-79) amended the water and waste disposal direct and guaranteed loan programs to encourage financing by private or cooperative lenders to the maximum extent possible, use of loan guarantees where the population exceeds 5,500, and use of direct loans where the impact of a guaranteed loan on rate payers would be significant.

Water and Waste Disposal Grants. Grants for the development costs of water supply and waste disposal projects in rural areas also are 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 2014 farm bill (P.L. 113-79) authorized appropriations at $30 million annually through FY2018 for these grants. The appropriation for water and waste water grants is $400 million.

Grant funds may be available for up to 75% of the development cost of a project and should only be used to reduce user costs to a reasonable level. Grants are only made after a determination of 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.

Emergency Community Water Assistance Grants. RUS is also authorized to help eligible communities prepare, or recover from, an emergency that threatens the availability of safe, reliable drinking water. Grants, ranging from $10,000 to a maximum of $500,000, are provided for projects to serve a rural area with a population of 10,000 or less that has a median household income not in excess of the statewide nonmetropolitan median household income. 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 mandatory through reservation of 3% to 5% of appropriated water and waste disposal grant funds. Of the amounts appropriated for water and waste disposal grants, 3% to 5% is reserved for grants for the Emergency and Imminent Water Assistance program. The 2014 farm bill (P.L. 113-79) also authorized an additional $35 million per year through FY2018 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. No funds were appropriated for the program in FY2017 and FY2018.

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

Eligibility Requirements

Eligible entities are municipalities, counties, and other political subdivisions of a state; associations, cooperatives,[34] 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 less. 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. The 2014 farm bill (P.L. 113-79) authorized $5 million per year through FY2018 for USDA to make grants to private nonprofit organizations for the purpose of providing loans to eligible individuals for construction, refurbishing, and servicing of individually owned household water well systems. Loans are limited to $11,000 per water well system. Authorized appropriations for the program were $993,000 in both FY2017 and FY2018.

Funding

Funds available through FY2018 appropriations for USDA's water and waste disposal programs were included in two titles of P.L. 115-141. Title III provided $560.3 million in total for FY2018, including $400.0 million in grants, $2.0 million in direct loan subsidies ($1.2 billion in loan authority), and $230,000 in subsidy to support guaranteed loans ($50.0 million in loan authority). Title VII (Section 780) provided an additional $500 million for the grant and loan program "of which not to exceed $495,000,000 shall be for grants." Out of the total FY2018 funds, USDA has appropriations of $1.0 million for grants to capitalize revolving loans for water and waste disposal systems and $68 million to support water and waste disposal projects in the colonias, Alaskan Native communities, and Hawaiian Native communities. For FY2019, the President's budget requested $1.20 billion in direct loan authority and $0 for guaranteed loans and water and waste disposal grants.

Statutory and Regulatory Authority

Statutory authority for the water and waste disposal loan and grant programs is the Consolidated Farm and Rural Development Act, as amended, Section 306, 7 U.S.C. 1926. Regulations for these programs are codified at 7 C.F.R. Parts 1778-1780.[35]

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

Natural Resources Conservation Service

The USDA provides assistance to 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—referred to as P.L.

[34] Rural electric cooperatives 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 to 90 rural electric coops (less than 10% of the total number of coops nationwide) currently are involved in some aspect of drinking water or wastewater management, with the majority dealing with drinking water management.

[35] For additional information on RUS water and environmental programs, see http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.

566 and P.L. 534 projects. 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 the WFPO program are 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.[36]

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 have been built pursuant to the authority of P.L. 83-566 (referred to as P.L. 566 projects), under which smaller projects (discussed below) authorized by the Chief of the NRCS are constructed. Larger projects must be approved by Congress. Eleven projects were specifically 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.

Under P.L. 566, over 2,100 projects have been authorized through FY2018. In FY2018, NRCS funded 23 new projects, 19 existing projects, and five remedial projects.[37]

The 11 projects that were specifically authorized under P.L. 534 encompass a total of 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 FY2019 Consolidated Appropriations Act (P.L. 116-6, FY2019 appropriations) appropriated $150 million in FY2019. Recent amendments in the Agriculture Improvement Act of 2018 (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 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 have similar objectives and are implemented following similar procedures. Both programs 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.

[36] 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.

[37] USDA, "2020 USDA Explanatory Notes—Natural Resources Conservation Service," pp. 27-59, https://www.obpa.usda.gov/FY20explan_notes.html.

Financing Mechanism

Partial project grants, plus provision of technical advisory services are provided. 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 USDA Rural Utilities Service (RUS) Water and Waste 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.[38] 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 FY2019 appropriation provided WFPO with $150 million. Of the $150 million, $50 million is required to be allocated to projects and activities that can "commence promptly;" address regional priorities for flood prevention, agricultural water management, inefficient irrigation systems, fish and wildlife habitat, or watershed protection; or watershed protection projects authorized under P.L. 534. The FY2020 Administration's request proposes no funding for the program.

Beginning in FY2014, when no funding was appropriated for WFPO, Congress directed funding from another conservation account—Conservation Operations, which funds general conservation technical assistance offered by NRCS—to fund projects authorized under the WFPO authority. The use of Conservation Operation funding for WFPO activities has continued each fiscal year through the FY2019 appropriations.[39] This congressionally directed amount is in addition to the $150 million made available for the program as a whole in FY2019.

In addition to discretionary funding provided through appropriations, the 2018 farm bill permanently authorized $50 million annually from mandatory sources.[40] This mandatory funding

[38]The enacted FY2019 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 and is therefore effective only for the funds provided during the FY2019 appropriation year.

[39] Congressionally directed amounts of Conservation Operations funding include $3 million in FY2014, $5.6 million in FY2015, $10.6 million in FY2016, $5.6 million in FY2017, $5.6 million in FY2018, and $5.6 million in FY2019.

[40] Funding is authorized from the Commodity Credit Corporation, a government-owned entity that finances authorized programs supporting U.S. agriculture. For more information, see CRS Report R44606, *The Commodity Credit Corporation: In Brief*, by Megan Stubbs.

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 Watershed and Flood Prevention Operations (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 7 C.F.R. Part 622.[41]

Small Watershed Loans

As part of its lending responsibilities, the Rural Utilities Service (RUS) at USDA (see discussion above) 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. 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 2018, approximately 6,245 watershed dams have reached the end of their originally designed life spans. By the end of 2019, more than half of the 11,847 watershed dams will have reached the end of their designed life spans. In response to this concern, Congress created a 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 2018, the program authorized the rehabilitation of 288 dams in 31 states. Of this total, 150 projects are complete, 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

[41] 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/.

state and may include bonds, local taxing authority, state appropriations, or in-kind technical services.

Eligibility Requirements

Only dams constructed under the P.L. 566 authority, the Resource Conservation and Development (RC&D) 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 FY2020, 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 $11.2 million over the last five years, including $10 million in FY2019.

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 to generate annual savings.[42] The FY2018 appropriations act 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 for the program, but no additional mandatory funding authority was provided.[43]

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 §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 7 C.F.R. Part 622.[44]

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

Environmental Protection Agency

Clean Water State Revolving Fund Loan Program

The Clean Water Act (CWA) establishes performance levels (e.g., secondary treatment) to be attained by municipal sewage treatment plants in order to prevent the discharge of harmful wastes

[42] 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.

[43] 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.

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

into surface waters.[45] The act also provides financial assistance, so that communities can construct treatment facilities in compliance with the law, which has the overall objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters.

Since 1973, Congress has appropriated approximately $98 billion in program grants that support wastewater projects.[46] Funds are distributed to states under a statutory allocation formula and are used to assist qualified projects on priority lists that are determined by individual states.[47] These funds are used to assist localities in meeting wastewater infrastructure needs most recently estimated (in 2016) by EPA and states at $271 billion nationally (over the next 20 years) for all categories of projects eligible for federal assistance under the law.[48]

In 1987, Congress amended the CWA (P.L. 100-4) and initiated a new program of federal capitalization grants to support Clean Water State Revolving Funds (CWSRFs). Prior to 1989 (when the CWSRF program became effective), states used their annual allocations to make grants to cities and other eligible recipients. Since 1989, federal funds (grants of appropriated funds) have been used to capitalize state loan programs with states providing matching funds equal to 20% of the federal funds to capitalize the CWSRF. All 50 states, plus Puerto Rico, participate in the CWSRF program. 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.

EPA data indicate that since 1987, 67% of all loans and other assistance have gone to assist communities with 10,000 people or fewer. These loans and assistance have comprised 22% of total CWSRF funding.[49]

Program Purpose

The CWSRF program provides assistance in constructing and upgrading publicly owned municipal wastewater treatment plants, implementing nonpoint pollution management programs, developing and implementing management plans under the National Estuary Program, and supporting other eligible activities.

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

[45] 33 U.S.C. §1311 and §1314.

[46] See CRS Report R43871, *Funding for EPA Water Infrastructure: A Fact Sheet*, by Jonathan L. Ramseur and Mary Tiemann.

[47] See CRS Report RL31073, *Allocation of Wastewater Treatment Assistance: Formula and Other Changes*, by Jonathan L. Ramseur.

[48] EPA, *Clean Watersheds Needs Survey 2012*, Report to Congress, 2016, https://www.epa.gov/cwns.

[49] EPA, "Did You Know," https://www.epa.gov/cwsrf (accessed March 19, 2019).

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.[50]

Eligibility Requirements

Eligible loan recipients for CWSRF assistance are any municipality, 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 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,[51] 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 clean water SRF 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.[52]

In 2000, Congress authorized separate CWA grant funding for projects to address overflows from municipal combined sewer systems and from municipal separate sanitary sewers ("wet weather" projects). Overflows from these portions of municipal sewerage systems can occur especially during rainfall or other wet weather events and can result in discharges of untreated sewage into local waterways. This program, contained in the FY2001 Consolidated Appropriations Act (P.L. 106-554, Division B, Section 112), authorized $750 million per year in FY2002 and FY2003. No funds were appropriated for this program. America's Water Infrastructure Act of 2018 (AWIA, P.L. 115-270), enacted on October 23, 2018, reauthorized appropriations for the grant program

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

[51] 33 U.S.C. §1292.

[52] 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.

(and expanded it to include certain stormwater activities) for $225 million for FY2019 and FY2020. The FY2019 appropriations act did not provide funding for this program.

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, AWIA 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 clean water SRF program in FY1989, Congress has provided more than $46 billion in grants to states and Puerto Rico to capitalize their CWSRFs. Through March 2018, federal funds, together with state matching contributions, repaid loans, and other funds, have been used for $126 billion in SRF assistance to support more than 39,000 SRF loans and debt refinance agreements.[53]

In both FY2016 and FY2017, Congress provided $1.394 billion for the CWSRF program. In FY2018, Congress increased the appropriation to the CWSRF program, providing $1.694 billion (P.L. 115-141). In FY2019, Congress maintained the same level as the previous fiscal year, $1.694 billion (P.L. 116-6). For FY2020, the President requested $1.120 billion for the CWSRF program.

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. EPA also provides direct grants to Indian tribes (33 U.S.C. §1377). 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 40 C.F.R. §35.3100.

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

Drinking Water State Revolving Fund Loan Program

The Safe Drinking Water Act (SDWA) requires public water systems to comply with federal drinking water regulations promulgated by EPA.[54] Through these regulations, EPA has set standards to control the levels of approximately 90 contaminants in drinking water, and more

[53] EPA, Clean Water SRF Program Information, National Summary, March 2018, https://www.epa.gov/cwsrf/clean-water-state-revolving-fund-cwsrf-national-information-management-system-reports.

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

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 clean water SRF, 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.[55] States must match 20% of the federal capitalization grant.

Each year, states must develop an "intended use plan" that includes a list of projects the state intends to fund through the DWSRF (referred to as the project priority list). 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.[56]

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 generally must repay the entire loan plus any interest to the state. DWSRFs may also be used to buy or refinance local debt obligations, to guarantee or purchase insurance for a local obligation, as a source of revenue or security for payment of principal and interest on state revenue or general obligation bonds if the proceeds of the sale of the bonds are deposited into the DWSRF, and to 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.[57] (A disadvantaged community is one in which the

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

[56] EPA, *Drinking Water Infrastructure Needs Survey and Assessment: Sixth Report to Congress*, EPA 816-K-17-002, March 2018, https://www.epa.gov/sites/production/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf.

[57] 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

service area of a public water system meets state-established affordability criteria.) As with recent appropriations acts, the Consolidated Appropriations Act, 2019 (P.L. 116-6) requires states to use 20% 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)."[58]

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).

Funding

For FY2018, the President requested $863.2 million for the state DWSRF capitalization grants, and Congress appropriated $1,163.2 million (P.L. 115-141). For FY2019, the President requested $863 million, and Congress provided $1,164.0 million (P.L. 116-6). AWIA reauthorized DWSRF appropriations for FY2019 through FY2021.[59] In recent years, the estimated average state grant has been roughly $17.16 million per fiscal year. The estimated average grant to territories was $3.40 million per fiscal year.[60]

From FY1997 through FY2018, cumulative appropriations for the DWSRF program reached $22.11 billion. Adjusted for set-asides, cumulative net federal contributions totaled $21.52 billion. When combined with the 20% state match ($3.91 billion), bond proceeds, loan principal repayments, and other funds, the total DWSRF investment through FY2018 had reached $39.86

capitalization grants to further subsidize DWSRF loans.

[58] P.L. 115-31, Division G, Title II; p. 339.

[59] 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.

[60] Code of Federal Domestic Assistance, Capitalization Grants for Drinking Water State Revolving Funds, No. 66.468, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=2da3dbe10180847e587b5f688e90bc0d.

billion, and the program had provided more than $38.22 billion in assistance. Over the same period, more than 14,577 projects had received assistance, and 10,441 had been completed.[61]

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 40 C.F.R. §35.3500.[62]

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

Water Infrastructure Finance and Innovation Act Program

Localities are the entities that 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 $655 billion over a 20-year period.[63] 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.

In 2014, WRRDA established a five-year Water Infrastructure Finance and Innovation Act (WIFIA) pilot program. WIFIA authorizes EPA to provide credit assistance—secured (direct) loans or loan guarantees—for a broad range of drinking water and wastewater projects. In contrast to SRF programs, EPA will provide the credit assistance directly to an eligible recipient. Most of the credit assistance will likely be secured loans, as the agency stated that it does not expect much demand for loan guarantees.[64] To be eligible for WIFIA assistance, projects must generally have costs of $20 million or more.

WRRDA also authorizes the Corps to provide similar assistance under the WIFIA for water resource projects, such as flood control or hurricane and storm damage reduction. Although Congress has provided funds to EPA to implement WIFIA, as of the date of this report, Congress has not yet appropriated funds (nor have any been requested) that would enable the Corps to begin preparations or begin making WIFIA loans under the authority in WRRDA.

Program Purpose

WIFIA provides an additional source of funding for water infrastructure projects. 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. WIFIA can provide capital at a low cost to the borrower, because

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

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

[63] EPA's most recent estimate of capital needs for wastewater infrastructure was published in 2016. See EPA, *Clean Watersheds Needs Survey 2012*, Report to Congress, January 2016. The most recent EPA needs estimate for drinking water infrastructure was issued in 2013. See EPA, *Drinking Water Infrastructure Needs Survey and Assessment*, April 2013.

[64] See EPA, *WIFIA Program Handbook*, 2017, footnote 23.

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 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.*).[65]

Although subsidy rates are project-specific, in the Trump Administration's FY2019 budget proposal, OMB estimated a 0.98% subsidy rate for WIFIA.[66] This equates to a 1:102 ratio. At this subsidy rate, a $10 million appropriation could support a direct loan (or loans) totaling $1.02 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 the following:

- 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 the following:

- 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;[67] or
- a combination of eligible projects.

[65] 33 U.S.C. §3901(13).

[66] OMB, *Budget of the United States Government, FY2019*, Federal Credit Supplement, Table 1, https://www.gpo.gov/fdsys/pkg/BUDGET-2019-FCS/pdf/BUDGET-2019-FCS.pdf.

[67] 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.

The act, among other provisions, authorizes EPA to provide credit assistance for a range of wastewater and drinking water projects. Project costs must be $20 million or larger to be eligible for credit assistance. In rural areas (defined as populations of 25,000 or less), 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). To receive funding, a prospective borrower submits a letter of interest to EPA. The letter includes project eligibility, financial creditworthiness, engineering feasibility, and alignment with EPA's policy priorities. From these submittals, the agency selects projects for funding.[68] On March 29, 2019, EPA announced a third round of WIFIA funding. EPA estimated that its budget authority ($63 million) would provide approximately $6 billion in credit assistance.[69]

Statutory and Regulatory Authority

The statutory authority for the WIFIA program is WRRDA (P.L. 113-121, Title V, codified in 33 U.S.C. §§3901-3914). EPA promulgated an interim final rule for the program on December 19, 2016 (81 *Federal Register* 91822). Regulations are codified at 40 C.F.R. §35.10000.

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

Department of Housing and Urban Development

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. CDBG funds are used by state and local governments 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

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

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

facilities and public service activities. Since it began in 1974, the CDBG program has invested $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 $50 billion in supplemental CDBG funding to assist targeted states and local governments in their recovery efforts. Funds from the regular CDBG program have been 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. During the five-year period from FY2012 to FY2016, CDBG expenditures for public improvement—including water and sewer improvements—accounted for approximately 33% of all CDBG funds expended.[70] Water and sewer improvements accounted for 10% of total CDBG expenditures during the same five-year span.

After subtracting amounts specified in appropriations acts for special-purpose activities, 70% of CDBG funds are allocated by formula to approximately 1,224 entitlement communities nationwide. These 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 FY2012 and FY2016, disbursements by CDBG recipients for water and sewer improvements have averaged $370 million per year.[71]

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

[70] HUD, *CDBG Expenditure Reports*, National Expenditure Reports (FY2001-FY2016), All CDBG Disbursements, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

[71] HUD, National Expenditure Report, FY2001-FY2016, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

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 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 Section 107 special project grants. Entitlement communities include central cities of metropolitan areas, metropolitan-based cities with populations of 50,000 or more, and statutorily defined urban counties. As of 2017, there were 1,224 entitlement communities, including the District of Columbia. 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 area of Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Marianas. 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

For FY2017, Congress provided $3.0 billion for CDBG entitlement/nonentitlement formula funds, of which approximately $2.095 billion was available for entitlement communities, $898 million for smaller communities under the state nonentitlement program, and $7 million for insular areas. For FY2018, the President's budget requested $0 in funds for this program, the same as the FY2017 request level. On March 23, 2018, the President signed into law the Consolidated Appropriations Act of 2018, P.L. 115-141. Division L of the act appropriated $3.365 billion for the HUD-administered Community Development Fund, including $3.3 billion for the CDBG entitlement/nonentitlement formula funds. Of the amount appropriated for CDBG formula grants, $2.305 billion was allocated to entitlement communities, $988 million to states for distribution to nonentitlement communities, and $7 million for insular areas. The act also

appropriated $65 million for Indian tribes. For FY2019, the Administration again requested $0 in funds for the CDBG program. On February 15, 2019, Congress, passed and the President signed the Consolidated Appropriations Act of 2019, P.L. 116-6. The act left the program's funding level unchanged from the previous year, appropriating $3.365 billion—including $2.305 for entitlement communities, $988 billion for states to distribute to nonentitlement communities, $7 million for insular areas, and $65 million for Indian tribes. The Administration's budget request for FY2020, released on March 11, 2019, does not include funding for the CDBG program. In proposing termination of the program 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.

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 24 C.F.R. Part 570. Regulations covering the CDBG state program for nonentitlement communities are codified at 24 C.F.R. Part 570, Subpart I (§570.480).[72]

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.

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 Section108 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

[72] For more program information on CDBG entitlements grants, see https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=75c19bc34eb650c446c2c4a078500ba5. For information on the CDBG state program, see https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=8ebaec7fffe34667744cf0b8b70b4251.

during the year. It should be noted that Section 108 loan funds are made available to eligible public entities that may reloan 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 FY2016, HUD issued loan guarantee commitments totaling $314.4 million to 47 projects, including $110.4 million to 17 projects in FY2014, $123.3 million in loan guarantees to 20 projects in FY2015, and $80.7 million to support 10 projects in FY2016.[73]

Funding

For FY2017, Congress authorized a loan commitment ceiling of $300 million and directed HUD to collect fees from borrowers that results in a credit subsidy cost of zero for guaranteeing Section 108 loans. Until FY2015, Congress appropriated an amount necessary to cover the estimated long-term liability to the federal government of a Section 108 loan guarantee (credit subsidy). The Department of Housing and Urban Development Appropriations Act for FY2014[74] 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 will be determined annually by HUD based on a percentage of the principal amount of the Section 108 guaranteed loan. For FY2018, the Trump Administration did not request any new loan guarantee authority. The Consolidated Appropriations Act of 2018, P.L. 115-141, signed by the President on March 3, 2018, included $300 million in Section 108 loan guarantee authority. For FY2019, the again requested no new loan guarantee authority. However, Congress, in passing the Consolidated Appropriations Act of 2019, P.L. 116-6, provided $300 million in loan guarantee authority for Section 108 financed projects. For FY2020, the Administration has requested no new loan guarantee authority for the Section 108 program.

[73] HUD, *Section 108 Loan Guarantee Program*, Section 108 Project Summaries 2010 to 2016, https://www.hudexchange.info/programs/section-108/.

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

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 24 C.F.R. Part 570, Subpart M.

[This section was prepared by Eugene Boyd, Analyst in Federalism and Economic Development Policy, Government and Finance Division.]

Department of Commerce

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. CDBG funds are used by state and local governments 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 $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 $50 billion in supplemental CDBG funding to assist targeted states and local governments in their recovery efforts. Funds from the regular CDBG program have been 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. During the five-year period from FY2012 to FY2016, CDBG expenditures for public improvement—including water and sewer improvements—accounted for approximately 33% of all CDBG funds expended.[75] Water and sewer improvements accounted for 10% of total CDBG expenditures during the same five-year span.

After subtracting amounts specified in appropriations acts for special-purpose activities, 70% of CDBG funds are allocated by formula to approximately 1,224 entitlement communities

[75] HUD, *CDBG Expenditure Reports*, National Expenditure Reports (FY2001-FY2016), All CDBG Disbursements, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

nationwide. These 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 FY2012 and FY2016, disbursements by CDBG recipients for water and sewer improvements have averaged $370 million per year.[76]

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 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.

[76] HUD, National Expenditure Report, FY2001-FY2016, https://www.hudexchange.info/programs/cdbg/cdbg-expenditure-reports/.

Eligibility Requirements

There are three categories of recipients eligible for direct allocations of CDBG program funds: entitlement communities (including insular areas), states, and Section 107 special project grants. Entitlement communities include central cities of metropolitan areas, metropolitan-based cities with populations of 50,000 or more, and statutorily defined urban counties. As of 2017, there were 1,224 entitlement communities, including the District of Columbia. 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 area of Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Marianas. 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

For FY2017, Congress provided $3.0 billion for CDBG entitlement/nonentitlement formula funds, of which approximately $2.095 billion was available for entitlement communities, $898 million for smaller communities under the state nonentitlement program, and $7 million for insular areas. For FY2018, the President's budget requested $0 in funds for this program, the same as the FY2017 request level. On March 23, 2018, the President signed into law the Consolidated Appropriations Act of 2018, P.L. 115-141. Division L of the act appropriated $3.365 billion for the HUD-administered Community Development Fund, including $3.3 billion for the CDBG entitlement/nonentitlement formula funds. Of the amount appropriated for CDBG formula grants, $2.305 billion was allocated to entitlement communities, $988 million to states for distribution to nonentitlement communities, and $7 million for insular areas. The act also appropriated $65 million for Indian tribes. For FY2019, the Administration again requested $0 in funds for the CDBG program. On February 15, 2019, Congress, passed and the President signed the Consolidated Appropriations Act of 2019, P.L. 116-6. The act left the program's funding level unchanged from the previous year, appropriating $3.365 billion—including $2.305 for entitlement communities, $988 billion for states to distribute to nonentitlement communities, $7 million for insular areas, and $65 million Indian tribes. The Administration's budget request for FY2020, released on March 11, 2019, does not include funding for the CDBG program. In proposing termination of the program 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.

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 24 C.F.R. Part 570.

Regulations covering the CDBG state program for nonentitlement communities are codified at 24 C.F.R. Part 570, Subpart I (§570.480).[77]

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.

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 Section108 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 anytime during the year. It should be noted that Section 108 loan funds are made available to eligible public entities that may reloan 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

[77] For more program information on CDBG entitlements grants, see https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=75c19bc34eb650c446c2c4a078500ba5. For information on the CDBG state program, see https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=8ebaec7fffe34667744cf0b8b70b4251.

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 FY2016, HUD issued loan guarantee commitments totaling $314.4 million to 47 projects, including $110.4 million to 17 projects in FY2014, $123.3 million in loan guarantees to 20 projects in FY2015, and $80.7 million to support 10 projects in FY2016.[78]

Funding

For FY2017, Congress authorized a loan commitment ceiling of $300 million and directed HUD to collect fees from borrowers that results in a credit subsidy cost of zero for guaranteeing Section 108 loans. Until FY2015, Congress appropriated an amount necessary to cover the estimated long-term liability to the federal government of a Section 108 loan guarantee (credit subsidy). The Department of Housing and Urban Development Appropriations Act for FY2014[79] 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 will be determined annually by HUD based on a percentage of the principal amount of the Section 108 guaranteed loan. For FY2018, the Trump Administration did not request any new loan guarantee authority. The Consolidated Appropriations Act of 2018, P.L. 115-141, signed by the President on March 3, 2018, included $300 million in Section 108 loan guarantee authority. For FY2019, the Administration again requested no new loan guarantee authority. However, Congress, in passing the Consolidated Appropriations Act of 2019, P.L. 116-6, provided $300 million in loan guarantee authority for Section 108 financed projects. For FY2020, the Administration has requested no new loan guarantee authority for the Section 108 program.

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 24 C.F.R. Part 570, Subpart M.

[This section was prepared by Eugene Boyd, Analyst in Federalism and Economic Development Policy, Government and Finance Division.]

[78] HUD, *Section 108 Loan Guarantee Program*, Section 108 Project Summaries 2010 to 2016, https://www.hudexchange.info/programs/section-108/.

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

Department of Commerce

Economic Development Administration (Public Works and Economic Development Facilities Program)

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 and Economic Development Facilities program (PWED). Such assistance is also available under the agency's Economic Adjustment Assistance program.

Under the PWED program public works 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 generally are 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 will help distressed areas address their competitive disadvantages. Funded projects must be part of an EDA-certified Comprehensive Economic Development Strategy (CEDS).

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, an institution 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 Commonwealth of Puerto Rico, the U.S.

Virgin Islands, Guam, American Samoa, and 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 an actual or anticipated abrupt rise in unemployment.

Funding

For FY2017, Congress provided appropriations totaling $100 million for EDA's public works grant program. For FY2018, the President's budget requested no funding for the public works program. On March 23, 2018, the President signed the Consolidated Appropriations Act of 2018, P.L. 115-141. Division B of the act appropriated $262.5 million for EDA programs and additional $39 million for salaries and expenses. Of the amount appropriated for EDA programs, $117.5 million is allocated for the public works program. On February 15, 2019, the President signed the Consolidated Appropriations Act of 2019, P.L. 116-6. The act appropriated $265 million for EDA programs, including $117 million for the public works program. The act also appropriated an additional $39 million for EDA salaries and expenses. This is the same amount appropriated for FY2018. The Administration's FY2020 budget requests no new funding for EDA program activities but does request $30 million to cover the costs associated with closing down the agency.

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 13 C.F.R. Chapter III, Part 302, 305, 316, and 317.

Economic Adjustment Assistance (EAA)

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 (BRAC).

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 the creation of short-term action plans intended to stabilize a distressed community and regionally oriented long-term development strategies (CEDS) 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 that will help distressed areas address their competitive disadvantages and rethink their economic futures. In general, funds may be used to develop CEDS, and funded projects must be part of EDA-certified CEDS.

Financing Mechanism

EDA competitively awards EAA grants directly to approved 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 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 an actual or anticipated abrupt rise in unemployment.

Funding

For FY2017, Congress provided appropriations totaling $35 million for EDA's EAA grant program. For FY2018, the President's budget requested $0 for the EAA program. On March 23, 2018, the President signed the Consolidated Appropriations Act of 2018, P.L. 115-141, which included $262.5 million for EDA programs and additional $39 million for salaries and expenses. Of the amount appropriated for EDA programs, $37 million was allocated for the EAA program. On February 15, 2019, the President signed the Consolidated Appropriations Act of 2019, P.L.

116-6. The act appropriated $265 million for EDA programs, including $37 million for the EAA program. For FY2020, the Administration seeks to terminate EDA and its programs, citing changing national priorities, including prioritizing rebuilding the military and making critical investments in the nation's security. The Administration is requesting $30 million for salaries and expenses to cover the cost of shutting down the agency.

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 13 C.F.R. Chapter III, Part 302, 305, 316, and 317.

[This section was prepared by Eugene Boyd, Analyst in Federalism and Economic Development Policy, Government and Finance Division.]

Author Information

Jonathan L. Ramseur, Coordinator
Specialist in Environmental Policy

Eugene Boyd
Analyst in Federalism and Economic Development Policy

Tadlock Cowan
Analyst in Natural Resources and Rural Development

Elena H. Humphreys
Analyst in Environmental 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

Mary Tiemann
Specialist in Environmental Policy

Disclaimer

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