

Federally Supported Water Supply and Wastewater Treatment Programs

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Summary

Although the federal government has played a significant role in developing water quality regulations and standards for municipal and industrial (M&I) water use, it historically has provided a relatively small percentage of the funding for construction of water supply and treatment facilities for M&I uses. Yet, several programs exist to *assist* communities with development of water supply and treatment projects, and it appears that Congress is more frequently being asked to authorize direct financial and technical assistance for developing or treating water supplies for M&I use.

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 recycling and treatment. These projects and programs are found primarily within the Department of Agriculture (USDA), Department of Commerce, Department of Defense (DOD), Department of Housing and Urban Development (HUD), Department of the Interior (DOI), and the Environmental Protection Agency (EPA).

The focus of some programs has been enlarged over the years. The Department of the Interior's 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. Congress subsequently authorized other uses of project water, including M&I use. Even so, the emphasis of Reclamation's operations was to provide water for irrigation. Similarly, the U.S. Army Corps of Engineers (DOD) constructed large reservoirs primarily for flood control, but was authorized in 1958 to allocate water for M&I purposes. Over the past 40-plus years, Congress has authorized and refined several programs to assist local communities in addressing other water supply and wastewater problems. These programs serve generally different purposes and have different financing mechanisms; however, there is some overlap.

Federal funding for the programs and projects discussed in this report varies greatly. For example, in FY2016 Congress provided \$863 million in appropriations for grants to states under EPA's State Revolving Fund (SRF) loan program for drinking water facilities and \$1.39 billion for EPA's SRF program for wastewater facilities; funds appropriated for the USDA's rural water and waste disposal grant and loan programs are \$385 million for FY2016; HUD Community Development Block Grant (CDBG) funds (used partly but not exclusively for water and wastewater projects) are \$3.01 billion for FY2016. In contrast, Reclamation's Title XVI reclamation/recycling projects received \$23.4 million in appropriations for FY2016.

For each of the projects and programs discussed, this report describes project or program purposes, financing mechanisms, eligibility requirements, recent funding, and the Administration's FY2017 budget request.

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Introduction

Although the federal government has played a significant role in developing water quality regulations and standards for municipal and industrial (M&I) water use, it historically has provided a small percentage of the funding for construction of water supply and treatment facilities for M&I uses. Yet, several programs established by Congress exist to assist communities with development of water supply and treatment projects. Congress also has frequently been asked to authorize direct financial and technical assistance for developing or treating water supplies for M&I use. Proposals have included individual "rural water supply projects" to be built and funded by the Bureau of Reclamation in the Department of the Interior (Reclamation), specific water recycling projects built and partially funded by Reclamation, and programs for water supply and wastewater treatment projects to be largely funded by the U.S. Army Corps of Engineers (Corps). Interest also has grown in expanding the size and scope of the State Revolving Fund loan programs under the Clean Water Act and the Safe Drinking Water Act, as well as support for individual wastewater and drinking water projects through congressionally earmarked grants in appropriations legislation. However, in recent years, Congress has adopted prohibitions on congressionally directed funding, thus largely banning the practice in authorization and appropriations legislation.

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. Projects developed by Reclamation and the Corps typically require direct, individual project authorizations from Congress. In contrast, projects funded by other agencies are funded through standing program authorizations. These programs are found primarily within the Department of Agriculture (USDA), Department of Commerce, Department of Housing and Urban Development (HUD), and the Environmental Protection Agency (EPA). 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.

For each of the projects and programs discussed, this report describes purposes, financing mechanisms, eligibility requirements, and recent funding. The report does not address special projects and programs aimed specifically at assisting Indian Tribes, Alaskan Native Villages, and *Colonias*, ¹ or other regional programs such as those associated with the Appalachian Region or U.S. Territories.

Background

The federal government has built hundreds of water projects over the years, primarily dams and reservoirs for irrigation development and flood control, with M&I use as an incidental project purpose. Most of the nation's public municipal water systems have been built by local communities under prevailing state water laws.

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¹ Colonias typically are 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.

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. Congress subsequently authorized other uses of project water, including M&I use. Even so, the emphasis of Reclamation's operations has been to provide water for irrigation. This emphasis is evidenced in part in the different payment mechanisms that evolved to finance projects (described below). Similarly, the U.S. Army Corps of Engineers (Corps) constructed large reservoirs primarily for flood control, but was authorized in 1958 (Water Supply Act of 1958, 72 Stat. 320; 43 U.S.C. §390b) to allocate water for M&I purposes. In this act, Congress emphasized the primacy of nonfederal interests:

It is declared to be the policy of the Congress to recognize the primary responsibilities of the States and local interests in developing water supplies for domestic, municipal, industrial, and other purposes and that the Federal Government should participate and cooperate with States and local interests in developing such water supplies in connection with the construction, maintenance, and operation of Federal navigation, flood control, irrigation, or multiple purpose projects. (43 U.S.C. § 390(b))

Over the past 40-plus years, Congress has authorized and refined several programs to assist local communities in addressing other water supply and wastewater problems. The agencies that administer these programs differ in scope and mission. For example, the primary responsibilities of the Corps of Engineers 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 safeguarding the nation's environment. Others, such as HUD and the Department of Commerce, focus on community and economic development. Likewise, the specific programs discussed in this report—while all address water supply and wastewater treatment—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), and others do not distinguish based on community size (e.g., EPA, the Corps). In addition, these programs serve generally different purposes and have different financing mechanisms (some provide grants, others authorize loans); however, there is some overlap. For example, the rural water and waste disposal program of the USDA typically authorizes "water delivery" assistance to improve community water systems and water quality, while EPA's drinking water infrastructure program is driven primarily by "end of the pipe" water quality requirements of the Safe Drinking Water Act (SDWA). Similarly, while the Clean Water Act sets performance standards for discharges of municipally treated sewage, it also provides financial assistance to municipalities for constructing and improving treatment facilities in order to comply with the law.

Federal funding for the programs and projects discussed in this report varies greatly. For example, for FY2016, Congress provided \$863.2 million in appropriations for grants to states under EPA's State Revolving Fund (SRF) loan program for drinking water facilities and \$1.39 billion for EPA's SRF loan program for wastewater treatment facilities; funds appropriated for the USDA's rural utilities water and waste disposal programs total \$385 million for FY2016; HUD Community Development Block Grant funds (used partly but not exclusively for water and wastewater projects) are \$3.01 billion for FY2016. In contrast, Reclamation's Title XVI reclamation/recycling projects received \$23.4 million for FY2016—funding for all of Reclamation was \$1.27 billion for FY2016. 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 and attention to deficit reduction, despite the continuing pressure from stakeholders and others for increased funding. While federal support for 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 see them as options to supplement or complement, but not replace, traditional financing tools. In 2014, Congress enacted a five-year pilot program for one such alternative financing approach—a federal loan program to be implemented by EPA and the Corps—as part of the Water Resources Reform and Development Act (P.L. 113-121).²

It is also important to note that state and local contributions are the most significant source of total funds available to communities for drinking water and wastewater treatment improvements. For example, from FY1991 through FY2000, states contributed about \$10.1 billion to match \$18.0 billion in EPA capitalization grants for drinking water and wastewater SRFs and made about \$13.5 billion available for these activities under state-sponsored grant and loan programs and by selling general obligation and revenue bonds.³ 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 2014, the state and local share of such projects (both capital and operation and maintenance spending) was 96%, while the federal share was 4%.

The following table summarizes financial and other key elements of the projects and program activities discussed in this report. Other federal authorities of the U.S. Department of Agriculture's Rural Utilities Service, Reclamation, and the Corps may be available to assist with the provision of emergency water and wastewater needs, such as improving access to water supplies during a drought. These authorities are not discussed in this report, but are summarized in CRS Report R43408, Emergency Water Assistance During Drought: Federal Non-Agricultural *Programs*, by Nicole T. Carter, Tadlock Cowan, and Joanna Barrett.

Table I. 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	FY2016 Funding	FY2017 Funding Request
USDOI Bureau of Reclamation	Multi-purpose projects, which may include M&I ²	De facto 40- 50 year Ioan	0%/100%, with interest for M&I uses ^b	Not applicable	Not readily available (Total agency approps. are \$1.27 billion in current gross discretionary authority)	(Total agency approps. request is nearly \$1.11 billion)
USDOI Bureau of Reclamation (Title XVI of	Wastewater reclamation and reuse ^a	De facto grant	Up to 25%/75%; dollar limits may apply	Not readily available	\$23.4 million	\$21.5 million

² For information, see CRS Report R43315, Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program. For discussion of WIFIA and other alternative financing approaches that have been discussed recently, see CRS Report R42467, Legislative Options for Financing Water Infrastructure.

³ U.S. General Accounting Office (now Government Accountability Office), Water Infrastructure: Information on Federal and State Financial Assistance, November 2001, GAO-02-134, p. 18. Hereinafter, GAO Water Infrastructure.

⁴ Congressional Budget Office, Public Spending on Transportation and Water Infrastructure, 1956 to 2014, March 2015, pp. 28-29.

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2016 Funding	FY2017 Funding Request
P.L. 102-575) USDOI Bureau of Reclamation	Indian and non-Indian rural water supply ^a	De facto grant, plus loan	Non-Indian projects: average of 64%/36%;	Not applicable (see report text for	\$83.5 million	\$38.1 million
	33777		Indian projects: average of 100%/0%	detail)		
U.S. Army Corps of Engineers (general)	Multi-purpose water projects, which may include permanent M&I water storage or temporary surplus water contracts ^a	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 ^b	Not applicable	\$12.0 million	\$7.0 million
U.S. Army Corps of Engineers (multiple sections of WRDAs and select Energy and Water Development Approps. acts)	"Environ- mental infrastruc- ture" assistance ^a	Technical/ planning and design services or grants; design and construction services or grants	75%/25% generally	Not applicable (see report text for detail)	\$55.0 million	None
USDA Rural Utilities Service, Water and	Municipal water supply and waste disposal	Loans and grants	0%/100% for loans Up to	Grants (FY2015): \$336.2 million total	Grants: \$353.4 million	Grants: \$340.0 million Direct loans:
Waste Disposal Program	disposai		75%/25% for grants	Direct loans: \$1.2 billion total	Direct loans: \$31.3 million	\$34.9 million
				Guaranteed loans: \$50.0 million total (averages not available)	Guaranteed loans: \$275,000	
USDA Watershed and Flood Prevention Operations Program	Multiple activities, but generally must include flood control measures	Project grants and technical advisory services	100%/0% Varies according to purpose of improvement activity	Average: \$650,000	\$0	\$0

Agency and Projects or Program	Project/ Program Purposes	Type of Financial Assistance	Federal/ Nonfederal Cost Share	Average Amount of Assistance	FY2016 Funding	FY2017 Funding Request
USDA Small Watershed Rehabilitation Program	Dam rehabilitation	Project grants and technical advisory services	100%/0% Varies according to purpose of improvement activity	Not applicable	\$12 million	\$14.28 million (\$0 discretionary, \$14.28 million mandatory, and \$54 million rescission)
EPA, Clean Water State Revolving Fund (SRF) Loan Program	Municipal wastewater treatment and other eligible projects and activities	Grants to states to capitalize loan funds SRF loans made by states to local project sponsors	80%/20% for grants to states to capitalize SRFs 0%/100%c (Project loans are repaid 100% to states)	Average capitalization grant to state: \$25.9 million (FY2014) Average assistance from SRF: \$2.99 million (FY2012)	Capitalization grants: \$1.394 billion	\$979.5 million
EPA, Drinking Water State Revolving Fund (SRF) Loan Program	Public water supply projects needed to meet federal drinking water standards and to address serious health risks	Grants to states to capitalize loan funds SRF loans made by states to local project sponsors	80%/20% for grants to states to capitalize SRFs 0%/100%c (Project loans are repaid 100% to states)	Average capitalization grant to state: \$27.3 million (FY2015) Average assistance from SRF: \$2.66 million (through FY2012)	Capitalization grants: \$863.2 million	\$1.02 billion
HUD, Community Development Block Grant Program	Multi-purpose 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	\$3.01 billion	\$2.88 billion
EDA, Public Works and Economic Development Program	Multi-purpose economic development projects; may include water and sewer	Project grants	Generally 50%/50%	Average grant \$1.7 million (FY2011)	\$100.0 million	\$85 million

- a. These projects generally must be authorized by Congress prior to construction.
- b. 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).
- c. Additional subsidies may be provided for economically disadvantaged communities.

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.⁵ Reclamation owns and manages 475 dams and 337 reservoirs, which are capable of storing 245 million acre-feet of water.⁶ The agency's inventory of 4,000 "constructed real property assets" has a current replacement value of nearly \$100 billion.⁷ 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 non-drought 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, multi-purpose 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 more than 50 reclamation wastewater and reuse/recycling projects. 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. However, for M&I projects under rural water and Title XVI authorities, Congress has authorized 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.

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

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

⁷ Ibid.

⁸ 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.

⁹ 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.

"Traditional" Multi-purpose Reclamation Projects

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. Once a feasibility study is completed, congressional authorization is typically sought prior to construction. 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, multi-purpose 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.

Eligibility Requirements

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

Funding

Funding information for the M&I portions of multi-purpose projects is not readily available. Total regular Reclamation appropriations (gross current authority; not including permanent funding) for FY2016 were \$1.27 billion. The total FY2017 regular appropriations request for Reclamation was \$1.11 billion. 12

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. Further, the Flood Control Act of 1944 (58 Stat. 887; 16 U.S.C. 460d) amended the 1939 Act, stating that the proposed construction must be approved by Congress if any state or the Secretary of War (now Army) objects to the proposed project construction (Section 1(c) of the 1944 Flood Control Act).

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

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. However, in 2006 Congress provided statutory authority for creation of a rural water supply program (P.L. 109-451). Under the program, Reclamation is 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. Congress must authorize construction of rural water projects before it is to begin. Instead of funding new projects, Congress has typically appropriated funding for already authorized projects.

Project Purposes

Individual authorization statutes establish project purposes. However, 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 projects authorizations are also linked to Indian water settlements or otherwise provide benefits to Indian tribes.

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 P.L. 109-451 and any existing or future construction authorization.

Eligibility Requirements¹⁴

Local governments and organizations such as water and conservation districts or associations, including Indian tribes, may approach Reclamation and/or Congress for project support. All construction project funding must be appropriated by Congress. As noted earlier, Reclamation only works on projects located in the 17 western states (32 Stat. 388; 43 U.S.C. §391 et seq.), unless specifically authorized by Congress. Reclamation published an interim final rule (43 C.F.R. 404), which establishes criteria for developing new rural supply projects. ¹⁵ The rule does

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^{13 43} C.F.R. §404.

¹⁴ For more information, see Reclamation's "Frequently Asked Questions" website: http://www.usbr.gov/ruralwater/general/faq.html.

¹⁵ See http://edocket.access.gpo.gov/2008/pdf/E8-26584.pdf. For more information on Reclamation's rural water program generally, see http://www.usbr.gov/ruralwater/.

not apply to previously authorized projects. Under the new rule, priority is given to domestic, residential, and municipal uses. Communities or groups of communities with populations under 50,000 are also eligible. However, the use of water for commercial irrigation purposes is not allowed.

Funding

Funding enacted for rural water supply projects in FY2016 was \$83.5 million; the Administration requested \$38.1 million for "on-going authorized" rural water projects for FY2017. The FY2016 request for rural water supply projects was prioritized using the criteria established in the interim final rule. Funding proposed for FY2017 for individual rural water supply projects ranges from \$1 million to \$13.8 million.

Statutory and Regulatory Authority

The Rural Water Supply Program is authorized by the Rural Water Supply Act of 2006 (P.L. 109-451, Title I; 120 Stat. 3345; 43 U.S.C. 2401 note); however, construction for many projects was previously authorized under 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. The original act 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 more than 50 projects authorized for construction. 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.

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 water reclamation and wastewater recycling program is limited to projects and studies in the 17 western states unless otherwise specified. ¹⁶ Authorized recipients of program assistance include "legally organized non-federal entities," such as irrigation districts, water districts, municipalities, and Indian tribes. In the past, Administration requests for construction funding has generally been limited to projects where (1) an appraisal investigation and feasibility study have been completed and approved by the Secretary; (2) the Secretary has determined the project sponsor is capable of funding the nonfederal share of project costs; and (3) the local sponsor has entered into a cost-share agreement with Reclamation. Reclamation published final funding criteria for the Title XVI Program in 2010;¹⁷ they now appear to be the primary mechanism upon which projects are evaluated for funding.

Unlike other water supply or wastewater treatment programs administered by the EPA, USDA, or HUD (discussed below), Reclamation's Title XVI projects are statutorily authorized construction projects. While Reclamation has the authority to undertake general appraisal investigations and feasibility studies without congressional authorization, it generally has interpreted the Title XVI language as requiring specific congressional authorization for the construction of new projects.

During the 108th and 109th Congresses, several oversight hearings were held on the Title XVI program; however, no legislation updating the overall program authorization has been enacted since the 1996 amendments. Reclamation issued an internal "Directives and Standards" document (October 2007) to increase the consistency and effectiveness of the program. The Directives and Standards did not establish a mechanism for prioritizing authorized projects; however, as noted above, the agency issued new criteria in 2010 for use in allocating Title XVI funding in the future. ¹⁸

Funding

The total regular appropriation for the Title XVI program in FY2016 was \$23.4 million. The Administration's FY2017 request was \$21.5 million. Prior year program funding (i.e., appropriations) ranged from a high of \$47.2 million in FY1998 to a low of \$12.6 million in FY2007. Projects authorized prior to the 1996 amendments 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 much smaller in size, ranging from \$10 million (\$2 million for Reclamation's share) to \$280 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

requested for authorized projects identified "through programmatic criteria...."

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¹⁶ For example, Congress has authorized three projects for construction in Hawaii (P.L. 109-70).

¹⁷ http://www.usbr.gov/WaterSMART/title/docs/Title_XVI_Final_Criteria_Oct_2010.pdf.

¹⁸ http://www.usbr.gov/WaterSMART/docs/Title_XVI_Final_Criteria_Oct_2010.pdf.

¹⁹ Since 2011, Reclamation has gradually increased funding for the criteria-based Commissioner's Funding Opportunity under the WaterSMART Title XVI program. For FY2011, Reclamation announced it was awarding \$11.34 million to eight projects under this funding opportunity. For FY2013, Reclamation requested that \$16.3 million go to the criteria-based Commissioner's Funding Opportunity. For FY2014, Reclamation asked that all the Title XVI request be allocated to the Commissioner's office for distribution. For FY2015, Reclamation noted that funding will be

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 Natural Resources Act of 2009 (P.L. 110-229); the Consolidated Appropriations Act, 2008 (P.L. 110-161); and the Omnibus Public Land Management Act of 2009 (P.L. 111-11; Title IX, Subtitle B). Reclamation published program guidelines in December 1998, internal Directives and Standards for the program's feasibility study review process in October 2007, and new criteria for prioritizing project funding in October of 2010; formal regulations have not been promulgated.²⁰

[This section prepared by Betsy A. Cody, Specialist in Natural Resources Policy, Resources, Science, and Industry Division (707-7229).]

Department of Defense

Army Corps of Engineers (Civil Works Program)

Under its civil works program, the U.S. Army Corps of Engineers (Corps, Department of Defense) operates water resources projects throughout the country. Corps civil works activities are concentrated on three principal missions—navigation, flood damage reduction, and aquatic ecosystem restoration. Many Corps activities also support municipal and industrial (M&I) water supply, hydroelectric generation, fish and wildlife, and recreation. M&I water supply, however, generally is not a Corps reservoir's or a Corps project's primary purpose. A total of 134 Corps reservoirs have roughly 11 million acre-feet (AF) of storage designated for M&I water. Most of this water was allocated to M&I purposes when the projects were constructed; around 0.7 million-acre feet have been allocated to M&I use from existing projects using the Corps' general water supply authorities. The provision of M&I water from Corps reservoirs is subject to availability, and the associated costs are 100% a local, nonfederal responsibility.

Additionally Congress has chosen to authorize a small number of Corps projects primarily for water supply. The Corps also has authorities related to water supply provision as part of emergency and disaster relief, including during droughts.

Congress has given the Corps 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 Corps reservoirs. The Water Supply Act of 1958 authorized the Corps (and the Bureau of Reclamation) to recommend economically justified M&I

²⁰ For information, see http://www.usbr.gov/pmts/writing/guidelines/ and http://www.usbr.gov/recman/DandS.html. Final funding criteria can be found at http://www.usbr.gov/WaterSMART/docs/Title XVI Final Criteria Oct 2010.pdf.

²¹ 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.

water supply storage space in new or existing reservoirs. The Corps also has authority for the short-term provision of surplus water as specified in the Flood Control Act of 1944; surplus water contracts generally are limited to five-year terms, with options to extend.

The Water Resources Reform and Development Act of 2014 (WRRDA 2014, P.L. 113-121) directed the Corps to assess the effects of management practices, priorities, and authorized purposes of Corps reservoirs in arid areas on water supply during drought. The legislation also included provisions associated with the administration of Corps water supply activities, including its management of future water storage rights and a 10-year waiver for surplus water storage fees in the Upper Missouri Mainstem Reservoirs.

Project Purposes

As previously noted, Congress authorized the Corps to allocate a portion of its multi-purpose reservoirs for permanent M&I storage, or to provide M&I water from Corps reservoirs under temporary contacts for surplus water. Neither authority allows the Corps to significantly modify its projects in order to provide for M&I water supply, nor allows the Corps to sell or allocate quantities of water. Instead, Corps 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, the Corps 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 the Corps for this work; instead, it is nonfederal entities that pay the Corps for M&I water storage. Corps 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 new Corps M&I water supply is from existing reservoirs and is managed though contracts requiring annual payments. The Obama Administration has signaled its intent to update and clarify the Corps policies governing the use of its projects for M&I water supply under the 1944 and 1958 authorities.²²

Eligibility Requirements

For new Corps 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 the Corps annually for all operation and maintenance or replacement costs. Occasional exceptions to the Corps' 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.

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²² The Administration announced the rulemaking (0710-AA72) as part of its Fall 2015 Unified Agenda of Federal Regulatory and Deregulatory Actions; more information is available at http://www.reginfo.gov/public/do/eAgendaViewRule?pubId=20151-&RIN=710-AA72.

Funding

There are no Corps water supply loans or grants available to nonfederal entities under these authorities. The Corps' water supply expenses are funded with annual appropriations. The Corps' FY2016 work plan for enacted appropriations indicated that \$12 million was applied to water supply activities. The Administration's FY2017 budget request was for \$7 million—the same as its FY2016 request.

Statutory Authority

Water Supply Act of 1958 (Title III, 72 Stat. 320, as amended; 43 U.S.C. §390b);²³ 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.

Environmental Infrastructure Assistance

Project Purpose

Federal policy generally is that community water supply is largely 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 the Corps 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 Corps 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 Corps 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 the Corps in annual Energy and Water Development Act appropriations legislation. How the Corps and nonfederal financing is managed varies according to the specifics of the authorization. Sometimes the Corps is responsible for performing the assistance or for contracting out the work; under other authorizations, the Corps 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 Corps program per se, there are no clear and/or consistent general eligibility criteria. Most of Corps environmental infrastructure authorities specify a specific geographic location (e.g., a city,

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²³ For information on the Corps' civil works program, see http://www.usace.army.mil/Services/Pages/Services.aspx.

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

Funding

Only a subset of authorized Corps environmental infrastructure activities has received appropriations. Since 1992, Congress has provided the Corps roughly \$2 billion in funds for environmental infrastructure assistance. Congress provided the Corps with \$55 million for environmental infrastructure assistance activities in FY2016. In recent years, Congress has provided in enacted appropriations "additional funding" for Corps environmental infrastructure as a broad category; the Administration then follows guidance provided in the appropriations bill and accompanying reports to guide its selection of specific authorized environmental infrastructure assistance activities that will be supported.

The Obama Administration requested no funding for these activities in its FY2017 request. Since the first assistance authorization in 1992, no administration has asked for funding for Corps environmental infrastructure assistance.

Statutory Authority

Prior to 1992, the Corps 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 Corps authorizations. Beginning with Sections 219 and 313 of WRDA 1992 (P.L. 102-580), Congress has authorized the Corps to assist local interests with planning, design, and construction assistance for environmental infrastructure projects. Subsequent Corps authorization bills included new environmental infrastructure assistance activities, and raised the authorized funding ceilings for previously authorized projects.

[This section prepared by Nicole T. Carter, Specialist in Natural Resources Policy, Resources, Science and Industry Division (707-0854).]

Department of Agriculture

Rural Utilities Service (Water and Waste Disposal Programs)

The USDA administers grant and loan programs for water and wastewater projects in low-income rural communities whose residents face significant health risks because they do not have access to water supply systems or waste disposal facilities. Eligibility is limited to communities of 10,000 or less. These programs are administered at the national level by the Rural Utilities Service (RUS) at USDA. RUS allocates program funds to the Rural Economic and Community Development (RECD) state offices through an allocation formula based on rural population, poverty, and unemployment. District RECD offices actually administer the programs locally. In recent years, approximately 65% of loan funds and 57% of grant funds have been obligated to water projects; the remainder have been obligated to waste disposal projects.

Prior to enactment of the 1996 farm bill (P.L. 104-127), these grants and loans, as well as other USDA rural development assistance, were authorized as separate programs. In P.L. 104-127, Congress consolidated 14 existing rural development grant and loan programs into three categories for better coordination and greater local involvement. This program is called the Rural Community Advancement Program (RCAP). The three components are the Rural Utilities Service (RUS, which includes water and waste disposal activities), Rural Community Facilities, and Rural Business and Cooperative Development programs.²⁴

There is heavy demand for water and waste disposal funds for rural and small communities. At the end of FY2007, USDA reported a \$2.4 billion backlog of requests for 928 water and wastewater projects. The 2012 EPA wastewater needs survey estimated that documented funding needs for rural communities totaled \$68 billion. Needs for projects in small communities (populations less than 10,000) were \$33 billion, or about 12% of the total U.S. funding needs. Five states accounted for 30% of the small community needs (Pennsylvania, New York, Kentucky, Texas, and Alabama). With few exceptions, small community facilities are a large majority of the total number of publicly owned facilities in each state, and in four states (Iowa, Montana, Nebraska, and North Dakota), small community facilities constitute more than 95% of publicly owned facilities. In 19 other states, small community facilities constitute 80% to 95% of the publicly owned facilities. In addition to this, EPA's 2011 drinking water infrastructure survey showed \$65 billion needed by small water systems serving 3,300 or fewer people over the next 20 years to install, upgrade, or replace infrastructure to ensure safe drinking water.

Program Purpose

The purpose of these programs is to provide basic human amenities, alleviate health hazards, and promote the orderly growth of the nation's rural areas by meeting the need for new and improved rural water and waste disposal facilities. Eligible projects can include drinking water facilities, sanitary sewers, and stormwater drainage and disposal facilities. Funds may be used for installation, repair, improvement, or expansion of rural water facilities, including costs of distribution lines and well-pumping facilities. USDA also makes grants (totaling \$15-20 million annually) to qualified non-profits 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.

Financing Mechanism

USDA provides grants and loans for water and waste disposal projects. USDA prefers making loans; grants are made only when necessary to reduce average annual user charges to a reasonable level. The split between loans and grants is about 70-30; the ratio of drinking water to sewer projects has been about 60-40 in recent years. 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

²⁴ RCAP is designed to give RECD state offices flexibility in targeting financial assistance to community and regional needs. Thus, within the three components of RCAP, up to 25% of funds can be transferred between programs in any state, as long as transfers do not result in changes in the national funding stream of more than 10%.

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, 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. ²⁵ 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 authorization of appropriations at \$30 million annually through FY2018 for these grants.

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 and Imminent Community Water Assistance Grants. RUS also is authorized to help rural residents where a significant decline in quantity or quality of drinking water exists or is imminent and funds are needed to obtain adequate quantities of water that meet standards of the Safe Drinking Water Act or the Clean Water Act. 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. The 2014 farm bill (P.L. 113-79) authorized \$35 million per year through FY2018 for this program. Funding for it is mandatory

²⁵ For current interest rates, see http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.

through reservation of 3% to 5% of appropriated water and waste disposal grant funds. 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.

Eligibility Requirements

Eligible entities are municipalities, counties, and other political subdivisions of a state; associations, cooperatives, ²⁶ 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 have been denied 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.

Funding

Beginning with USDA's FY1996 appropriation (P.L. 104-37), Congress consolidated the water and waste disposal grant and loan appropriations in a single Rural Community Assistance Program. Funds available through appropriations for USDA's water and waste disposal programs provide \$508.4 million in total for FY2016, including \$353.4 million in grants, \$31.3 million in direct loans, and \$275,000 in subsidy to support guaranteed loans. Out of the total FY2016 funds, USDA has available \$993,000 for grants to provide loans for individually owned water well systems and \$1.0 million for grants to capitalize revolving loans for water and waste disposal systems. For FY2017, the President's budget requested \$460.6 million in appropriations for these programs, including \$340.0 million for the core water and waste disposal grants and \$34.9 million for direct loans. According to the FY2017 budget justification, the proposal will support \$1.23 billion in program activity, counting both appropriations and activities resulting from loans. Funding in 2017 is projected to provide 1,150 loans and grants assisting 1.95 million rural residents.

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 1778-1780.²⁷

[This section prepared by Claudia Copeland, Specialist in Resources and Environmental Policy, Resources, Science and Industry Division (707-7227).]

²⁶ 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.

²⁷ For additional information on RUS water and environmental programs, see http://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program.

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. 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.²⁸

Currently all four programs are authorized and include a significant backlog of authorized projects. Only the rehabilitation and emergency programs, however, continue to receive appropriations from Congress. The WFPO program has not received an appropriation since FY2010.

Watershed and Flood Prevention Operations

The WFPO program consists of projects built under two authorities—the Watershed Prevention and Flood Protection 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 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, 2,161 projects have been authorized through FY2015. Of that total, 1,281 have been completed, while 364 others remain active. Also, 183 were subsequently deauthorized, 288 are inactive, and 45 have reached the end of their project life. Carryover funding was used to complete construction and to continue construction and design work on existing projects in FY2015. The backlog of authorized projects waiting funding is estimated to be \$921 million.

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 sub-watersheds. As of FY2015, NRCS reports that 94% of the total planning job, with 414 work plans for sub-watersheds encompassing almost 30 million acres, have been completed. With the exception of the two smallest projects, the estimated federal costs for each of these projects range from more than \$40 million to more than \$330 million. Three of the projects have been completed, and work on the remainder continues in one or more sub-watersheds.

Program Purpose

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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,

²⁸ 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.

agricultural water management, public recreation development, fish and wildlife habitat development, and municipal or industrial water supplies. Structural measures can include dams, levees, canals, pumping plants, and the like. Local sponsors agree to operate and maintain completed projects.

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. The Senate and House Agriculture Committees must approve projects that need an estimated federal contribution of more than \$5 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.

Funding

Congress has not appropriated funding for the WFPO program since FY2010. Beginning in FY2006, the Administration requested no funding for WFPO, citing program inflexibility and a backlog of congressionally designated projects there were frequently of limited merit. The FY2016 request marked the first time in a decade that an Administration requested funding for the program (\$200 million), citing the need for climate resilience. The FY2017 request, however, proposes no funding for the program, purportedly in favor of fully funding other mandatory conservation programs.²⁹

Congress had traditionally appropriated funds for the program in amounts similar to the preceding year. It was not until FY2011, when for the first time in the program's 60-year history, no funding was appropriated. In FY2015, carryover funding was used to complete construction on existing projects and to continue planning and design work. The Administration reported that congressionally designated project funding accounted for a significant portion of the continuing work. In FY2016, no funding was appropriated; however, Congress directed \$10.6 million of another conservation account—Conservation Operations, which funds general conservation technical assistance offered by NRCS—to fund projects authorized under the WFPO authority.

²⁹ U.S. Congress, House Committee on Appropriations, Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies, *Budget Hearing - Department of Agriculture, Natural Resources and Environment*, 114th Cong., 2nd sess., February 26, 2016.

Statutory and Regulatory Authorities

The Flood Control Act of 1944, P.L. 78-534, as amended, 58 Stat. 905 (33 U.S.C. 701b-1); 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 (Watershed and Flood Prevention Operations).³⁰

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. In 2015, an estimated 28 borrowers had loans with a total outstanding value of \$5.3 million. Congress did not appropriate funds for new loans in FY2016. 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. In 2015, 4,336 dams reached the conclusion of their 50-year design life. That number will continue to grow each year, and by 2017 will total 5,200. In response to that 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) as an amendment to the P.L. 566 law. From 2000 to 2015, the program authorized the rehabilitation of 269 dams in 31 states. Of this total, 130 projects are complete, and the remaining 139 projects are waiting for funding.

Program Purpose

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

Financing Mechanism

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

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³⁰ For information, see http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/.

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 Administration sought no funding for the Small Watershed Rehabilitation program for FY2017, citing the Administration's position that the maintenance, repair, and operation of these dams are the responsibility of local project sponsors.

The Small Watershed Rehabilitation Program has discretionary funding authority of up to \$85 million annually. The program has received an average of \$12.9 million in appropriations over the last five years, including \$12.0 million in FY2016.

The program is also authorized through omnibus farm bills to receive mandatory funding to remain available until expended. Since FY2002, annual appropriations have restricted this no-year funding to generate annual savings. In FY2014, the restriction in the Consolidated Appropriations Act, 2014 (P.L. 113-76) resulted in a savings of \$153 million. The Agricultural Act of 2014 (2014 farm bill, P.L. 113-79), which was enacted after P.L. 113-76, authorized an additional \$250 million in mandatory funding for FY2014; thereby superseding the appropriations restrictions for FY2014 in P.L. 113-76 and making the full \$250 million available for obligation. The original carryover from the FY2014 restriction (\$153 million) was further reduced by sequestration and the FY2015 and FY2016 appropriations acts. The FY2017 request proposes to use \$14.28 million of the remaining carryover and permanently rescind the balance of approximately \$54 million.

Statutory and Regulatory Authorities

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 (Watershed and Flood Prevention Operations).³²

[This section prepared by Megan Stubbs, Specialist in Agricultural Conservation and Natural Resources Policy, Resources, Science and Industry Division (707-8707).]

Environmental Protection Agency

Clean Water State Revolving Fund Loan Program

The Clean Water Act prescribes performance levels to be attained by municipal sewage treatment plants in order to prevent the discharge of harmful wastes into surface waters. The act also provides financial assistance, so that communities can construct treatment facilities in compliance

³¹ For additional information, see CRS In Focus IF10041, *Reductions to Mandatory Agricultural Conservation Programs in Appropriations Law*, by Megan Stubbs

³² For information, see http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wr/.

with the law, which has the overall objective of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters.

In historic terms, funding under the Clean Water Act has been the largest federal program for wastewater treatment assistance. Since 1973, Congress has appropriated \$93 billion in program grants. 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. These funds are used to assist localities in meeting wastewater infrastructure needs most recently estimated by EPA and states at \$298 billion nationally for all categories of projects eligible for federal assistance under the law.

In 1987 Congress amended the Clean Water Act (P.L. 100-4) and initiated a new program of federal capitalization grants to support State Water Pollution Control Revolving Funds (SRFs). Prior to 1989 (when the SRF program became effective), states used their allotments 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, or SRFs, with states providing matching funds equal to 20% of the federal funds to capitalize the SRF. All 50 states, plus Puerto Rico, participate in the clean water SRF 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. Rural and non-rural communities compete for funding; rural areas and other small communities have no special priority, nor are states required to reserve any specific percentage for projects in rural areas. Nevertheless, rural areas are not shut out of the program. EPA data indicate that since 1989, nationally, 67% of all loans and other assistance (comprising 23% of all assistance amounts) have gone to assist communities with 10,000 people or fewer.

Program Purpose

The clean water SRF program provides assistance in constructing publicly owned municipal wastewater treatment plants, implementing nonpoint pollution management programs, and developing and implementing management plans under the National Estuary Program.

Financing Mechanism

Clean water SRFs 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 SRF debt obligations (i.e., to be used as security for leveraging the assets in the SRF); providing loan guarantees for sub-state revolving funds; earning interest on fund accounts; and supporting reasonable costs of administering the SRF. States may not provide grants from an SRF. Loans are made at or below market interest rates, including zero interest loans, as determined by the state in negotiation with the applicant. States may provide additional subsidization, such as principal forgiveness, negative interest loans, grants, or a combination, to municipalities that meet the state's affordability criteria. Additional subsidization also can be provided for projects to implement water or energy efficiency goals or to mitigate stormwater runoff. 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 SRF-funded projects use American iron and steel products and apply the prevailing wage requirements of the Davis-Bacon Act.³³

³³ See CRS Report RL31491, *Davis-Bacon Act Coverage and the State Revolving Fund Program Under the Clean Water Act.*

Eligibility Requirements

Eligible loan recipients for SRF 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 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 are, initially, those needed for constructing or upgrading publicly owned municipal wastewater treatment plans. As defined in Clean Water Act Section 212, 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 is not an eligible activity. All funds in the clean water SRF resulting from federal capitalization grants are first to be used to assure maintenance of progress toward compliance with enforceable deadlines, goals, and requirements of the act, including municipal compliance. Following compliance with the "first use" requirement, funds may be used to implement nonpoint source management programs and estuary activities in approved State Nonpoint Management Programs and estuarine Comprehensive Conservation and Management Plans, respectively. Since the clean water SRF program was established in 1989, \$4.3 billion has been used to assist 15,762 nonpoint management projects; \$7.4 million has gone to five estuary management plan activities.

"Wet Weather" Projects

In 2000, Congress authorized separate Clean Water Act grant funding for projects to address overflows from municipal combined sewer systems and from municipal separate sanitary sewers. 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. The funds would only be available for appropriation if Congress also appropriated at least \$1.35 billion in each of the years for the clean water SRF program. Under the program, grants to a municipality or municipal entity could be used for planning, design, and construction of treatment works to intercept, transport, control, or treat municipal combined and separate sewer overflows. However, no funds were appropriated for this program either in FY2002 or FY2003; thus, wet weather projects continue to compete with other water infrastructure projects for available Clean Water Act funds.

Funding

Since the first appropriations for the clean water SRF program in FY1989, Congress has provided \$41.6 billion in grants to states and Indian Tribes to capitalize SRFs. Through June 2014, federal funds, together with state matching contributions, repaid loans, and other funds, have been used for \$105.4 billion in SRF assistance to support nearly 35,000 SRF loans and debt refinance agreements. For FY2016, Congress appropriated \$1.39 billion, \$35 million less than was provided in FY2015 for clean water SRF capitalization grants. For FY2017, the President's budget requested \$979.5 million for these grants.

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. §35.3100.³⁴

[This section prepared by Claudia Copeland, Specialist in Resources and Environmental Policy, Resources, Science and Industry Division (707-7227).]

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. Through these regulations, EPA has set standards to control the levels of approximately 90 contaminants in drinking water, and more regulations are under development. To help communities meet these federal mandates and to meet the act's public health objectives, Congress amended the SDWA in 1996 to establish a drinking water state revolving fund (DWSRF) loan program. The program is patterned closely after the 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. 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 (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 \$384.2 billion on infrastructure improvements over 20 years (\$19.21 billion annually) to ensure the provision of safe drinking water and compliance with federal standards.³⁶

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. States may use a portion of the

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³⁴ For additional information, see https://www.cfda.gov/index?s=program&mode=form&tab=step1&id=312e4abeea3cc908bc55deb5e07ec37f.

³⁵ Private, residential wells are not regulated under the SDWA and are not eligible for assistance through this program.

³⁶ U.S. Environmental Protection Agency, *Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress*, Office of Water, EPA 816-R-13-006, April 2013, http://water.epa.gov/grants_funding/dwsrf/upload/epa816r13006.pdf.

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 30% of their annual DWSRF grant to provide additional subsidies (e.g., principal forgiveness and negative interest rate loans) to help economically disadvantaged communities of any size. (A disadvantaged community is one in which the service area of a public water system meets stateestablished affordability criteria.) In recent appropriations acts, Congress has required states to make available at least 20%, and no more than 30%, of their capitalization grant to eligible communities for additional subsidization in the form of forgiveness of principal, negative interest loans, and/or grants. In recent appropriations acts, including EPA appropriations for FY2016 (P.L. 114-113), Congress has required states to make available at least 20% of their capitalization grant to eligible communities for additional subsidization in the form of forgiveness of principal, negative interest loans, and/or grants.

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 upgrade or replace infrastructure in order to continue providing the public with safe drinking water; (2) projects needed to address violations of SDWA regulations; and (3) projects to replace aging infrastructure (e.g., source water improvement projects and treatment facilities, storage facilities, transmission and distribution pipes, and consolidation with other systems). Assistance may also be available for new wells to replace contaminated wells, land acquisition, project design and planning, and various security measures, including infrastructure improvements. Also eligible for assistance are projects to consolidate water supplies (for example, in cases where individual homes or other public water supplies 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 finished (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

Through FY2016, cumulative appropriations for the DWSRF program totaled approximately \$19.9 billion.³⁷ For FY2016, the President requested \$1.186 billion for the program, and Congress provided \$863.2 million. The FY2016 appropriation includes \$20 million in tribal resources and roughly \$12.25 million for American Samoa, Guam, Northern Mariana Islands, and the U.S. Virgin Islands. The estimated average state grant is roughly \$15.9 million. The President requested \$1.020 billion for FY2017.

From 1997 through June 2015, \$18.26 billion in federal contributions—combined with the 20% state match (\$3.3 billion), bond proceeds, loan principal repayments, and other funds—generated roughly \$30.57 billion in DWSRF program resources. Through this same period, \$30.0 billion was made available for loans and other assistance (e.g., debt refinance), and 12,424 projects received assistance. In FY2015, states provided assistance to 730 drinking water projects.³⁸

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). EPA promulgated an interim final rule for the program on August 7, 2000 (65 FR 48285), and adopted it as final on January 12, 2001 (66 FR 2823). Regulations are codified at 40 C.F.R. §35.3500.³⁹

[This section prepared by Mary Tiemann, Specialist in Environmental Policy, Resources, Science and Industry Division (707-5937).]

Department of Housing and Urban Development

Community Development Block Grants

The Department of Housing and Urban Development (HUD) administers assistance primarily under the Community Development Block Grant (CDBG) program. The program's primary objective is to develop viable urban 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 localities for a broad range of activities intended to result in decent housing in a suitable living environment. Water and waste disposal needs compete with many other public activities for this assistance, including historic preservation, energy conservation, housing construction, lead-based paint abatement, urban renewal projects, recreation facilities, home ownership assistance, and others. Program policy requires that at least 70% of funds must benefit low- and moderate-income persons. The use of CDBG funds is

³⁷ Portions of the appropriated amounts are reserved each year for authorized purposes, including providing direct grants for American Indian and Alaskan Native Village water systems, and reimbursing small water system for monitoring for unregulated contaminants. Adjusted for these set-asides, total contributions to states, territories, and the District of Columbia totaled \$17.68 billion.

³⁸ DWSRF program information, regulations, facts, statistics, and state contact information are available at https://www.epa.gov/drinkingwatersrf. For further information and contacts, see the Catalog of Federal Domestic Assistance, DWSRF entry, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=2da3dbe10180847e587b5f688e90bc0d.

³⁹ DWSRF program information, regulations, facts and statistics are available at http://www.epa.gov/safewater/dwsrf.html. For further information and contacts, see the Catalog of Federal Domestic Assistance, DWSRF entry, https://www.cfda.gov/?s=program&mode=form&tab=step1&id=2da3dbe10180847e587b5f688e90bc0d.

intended to reflect a balance between local flexibility and national targeting to low- and moderate-income persons. Since it began in 1974, the CDBG program has invested \$149 billion in communities nationwide. The program's focus since 2014 has been support of infrastructure pre-development and resilient infrastructure.

After subtracting amounts specified in appropriations acts for special-purpose activities, 70% of CDBG funds are allocated by formula to approximately 1,000 entitlement cities nationwide, defined as central cities of metropolitan areas, metropolitan cities with populations of 50,000 or more, and 183 statutorily defined urban counties (the entitlement program). These funds are not available for projects in rural communities. The remaining 30% of CDBG funds is allocated by formula to the states for distribution to non-entitlement, smaller communities (the state program) for use in areas that are not part of a metropolitan city or urban county, and these funds may be available for rural community water projects. The 70/30 split and allocation formulas are provided for in law. According to data from HUD, in recent years, water and sewer improvement projects accounted for slightly more than 10% of all CDBG funds disbursed nationally, the largest major category of funded public improvements. Since FY2008, investments by CDBG recipients for water and sewer improvements have averaged \$404 million per year. 40

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.

Financing Mechanism

The entitlement communities and states receive a basic grant allocation each year and know in advance the approximate amount of federal funds that they will receive annually. Grantees access their CDBG funding through a consolidated plan process in which states and localities establish their local priorities and specify how they will measure their performance. In the CDBG program for smaller communities, grants are distributed out of state allocations to units of general local government which implement approved activities. States may retain a percentage of funds to cover the costs of administering the program and providing technical assistance to local governments and nonprofit organizations.

Eligibility Requirements

Eligible CDBG grant recipients include states, local governments, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Marianas. 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

⁴⁰ U.S. Department of Housing and Urban Development, "CDBG Expenditure Reports, All CDBG Disbursements," https://www.hudexchange.info/manage-a-program/cdbg-expenditure-reports/.

have considerable latitude to define community eligibility and criteria, within general criteria in law and regulations.

Funding

For FY2016, Congress provided \$3.01 billion for CDBG entitlement/non-entitlement formula funds, of which approximately \$2.1 billion is available for entitlement communities and \$900 million is available for smaller communities under the state non-entitlement program. For FY2017, the President's budget requested \$2.88 billion for this program, the same as the FY2016 request level.

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 non-entitlement communities are codified at 24 C.F.R. Part 570, Subpart I (§570.480).⁴¹

[This section prepared by Claudia Copeland, Specialist in Resources and Environmental Policy, Resources, Science and Industry Division. For additional CDBG program information, contact Eugene Boyd, Government and Finance Division (707-8689).]

Department of Commerce

Economic Development Administration (Public Works and Economic Development Program)

The Economic Development Administration (EDA), Department of Commerce, is authorized to provide development assistance to areas experiencing substantial economic distress. Economic development grants for community water and sewer projects are available through the Public Works and Economic Development Program.

Under this federally administered program, public works grants are made to eligible applicants to revitalize, expand, and upgrade their physical infrastructure. These investments are intended to enable communities to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term jobs in the private sector through improvements needed for establishing or expanding industrial or commercial enterprises in distressed regions. Grants may be used for a wide range of purposes, but frequently have a sewer or water supply element. EDA's FY2010 budget justification noted the linkage between water and sewer systems and economic development and redevelopment:

Basic infrastructure in the downtown regions, particularly water and sewer systems, is often over a century old. This infrastructure is not adequate to support the needs of growing businesses. In rural regions, water management and coordinated planning and implementation of water/wastewater infrastructure is key to unlocking economic

⁴¹ 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.

sustainability. The inadequacy of basic public water and sewer infrastructure has proven to be a significant impediment to the growth of new businesses.⁴²

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. According to GAO, from FY1991 through FY2000, EDA provided \$1.1 billion in grants to local communities for drinking water and wastewater projects. ⁴³ 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 jobs in the private sector in areas experiencing substantial economic distress. EDA's public works program provides investments that help to facilitate the transition of distressed communities to become more competitive through development of key infrastructure by investing in infrastructure that is directly tied to job creation.

Financing Mechanism

EDA provides 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% may be awarded. On average, EDA grants fund 50% of project costs. 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, 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 employment, and (3) benefit long-term unemployed or underemployed persons and low-income families. Projects must also fulfill a pressing need and be consistent with the comprehensive economic development plan for the area, and have an adequate share of local

⁴² U.S. Department of Commerce, Economic Development Administration, *Fiscal Year 2010 Congressional Budget Request*, p. EDA-41.

⁴³ GAO Water Infrastructure, pp. 13-14.

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 FY2016, Congress provided appropriations totaling \$100 million for EDA's Public Works and Economic Development (public works) grant program. For FY2017, the President's budget requested \$85 million for the public works program, the same as the FY2016 request level.

Statutory and Regulatory Authority

The statutory authority for the Public Works and Economic Development Program is the Public Works and Economic Development Act of 1965, as amended, P.L. 89-136 (42 U.S.C. 3131, 3132, 3135, 3171), and Title II, P.L. 105-393 (42 U.S.C. 3211). Regulations are codified at 13 C.F.R. Chapter III, Part 302, 305, 316, and 317.

[This section prepared by Claudia Copeland, Specialist in Resources and Environmental Policy, Resources, Science and Industry Division. For additional EDA program information, contact Eugene Boyd, Government and Finance Division (707-8689).]

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