

November 2001

# WATER INFRASTRUCTURE

## Information on Federal and State Financial Assistance



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United States General Accounting Office  
Washington, DC 20548

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November 30, 2001

The Honorable Robert C. Smith  
Ranking Minority Member  
Committee on Environment  
and Public Works  
United States Senate

The Honorable Michael D. Crapo  
Ranking Minority Member  
Subcommittee on Fisheries,  
Wildlife, and Water  
Committee on Environment  
and Public Works  
United States Senate

U.S. drinking water and wastewater systems encompass thousands of treatment facilities, collection facilities, and related works and well over a million miles of pipes and conduits. While the investment, made over decades, in these facilities is enormous, even more funds will be needed in the future to support efforts to maintain clean and safe water. The estimated cost of the investments needed to repair, replace, or upgrade aging facilities; to accommodate the nation's growing population; and to meet new water quality standards ranges from \$300 billion to \$1 trillion over the next 20 years, according to various estimates.

While user rates serve as the major source of facilities' financing, federal and state government agencies offer financial support as well. As the agency that regulates drinking water and surface water quality, the U.S. Environmental Protection Agency (EPA) provides a significant amount of financial assistance for facilities that supply drinking water and treat wastewater. This assistance is primarily in the form of grants to the states to capitalize revolving loan funds. The states, which are required to contribute matching funds equal to 20 percent of the EPA grants, make loans to local communities or utilities; as loans are repaid, the states' revolving loan funds are replenished. In addition, other federal agencies provide financial assistance for drinking water and wastewater facilities through a variety of grant and loan programs, some of which also require matching funds. Some of this assistance goes directly to local communities or utilities; the rest goes to states that then distribute it to the local level. In addition, states sponsor their own financial assistance programs for local drinking water and wastewater facilities. Given the magnitude of the

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estimated infrastructure needs, some industry groups are seeking increased federal funding, and the Congress is considering a variety of legislative options.

In this context, you asked us to develop information on the financial support that federal agencies and states have historically provided for water infrastructure improvements. Accordingly, as agreed with your offices, this report provides information on financial assistance that (1) federal agencies and (2) states made available for capital improvements at public and privately owned drinking water and wastewater facilities during fiscal years 1991 through 2000. We collected data from the nine federal agencies responsible for the majority of the federal assistance and, using a detailed questionnaire, surveyed all states to collect information on state-sponsored programs. Forty-six states responded to our survey; the nonrespondents were Arizona, Arkansas, Georgia, and Illinois. (A copy of the survey questions is included in app. III.) We converted the annual amounts reported by the federal agencies and the states to constant year 2000 dollars. We are also collecting data from publicly and privately owned water utilities about their capital investment programs, which we will include in a subsequent report to you.

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## Results in Brief

From fiscal year 1991 through fiscal year 2000, nine federal agencies made available about \$44 billion, in a variety of forms, for drinking water and wastewater capital improvements. Four agencies—EPA and the department of Agriculture (USDA), of Housing and Urban Development (HUD), and of Commerce—accounted for about 98 percent of the total. Specifics over the 10-year period are as follows:

- EPA provided over \$20 billion in grants to states to capitalize their revolving loan funds and \$4.5 billion in grants for water and wastewater projects specifically designated in the appropriations process.
- USDA provided local communities \$4.5 billion in grants, \$7.1 billion in loans, and \$550 million in loan guarantees. USDA also provided \$376 million in grants for water and wastewater projects specifically designated in the appropriations process.
- HUD provided \$4.4 billion in block grants—some directly to large communities and others to states for distribution to smaller communities—to be used for water and wastewater projects. HUD provided another \$39.9 million for specific projects designated in the appropriations process.

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- Commerce's Economic Development Administration provided \$1.1 billion in grants to local communities for water and wastewater infrastructure.

The remaining federal assistance, which totaled about \$1.1 billion over the 10 years, was provided by the Appalachian Regional Commission, the Federal Emergency Management Agency, the Department of the Interior's Bureau of Reclamation, the Small Business Administration, and the U.S. Army Corps of Engineers.

According to our survey responses, state governments made a total of about \$25 billion in state funds available for water infrastructure programs over the past 10 years. Specifically, the states reported that they collectively:

- Contributed about \$10.1 billion to match EPA's capitalization grants for the Drinking Water State Revolving Fund and the Clean Water State Revolving Fund. This amount consisted of about \$3.3 billion from state appropriations or other state sources, and about \$6.8 billion that the states leveraged—that is, raised through the sale of state-issued bonds backed by the funds.
- Made about \$9.1 billion in grants and loan commitments under state-sponsored programs, including \$3.4 billion through a variety of grant programs and \$5.7 billion in loans. The states reported a total of 56 state-sponsored grant programs, 29 state-sponsored loan programs, and 35 state-sponsored programs that include grants and/or loans.
- Made another \$4.4 billion available for loans by selling general obligation and revenue bonds (15 states).

In addition, the states reported that they contributed about \$1.4 billion from state appropriations, interest earnings, and other state sources for purposes, such as matching non-EPA federal funds and financing state-designated specific drinking water or wastewater projects.

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## Background

Drinking water infrastructure includes treatment and storage facilities and distribution systems (pipes and conduits), while wastewater infrastructure includes sewage collection systems and treatment works. According to EPA officials, there are some 2 million miles of pipe in drinking water systems alone. While estimates vary, the amount needed for future capital investments in water and wastewater infrastructure appears large. According to EPA's most recent survey of drinking water systems, conducted in 1999, the needs are \$150.9 billion over 20 years. A 1996

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report on a similar EPA survey of wastewater systems identified needs of \$128 billion over 20 years, and a subsequent analysis by EPA estimated an additional \$56 billion to \$87 billion to correct existing sanitary sewer overflow problems. The Water Infrastructure Network—a consortium of industry, municipal, and nonprofit associations—recently estimated needs of up to \$1 trillion over the next 20 years for drinking water and wastewater systems combined, when both the capital investment needs and the cost of financing are considered. The actual future needs will likely be met by some combination of local, state, and federal funding sources.

This report is intended to provide information on the amount of federal financial assistance available for drinking water and wastewater facilities in local communities. We use the term “made available” to encompass several forms of federal funding. Because of differences in the programs and in the ways that federal agencies account for their financial assistance, the information that best reflected the amounts made available for drinking water and wastewater facilities came from appropriations, obligations, or expenditures, depending on the agency and the specific program in question. For example, the data for EPA include appropriated amounts for the revolving loan fund capitalization grants to the states for each year; the states may not have loaned the funds (i.e., actually made them available) to local water systems until after the end of the fiscal year in which they were appropriated. In contrast, the data for HUD and Commerce consist of obligated amounts—that is, the amounts of funds allocated by the agencies to drinking water and wastewater infrastructure projects during the fiscal year. For these agencies, we report obligations rather than appropriated amounts because their appropriations are for broader purposes than drinking water and wastewater. In other cases, the data consist of expenditures—that is, funds actually expended during the fiscal year regardless of when they were appropriated or obligated. For the loan programs of the Small Business Administration and USDA’s Rural Utilities Service, the amounts reported are the face value of the loans or loan guarantees that were available to be made for the fiscal year. Because most of these loans are repaid, the ultimate cost to the federal government is significantly less than the face value. Further details on the costs of the loan programs—and the nature and amount of other financial assistance provided by each agency—are included in the following sections of this report.

**Figure 1: Decaying Drinking Water Pipeline in Philadelphia**



Source: *Drinking Water Infrastructure Needs Survey Second Report to Congress*, U.S. Environmental Protection Agency (EPA 816-R-01-004, Feb. 2001), p. 40 (Philadelphia Water Department).



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The federal government has been providing financial assistance for wastewater treatment facilities since the enactment of the Federal Water Pollution Control Act Amendments of 1956, which provided grants to local governments for constructing treatment facilities, but limited the federal contribution to 30 percent of eligible construction costs. The Federal Water Pollution Control Act Amendments of 1972, later designated the Clean Water Act, increased the federal share of costs to 75 percent. According to the Congressional Budget Office, federal outlays for wastewater treatment grants rose 10-fold during the 1970s, reaching a high \$8.4 billion in 1980.<sup>1</sup> Subsequent amendments in 1981 and 1987, respectively, reduced and then phased out the construction grant program, replacing it with grants to the states to capitalize state revolving funds. As a condition of receiving the federal funds, states are required to contribute to the revolving funds as well. Under the Clean Water State Revolving Fund program, states provide loans to communities to finance wastewater treatment works projects as well as other water quality projects. The 1987 law envisioned that loan repayments, by financing future loans, would allow the state revolving funds to operate without sustained federal support, and authorized appropriations only through 1994. However, the Congress has continued to appropriate funds each year since. For each of the most recent fiscal years—1999, 2000, and 2001—the Congress has appropriated about \$1.3 billion for the revolving loan fund program.

The first major federal legislation on drinking water, enacted in 1974, was the Safe Drinking Water Act, which required EPA to set standards or treatment techniques for contaminants that could adversely affect human health. The Congress amended the act in 1986 to establish deadlines intended to accelerate EPA's efforts to set standards for more contaminants and added a number of other significant requirements to be met by EPA and public water systems. In part to help local water systems with the costs of meeting federal standards, the Safe Drinking Water Act Amendments of 1996 established a Drinking Water State Revolving Fund, similar to that under the Clean Water Act, which also requires state contributions. The law authorized appropriations of \$9.6 billion through 2003; actual appropriations through fiscal year 2001 have totaled \$4.4 billion.

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<sup>1</sup>In constant 1997 dollars. See *Budget Options*, Congressional Budget Office, February 2001.

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## Federal Agencies Made \$44 Billion Available for Drinking Water and Wastewater Infrastructure in Fiscal Years 1991 Through 2000

From fiscal years 1991 through 2000, nine federal agencies made about \$44 billion available for drinking water and wastewater capital improvements. Four agencies—EPA, USDA, HUD, and Commerce—account for about 98 percent of the total. The remaining federal assistance, which totaled about \$1.1 billion over the 10 years, was provided by the Appalachian Regional Commission, the Federal Emergency Management Agency, the Department of the Interior’s Bureau of Reclamation, the Small Business Administration, and the U.S. Army Corps of Engineers.

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## Four Agencies Account for About 98 Percent of the Federal Assistance

Of the nine federal agencies that provided financial assistance for drinking water and wastewater infrastructure from fiscal years 1991 through 2000, four of them—EPA, USDA’s Rural Utilities Service, HUD, and Commerce’s Economic Development Administration—accounted for about 98 percent of the total. EPA and USDA alone accounted for over 85 percent of the assistance. Over 82 percent of the total assistance was provided in the form of grants; the remainder consisted of loans and loan guarantees. Although the programs differed in terms of eligibility criteria, allowable uses, and funding priorities, for the most part, the financial assistance was available to a broad range of entities.

## EPA Made Available About \$25 Billion in Financial Assistance

EPA’s financial assistance came primarily in the form of grants to the states to capitalize the Drinking Water and Clean Water State Revolving Funds, which are used to finance improvements at local drinking water and wastewater treatment facilities, respectively.<sup>2</sup> The states lend money from the funds to local communities or facilities for improvements needed to comply with the Safe Drinking Water Act or Clean Water Act and to protect public health or water quality. According to EPA, money invested in the funds provides about four times the purchasing power over 20 years compared with what would occur if the money were distributed as grants because the revolving fund money gets recycled when loans are repaid and funds then become available for new loans. (See fig. 2 for a breakdown of EPA’s financial assistance for infrastructure projects during the period that we reviewed.)

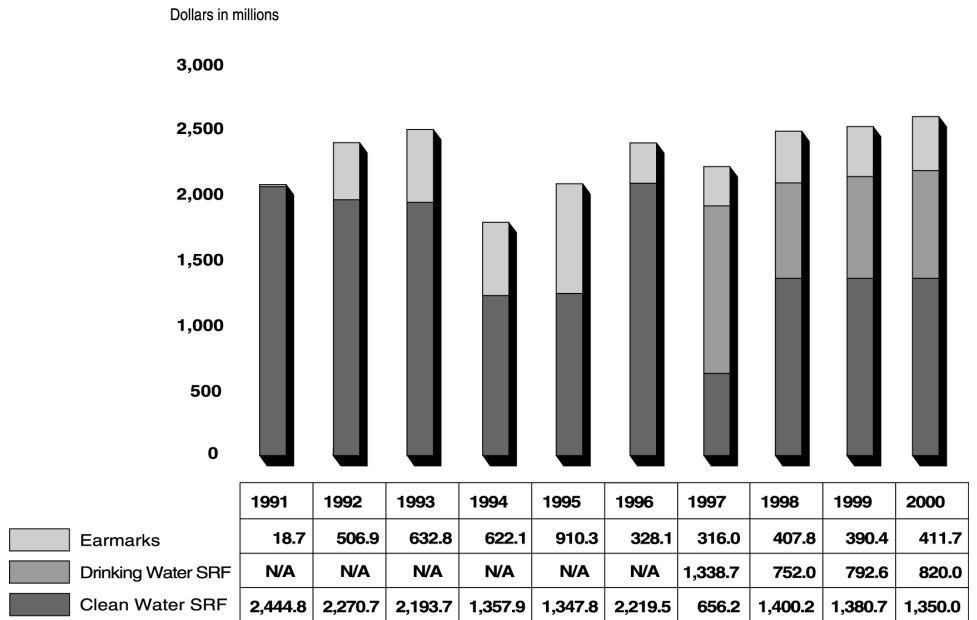
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<sup>2</sup>The Clean Water State Revolving Fund may also be used for other water quality improvement projects, such as nonpoint source pollution control and estuary management, in addition to wastewater treatment facilities.

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To obtain the capitalization grants, states are required to match 20 percent of the federal grant money. Under the Drinking Water State Revolving Fund, EPA regularly updates the allotments to the states based on their proportional share of the needs identified in EPA's periodic surveys. Allotments from the Clean Water State Revolving Fund derive from the percentages specified in the 1987 amendments to the Clean Water Act. The percentages were based on several factors, including the states' respective wastewater treatment needs, as reflected in EPA's 1976 and 1980 needs surveys. Drinking water projects designated as priorities for financial assistance are those that (1) address the most serious risk to human health, (2) are necessary to ensure compliance with Safe Drinking Water Act requirements, and (3) will assist systems most in need on a per household basis, according to state "affordability" criteria. Under the Clean Water Act, states have greater flexibility. While the states must similarly establish a priority ranking system for their projects, they are not bound to fund these projects in priority order. Decisions on which projects receive what assistance are based on considerations of the severity of local water pollution problems and other factors.

**Figure 2: Financial Assistance for Drinking Water and Wastewater Infrastructure Provided by EPA, Fiscal Year 1991 Through Fiscal Year 2000**



Legend: SRF = State Revolving Fund

N/A = Not applicable

Notes: The amounts presented in this figure are the appropriated amounts; they have not been adjusted to account for amounts that states can reserve or “set aside” for other purposes. Under the Drinking Water State Revolving Fund program, states, at their option, may set aside up to 31 percent of their annual allotment to implement their drinking water programs and perform related activities, such as training water system operators. Under the Clean Water State Revolving Fund program, states may set aside 4 percent of their allotments to administer the program. In addition, in each of the funds, states may make loans to local communities for non-infrastructure-related projects, such as land acquisition for source water protection, projects to control nonpoint source pollution, estuary management, etc. We did not attempt to adjust the appropriated amounts to account for such uses.

Earmarks are grants for water and wastewater projects specifically designated in the appropriations process.

Source: GAO’s analysis of data provided by EPA (measured in constant year 2000 dollars).

USDA Made Available About \$12.5 Billion in Financial Assistance

USDA’s Rural Utilities Service<sup>3</sup> provides direct loans, loan guarantees, and grants to construct or improve drinking water, sanitary sewer, solid waste, and storm drainage facilities in rural communities, as part of the Rural

<sup>3</sup>The Rural Utilities Service was created in 1994 to administer the loan and grant program that was previously administered by the Rural Development Administration and the Farmers Home Administration. Both of these offices were abolished when the Rural Utilities Service was created.

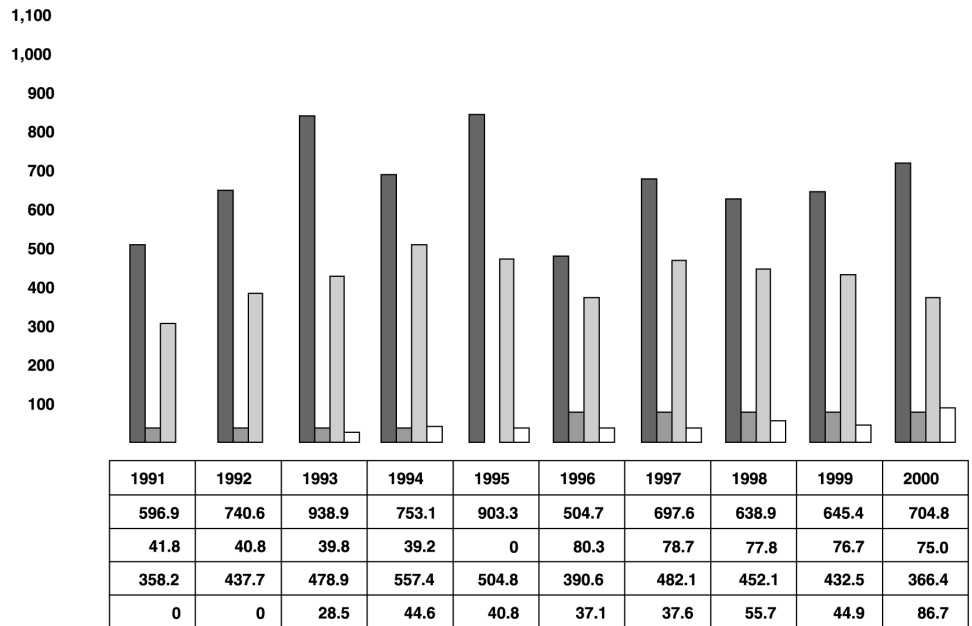
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Community Advancement Program. Among other things, the program is designed to provide basic human amenities, alleviate health hazards, and promote the orderly growth of rural areas by financing new and improved rural drinking water and waste disposal facilities. From fiscal year 1991 through fiscal year 2000, USDA provided about \$12.5 billion under this program. (See fig. 3 for a breakdown of USDA's financial assistance during the period that we reviewed.)

In general, to be eligible for USDA assistance, a facility must serve a rural area with a population of 10,000 or less and must be unable to finance its needs from its own resources or obtain other credit at reasonable rates and terms. Priority for USDA assistance is given to public entities in areas with populations of less than 5,500 and requests that involve the consolidation of small facilities or utilities serving low-income communities. Grants and loans (or loan guarantees) are made directly to local entities, including municipalities, counties, or other political subdivisions of states, nonprofit corporations, such as cooperatives, or Indian tribes. To obtain grant assistance, the median household income of the applicant's service area must fall below the statewide nonmetropolitan median household income. Grants are limited to amounts required by applicants to establish reasonable user rates and cannot exceed 75 percent of eligible project costs. Thus, local grantees must provide matching funds. For loans and loan guarantees, the allowable loan term is limited to 40 years, the useful life of the facilities, or the maximum allowable term under state law, whichever is shorter.

**Figure 3: Financial Assistance for Drinking Water and Wastewater Infrastructure Provided by USDA's Rural Utilities Service, Fiscal Year 1991 Through Fiscal Year 2000**

Dollars in millions



Water and Wastewater Loans  
 Water and Wastewater Loan Guarantees  
 Water and Wastewater Grants  
 Earmarks

Notes: The amounts presented in this figure are the appropriated amounts, except that we are reporting the amounts available for loans and loan guarantees in terms of their face values. The actual cost to the federal government for loans and loan guarantees is significantly lower than the face value because most loans are repaid. For example, according to the Office of Management and Budget, the average default rate for the Rural Utilities Service's direct loans for water and wastewater disposal over fiscal years 1992 to 2000 was about 16 percent.

Earmarks are grants for water and wastewater projects specifically designated in the appropriations process.

Source: GAO's analysis of data provided by USDA (measured in constant year 2000 dollars).

HUD Made Available More Than \$4 Billion in Financial Assistance

HUD's Community Development Block Grant program is intended to aid in the development of viable urban communities. Generally, the program focuses on community development, and drinking water and wastewater facility investment is often an integral part of that effort. From fiscal year 1991 through fiscal year 2000, HUD provided over \$4 billion in block grants

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that were used for drinking water and wastewater projects. In addition to the block grants, HUD provided \$39.9 million in assistance for water and wastewater projects specifically designated in the appropriations process. (See fig. 4 for a breakdown of the assistance available from HUD during the period that we reviewed.)

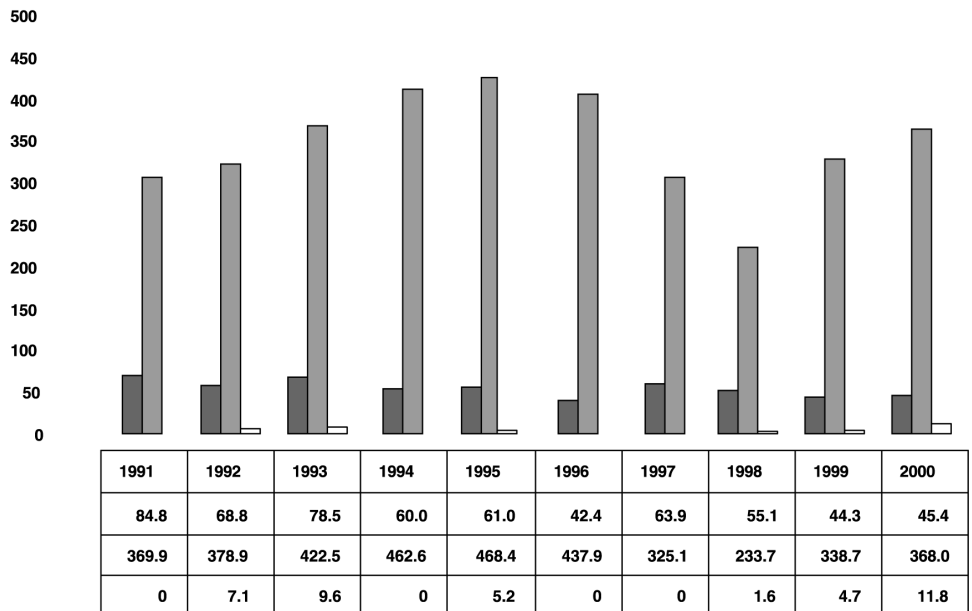
HUD's community development block grant program funds are distributed directly to larger communities, called entitlement communities,<sup>4</sup> as well as to states for distribution to smaller communities. To determine the amount of its grants to communities and states, HUD uses formulas that combine several objective measures of community needs, such as population, the extent of poverty, the age of the housing stock, and the extent of overcrowding. To be eligible for funding under the block grant program, all activities or projects must meet at least one of the program's designated national objectives: benefiting low- and moderate-income persons, preventing or eliminating slums or blight, and addressing particularly urgent community development needs caused by conditions that pose a serious and immediate threat to the community's health or welfare.

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<sup>4</sup>HUD defines entitlement communities as central cities of Metropolitan Statistical Areas, other metropolitan cities with populations of at least 50,000, and qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities).

**Figure 4: Financial Assistance for Drinking Water and Wastewater Infrastructure Provided by HUD, Fiscal Year 1991 Through Fiscal Year 2000**

Dollars in millions



Water & Sewer Activities entitlement  
 Water & Sewer Activities state  
 Earmarks

Notes: Our ability to determine how much financial assistance was provided (or used) specifically for drinking water and wastewater infrastructure varied depending on the recipient. Consequently, the amounts presented in this figure represent a combination of appropriated amounts (earmarks), obligated amounts (state), and expended amounts (entitlement).

Earmarks are grants for water and wastewater projects specifically designated in the appropriations process.

Source: GAO's analysis of data provided by HUD (measured in constant year 2000 dollars).

**Commerce Made Available  
\$1.1 Billion in Financial  
Assistance**

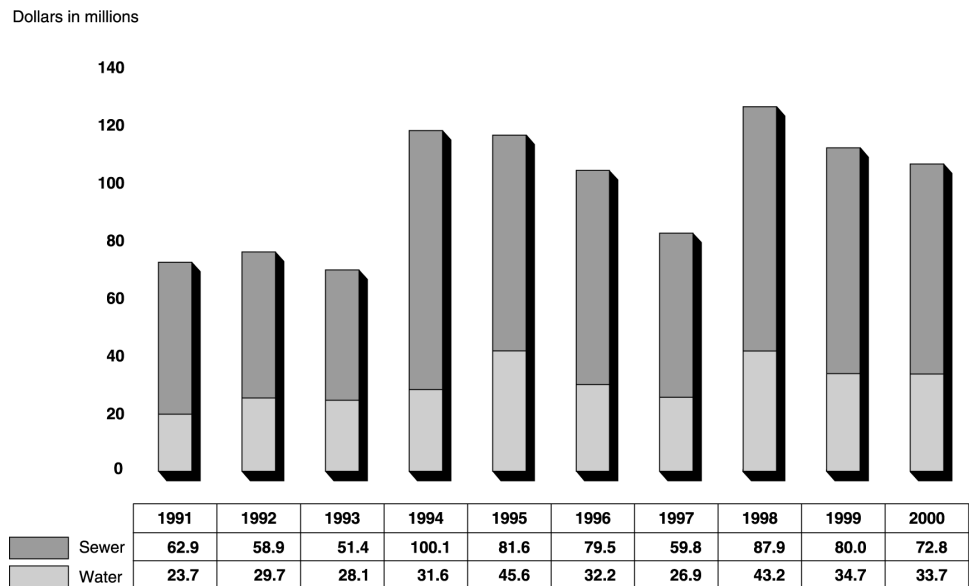
Under its Public Works Program, Commerce's Economic Development Administration provides grants to communities in economic decline to revitalize, expand, and upgrade their physical infrastructure—including water and sewer facilities. Proposed projects must be located within an economically distressed area, as defined by the Administration, and must contribute to the long-term development of the area by creating or retaining jobs and raising income levels. From fiscal year 1991 through fiscal year 2000, Commerce provided \$1.1 billion in grants to local communities for drinking water and wastewater projects. (See fig. 5 for a



breakdown of the financial assistance that the Economic Development Administration provided during the period we reviewed.)

Depending on the recipient, matching funds may be required for Public Works Program grants. A basic grant covers up to 50 percent of a project's total cost. However, projects in severely depressed areas may receive grants of up to 80 percent of the costs, and projects for recognized Indian tribes may be granted up to 100 percent of the costs. Priority is given to the projects that assist the nation's most economically distressed areas, such as areas with persistently high rates of poverty, previously unserved distressed areas and applicants, and areas undergoing significant economic downturns and dislocations.

**Figure 5: Financial Assistance for Drinking Water and Wastewater Infrastructure Provided by Commerce's Economic Development Administration, Fiscal Year 1991 Through Fiscal Year 2000**



Note: The amounts included in this figure are the amounts obligated for drinking water and wastewater infrastructure projects. The amounts appropriated for the Public Works Program, which provides financial assistance for a variety of physical infrastructure projects, did not include a specific amount for water infrastructure.

Source: GAO's analysis of data provided by Commerce (measured in constant year 2000 dollars).

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## Five Other Federal Agencies Provided Over \$1 Billion in Combined Federal Assistance

Programs or activities within the Appalachian Regional Commission, the Federal Emergency Management Agency, the Department of the Interior's Bureau of Reclamation, the Small Business Administration, and U.S. Army Corps of Engineers provided about \$1 billion in financial assistance for drinking water and wastewater infrastructure over the period we reviewed. With the exception of the Federal Emergency Management Agency, these agencies targeted their assistance to specific projects, geographic areas, or some combination of the two. The specifics of each program follow:

- The Appalachian Regional Commission provided \$271.5 million in grants for projects under state Appalachian development plans. The Commission makes grants to states or private nonprofit agencies within the Appalachian Region. In general, grants are limited to 50 percent of project costs, but can be increased to 80 percent in designated distressed counties or limited to 30 percent in designated competitive counties.
- The Federal Emergency Management Agency provided \$45.5 million<sup>5</sup> for drinking water and wastewater infrastructure under its Hazard Mitigation Grants program to implement measures that permanently reduce or eliminate future damages and losses from natural hazards through safer building practices and improving existing structures. Eligible recipients include state agencies, local governments, other public entities, and private nonprofit organizations.
- Interior's Bureau of Reclamation provided a total of \$737.4 million for water infrastructure projects in 17 Western states. Among the recipients of these grants were water supply agencies and wastewater collection and treatment agencies. Under its Water Reclamation and Reuse Program, the Bureau provides grants to investigate and identify opportunities for reclamation and reuse of municipal, industrial, domestic, and agricultural wastewater and for the design and construction of demonstration and permanent facilities to reclaim and reuse wastewater. Financial assistance for construction projects may not exceed 25 percent of project costs up to a maximum of \$20 million

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<sup>5</sup>During the 10-year period we reviewed, the Federal Emergency Management Agency also provided \$15.8 billion to public entities and certain private nonprofit organizations under its Public Assistance Grants Program, which is intended to alleviate suffering and hardship resulting from major disasters or emergencies declared by the President. Over \$2 billion of these grants were used for the permanent restoration of eligible utilities, including gas and electric utilities as well as drinking water and wastewater systems. Because the agency could not provide information on how much assistance was used specifically for drinking water and wastewater utilities, we did not include this program in our report.

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per project. Grants are also available to conduct research on related topics, such as desalination of wastewater, naturally impaired groundwater, and surface water reclamation. Funding for studies, demonstration projects, and research is limited to 50 percent of the total cost.

- The Small Business Administration guaranteed \$27.6 million in loans under its Small Business Loans Program.<sup>6</sup> In this program, guaranteed loans are made to small businesses that cannot obtain financing in the private marketplace, but can demonstrate the ability to repay the guaranteed loans. Loans can be used to construct, expand, or convert facilities, including water and wastewater infrastructure.
- The U.S. Army Corps of Engineers provided \$23.7 million for drinking water and wastewater infrastructure during the 10-year period. The Corps does not have a program that provides financial assistance for water infrastructure, but its annual appropriations identified and funded certain project-specific assistance. In general, the Corps requires a 25-percent matching contribution from recipients.

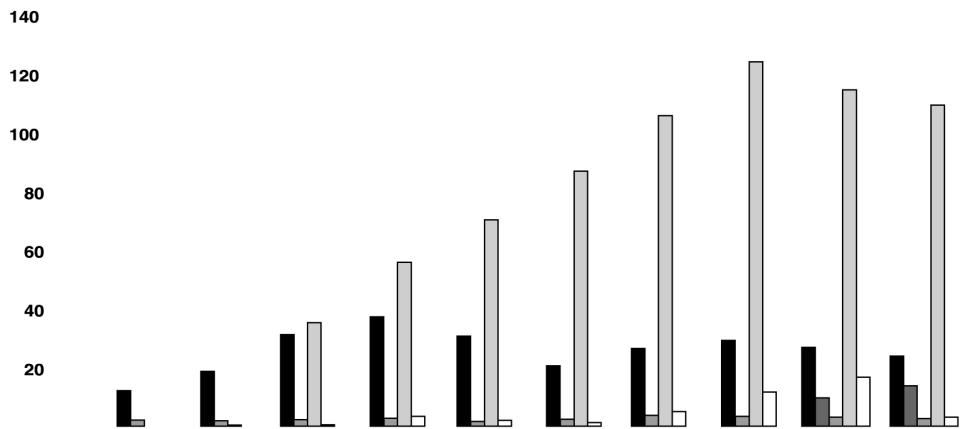
Figure 6 shows the financial assistance that these five federal agencies provided over the period that we reviewed.

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<sup>6</sup>As noted previously, the face value of loans guaranteed by a federal agency does not represent the actual cost to the federal government because most loans are repaid. According to the Office of Management and Budget, the average default rate for the Small Business Administration's loan guarantees was less than 1 percent over fiscal years 1992 to 2000.

**Figure 6: Financial Assistance for Water and Wastewater Infrastructure Provided by Other Agencies, Fiscal Year 1991 Through Fiscal Year 2000**

Dollars in millions



1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
20.5	21.8	24.1	41.4	33.4	22.0	27.8	30.2	27.5	22.8
0	0	0	0	0	0	0	0	9.9	13.8
2.5	2.2	2.6	3.0	1.7	2.5	3.8	3.4	3.2	2.5
0	0	40.1	62.2	76.5	92.9	110.9	128.6	117.0	109.2
0.1	0.4	0.6	3.7	2.1	1.3	5.2	12.0	17.0	3.1

- Appalachian Regional Commission
- US Army Corps of Engineers
- Small Business Administration
- Bureau of Reclamation
- Federal Emergency Management Agency

Note: Depending on the level at which we were able to identify the amounts provided (or used) specifically for drinking water and wastewater infrastructure, the amounts presented in this figure generally represent appropriated, obligated, and expended amounts as follows:

- Appalachian Regional Commission – obligated amounts
- Federal Emergency Management Agency – obligated amounts
- Interior’s Bureau of Reclamation – appropriated amounts
- Small Business Administration – face value of loans guaranteed
- U.S. Army Corps of Engineers – expended amounts

Source: GAO’s analysis of data provided by the five federal agencies (measured in constant year 2000 dollars).

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## States Made \$25 Billion Available for Drinking Water and Wastewater Infrastructure in Fiscal Years 1991 Through 2000

The 46 states that responded to our survey cumulatively made about \$25 billion in state funds available to local communities and utilities for drinking water and wastewater improvements during the period that we reviewed. Specifically, the states reported that they:

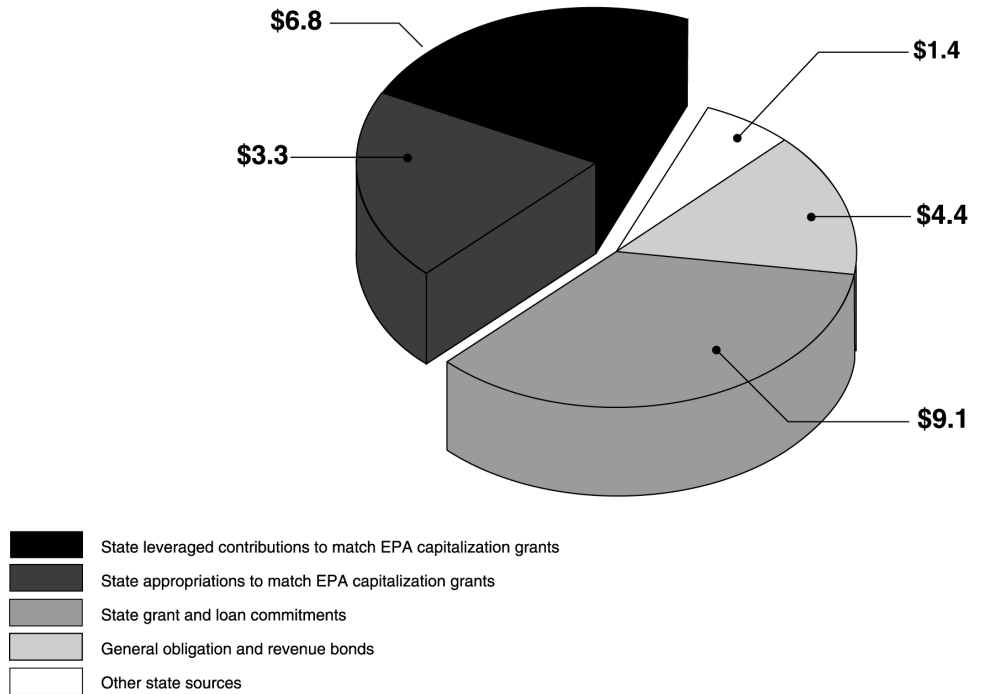
- contributed about \$10.1 billion to match EPA's capitalization grants for the Drinking Water and Clean Water State Revolving Funds. This amount consisted of about \$3.3 billion from state appropriations or other state sources, and about \$6.8 billion that the states leveraged—that is, raised through the sale of state-issued bonds backed by the funds.
- made about \$9.1 billion in grants and loan commitments under state-sponsored programs.
- made another \$4.4 billion available for loans by selling general obligation and revenue bonds.

In addition, the states reported that they contributed about \$1.4 billion from state appropriations, interest earnings, and other state sources for purposes, such as matching non-EPA federal funds and financing state-designated specific drinking water or wastewater projects.

Figure 7 depicts the financing made available by the states during the period.

**Figure 7: Primary Sources of Financial Assistance Provided by States**

Dollars in billions



Source: Survey data reported to GAO by 46 states (measured in constant year 2000 dollars).

### States Contributed About \$10.1 Billion to the Revolving Loan Funds

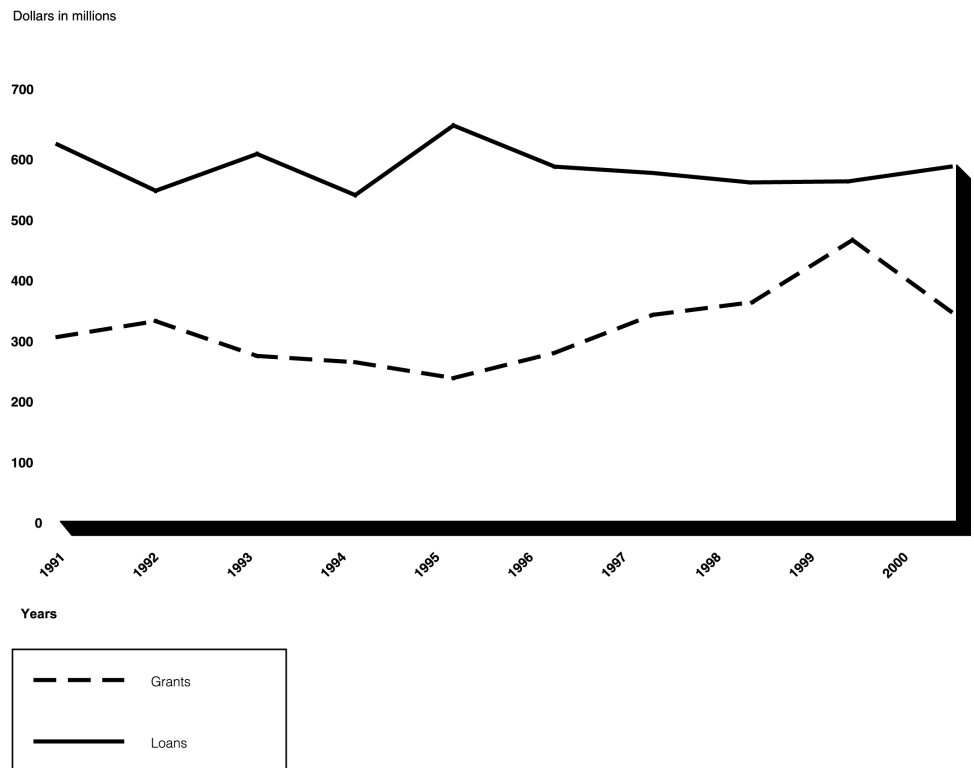
As noted previously, states are required to match 20 percent of the revolving loan fund capitalization grants they receive from EPA. States, at their option, may contribute more than the required minimum. According to the responses to our survey, the 46 states collectively provided about \$10.1 billion in matching funds for the two revolving loan fund programs. Forty-two of the states reported amounts that exceeded the 20 percent minimum matching amount for one or both of the programs.

The states reported that about \$3.3 billion of their contributions came from state appropriations or other sources. In addition, 19 states reported that they had generated about \$6.8 billion to be used for drinking water and wastewater infrastructure, in bond revenues backed by the state revolving loan funds. In total, states' contributions to the Drinking Water and Clean Water State Revolving Funds accounted for about \$10.1 billion of the total \$25 billion that the states reported making available.

## States Made \$9.1 Billion in Grants and Loan Commitments Under State-Sponsored Programs

Unlike federal agencies, which provided assistance mostly in the form of grants, states provided more financial assistance for water infrastructure in the form of loans—\$5.7 billion versus \$3.4 billion for grants. The states reported a total of 56 state-sponsored grant programs, 29 state-sponsored loan programs, and 35 state-sponsored programs that include loans and/or grants. (Detailed information that the states provided on their programs can be found in app. II.) Figure 8 shows the amount of state grant and loan programs over the 10-year period.

**Figure 8: State-Sponsored Grant and Loan Programs**



Source: Survey data reported to GAO by 46 states (measured in constant year 2000 dollars).

## State-Sponsored Grant Programs

States provided funds through a variety of grant programs. Drinking water facilities received \$767 million, wastewater facilities received \$2.0 billion, and grant programs that funded both drinking water and wastewater projects received \$585 million. There were 56 state-sponsored grant programs for drinking water and/or wastewater infrastructure. Some examples follow:

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## State-Sponsored Loan Programs

- Alaska offered municipal construction grants that provided engineering assistance for water and sewer projects.
- Connecticut offered grants of 20 to 50 percent of the costs for nitrogen removal through its Clean Water Fund.
- Maine offered grants to help financially stressed communities replace and upgrade wastewater treatment facilities.
- Minnesota offered special infrastructure grants to construct phosphorus removal facilities.
- Missouri provided special infrastructure grants for water and sewer improvements in its state parks.

States responding to our survey indicated that, apart from the state revolving loan program, they made loan commitments of about \$5.7 billion under state-sponsored loan programs to help meet drinking water and wastewater facility needs. The states committed \$3.9 billion under programs specifically targeted at wastewater or drinking water facilities. In addition, states committed \$1.8 billion under other state-sponsored programs in which drinking water or wastewater infrastructure was among the types of projects eligible for funding.

Twenty-nine states reported having state loan programs that covered a variety of specific purposes. Some examples follow:

- Delaware offered low-interest loans to wastewater and water utilities to expand and upgrade wastewater and drinking water infrastructure.
- Mississippi offered emergency loans for making necessary repairs to existing water pollution control systems, or drinking water systems, and offered loans to finance capital improvements such as water, sewer, and access roads; to fund improvements needed to implement projects by private companies; and to promote economic growth.
- Ohio offered loans for emergency remediation threats for drinking water and preliminary engineering plans and other costs associated with wastewater and publicly owned drinking water facilities. The state also provided interest-free loans to pay a portion of sewer or drinking water line extension project costs, which would otherwise have been paid by assessments on agricultural land.
- Tennessee offered loans to cities and utility districts that must relocate utilities because of road projects.



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## States Made Another \$4.4 Billion Available for Loans Through State Bond Issues

The states reported making available about \$4.4 billion for loans from revenues stemming from general obligation and state revenue bonds. Fifteen of the 46 states reported using bond issues, including \$3.3 billion in state revenue bonds and \$1.1 billion in general obligation bonds. There were nine wastewater bond programs, eight drinking water bond programs, and seven bond programs that covered both wastewater and drinking water projects. Some example follow:

- Virginia's Resource Authority program issues bonds to provide financing to local government for wastewater and drinking water projects.
- Texas' Water Development Fund funds a variety of regional water supply, wastewater, and flood control projects through general obligation funds.

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## Agency Comments

We provided a draft of this report to EPA for its review and comment. We received comments from several senior officials within EPA's Office of Water, including the Director, Drinking Water Protection Division, Office of Ground Water and Drinking Water; and the Director, Municipal Support Division, Office of Wastewater Management. They generally agreed with the report's findings, but suggested that we present the 10-year summary of federal and state financial assistance in constant dollars, rather than current dollars. We originally presented the data in current dollars because (1) the data include a mixture of appropriations, obligations, and expenditures and (2) our primary purpose is to present aggregate data, not trends. However, for greater comparability among the annual figures, we adjusted the financial assistance data to constant dollars. EPA also provided us with technical corrections and clarifications, which we incorporated in the report as appropriate.

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## Scope and Methodology

To identify the federal departments and agencies that provide financial assistance for water and wastewater infrastructure, we reviewed the literature, documents, program information, and past reports that address infrastructure assistance. We identified nine departments and agencies that provide financial assistance for water and wastewater infrastructure, including EPA, USDA, HUD, Commerce, the Appalachian Regional Commission, the Federal Emergency Management Agency, the Department of Interior, the Small Business Administration, and the U.S. Army Corps of Engineers. We asked officials at these departments and agencies for data on the amount of financial assistance provided for drinking water and wastewater infrastructure for fiscal years 1991 through 2000. We contacted officials to clarify any questions about the data and to

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obtain additional information as needed. Where possible, we verified the information we obtained with data from other, independent sources.

To identify the amounts and sources of state funds, we mailed a survey to all 50 states asking for information on their financial contributions to drinking water and wastewater capital improvements and on their state-sponsored programs. Prior to designing the survey, we spoke to officials from industry associations, EPA as well as the U.S. Bureau of the Census to determine the data available from other sources. In developing the survey we talked with officials from EPA and pre-tested the survey in several states. We directed this survey to officials from state offices responsible for the Clean Water State Revolving Fund and asked them to coordinate with other state officials to complete the survey. We received responses from 46 states.

To check the reliability of the state data, we called states to clarify any data items that appeared to be questionable or inconsistent. In addition, we compared the annual amounts that the states reported as contributions to their Clean Water and Drinking Water State Revolving Funds with similar data available from EPA's National Information Management System database. While we did not independently verify the accuracy or reliability of EPA's data, we noted that some of the annual amounts differed between the two sources. In total, the states reported to us contributions totaling about 20 percent less to the Clean Water State Revolving Fund and about 20 percent more to the Drinking Water State Revolving Fund than indicated by the data in EPA's information system. Because GAO's survey data stemmed from only 46 states while EPA's data included all 50 states as well as Puerto Rico, some differences in the data were expected.

We sorted our data by the state fiscal year and report annual figures and cumulative totals in that manner. Finally, we present 10-year summary data on federal and state financial assistance in constant year 2000 dollars. We used the Gross Domestic Product (GDP) chain type price index to adjust for inflation. A copy of our survey is included in appendix III of this report.

We conducted this review from January 2001 through November 2001 in accordance with generally accepted government auditing standards.

As we agreed with your office, unless you announce its contents earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies to the Administrator, EPA, and make

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copies available to others who request them. If you or your staff have questions about this report, please call me on (202) 512-3841. Key contributors to this report are listed in appendix IV.

*David G. Wood*

David G. Wood  
Director, Natural Resources  
and Environment

# Appendix I: Detailed Information on Federal Investment in Water Infrastructure

Dollars in millions (in constant year 2000 dollars)

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
<b>Environmental Protection Agency</b>												
Clean Water SRF	Grant	2,444.8	2,270.7	2,193.7	1,357.9	1,347.8	2,219.5	656.2	1,400.2	1,380.7	1,350.0	<b>16,621.5</b>
Drinking Water SRF	Grant	0	0	0	0	0	0	1,338.7	752.0	792.6	820.0	<b>3,703.3</b>
Earmarks	Grant	18.7	506.9	632.8	622.1	910.3	328.1	316.0	407.8	390.4	411.7	<b>4,544.9</b>
<b>Total</b>		<b>2,463.5</b>	<b>2,777.7</b>	<b>2,826.5</b>	<b>1,980.0</b>	<b>2,258.1</b>	<b>2,547.6</b>	<b>2,310.9</b>	<b>2,560.0</b>	<b>2,563.8</b>	<b>2,581.7</b>	<b>24,869.6</b>
<b>USDA - Rural Utilities Service</b>												
Water and Wastewater Loans	Loan	596.9	740.6	938.9	753.1	903.3	504.7	697.6	638.9	645.4	704.8	<b>7,124.5</b>
Water and Wastewater Loan Guarantees	Loan Guarantee	41.8	40.8	39.8	39.2	0	80.3	78.7	77.8	76.7	75.0	<b>550.2</b>
Water and Wastewater Grants	Grant	358.2	437.7	478.9	557.4	504.8	390.6	482.1	452.1	432.5	366.4	<b>4,460.7</b>
Earmarks	Grant	0	0	28.5	44.6	40.8	37.1	37.6	55.7	44.9	86.7	<b>376.0</b>
<b>Total</b>		<b>996.9</b>	<b>1,219.1</b>	<b>1,486.1</b>	<b>1,394.4</b>	<b>1,448.9</b>	<b>1,012.7</b>	<b>1,296.1</b>	<b>1,224.5</b>	<b>1,199.6</b>	<b>1,232.9</b>	<b>12,511.3</b>
<b>Department of Housing and Urban Development</b>												
Water & Sewer Activities - Entitlement	Grant	84.8	68.8	78.5	60.0	61.0	42.4	63.9	55.1	44.3	45.4	<b>604.0</b>
Water & Sewer Activities - State	Grant	369.9	378.9	422.5	462.6	468.4	437.9	325.1	233.7	338.7	368.0	<b>3,805.6</b>
Earmarks	Grant	0	7.1	9.6	0	5.2	0	0	1.6	4.7	11.8	<b>39.9</b>
<b>Total</b>		<b>454.7</b>	<b>454.7</b>	<b>510.6</b>	<b>522.6</b>	<b>534.5</b>	<b>480.2</b>	<b>389.0</b>	<b>290.4</b>	<b>387.8</b>	<b>425.2</b>	<b>4,449.6</b>
<b>Commerce - Economic Development Administration</b>												
Sewer	Grant	62.9	58.9	51.4	100.1	81.6	79.5	59.8	87.9	80.0	72.8	<b>734.9</b>
Water	Grant	23.7	29.7	28.1	31.6	45.6	32.2	26.9	43.2	34.7	33.7	<b>329.4</b>
<b>Total</b>		<b>86.6</b>	<b>88.6</b>	<b>79.4</b>	<b>131.7</b>	<b>127.2</b>	<b>111.7</b>	<b>86.7</b>	<b>131.1</b>	<b>114.7</b>	<b>106.5</b>	<b>1,064.2</b>
<b>Interior - Bureau of Reclamation</b>												
Reclamation Wastewater & Groundwater Studies	Grant	0	0	0.2	10.5	17.0	24.4	40.0	47.7	35.6	33.2	<b>208.6</b>
Rural & Indian Water Systems	Grant	0	0	39.9	40.5	56.2	35.3	69.4	60.9	69.8	64.9	<b>437.0</b>
Earmarks	Grant	0	0	0	11.1	3.3	33.1	1.6	20.0	11.6	11.2	<b>91.8</b>
<b>Total</b>		<b>0</b>	<b>0</b>	<b>40.1</b>	<b>62.2</b>	<b>76.5</b>	<b>92.9</b>	<b>110.9</b>	<b>128.6</b>	<b>117.0</b>	<b>109.2</b>	<b>737.4</b>
<b>Appalachian Regional Commission</b>												
Sewer Systems	Grant	6.6	8.5	10.3	11.4	11.8	8.6	7.2	12.4	9.7	9.1	<b>95.7</b>
Water Systems	Grant	12.5	11.4	13.3	22.1	16.3	12.4	18.5	15.7	14.6	11.1	<b>148.0</b>
Water and Sewer Systems	Grant	1.4	1.9	0.5	7.9	5.2	1.0	2.0	2.1	3.2	2.5	<b>27.7</b>
<b>Total</b>		<b>20.5</b>	<b>21.8</b>	<b>24.1</b>	<b>41.4</b>	<b>33.4</b>	<b>22.0</b>	<b>27.8</b>	<b>30.2</b>	<b>27.5</b>	<b>22.8</b>	<b>271.5</b>
<b>Federal Emergency Management Agency</b>												
Mitigation and Planning	Grant	0.1	0.4	0.6	3.7	2.1	1.3	5.2	12.0	17.0	3.1	<b>45.5</b>

**Appendix I: Detailed Information on Federal Investment in Water Infrastructure**

Dollars in millions (in constant year 2000 dollars)

Type of assistance		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
<b>Small Business Administration</b>												
Sewerage Systems	Loan											
	Guarantee	0.9	0.3	0.4	0.6	0.7	0.2	1.6	0.2	0.4	1.0	<b>6.2</b>
Water Supply	Loan											
	Guarantee	1.6	1.9	2.1	2.4	1.1	2.4	2.2	3.3	2.8	1.6	<b>21.4</b>
<b>Total</b>		<b>2.5</b>	<b>2.2</b>	<b>2.6</b>	<b>3.0</b>	<b>1.7</b>	<b>2.5</b>	<b>3.8</b>	<b>3.4</b>	<b>3.2</b>	<b>2.5</b>	<b>27.6</b>
<b>U.S. Army Corps of Engineers</b>												
Environmental Infrastructure	Grant	0	0	0	0	0	0	0	0	9.9	13.8	<b>23.7</b>
<b>Total Federal Assistance</b>		<b>4,024.6</b>	<b>4,564.5</b>	<b>4,970.0</b>	<b>4,139.1</b>	<b>4,482.5</b>	<b>4,270.9</b>	<b>4,230.5</b>	<b>4,380.2</b>	<b>4,440.4</b>	<b>4,497.6</b>	<b>44,000.4</b>

Legend: SRF = State Revolving Fund

Numbers may not add to totals due to rounding.

Notes: This table is intended to provide information on the amount of federal financial assistance made available for drinking water and wastewater facilities in local communities. The term "made available" encompasses several measures of federal funding. Because of differences in the programs and in the ways that federal agencies account for their financial assistance, it was not possible to obtain consistent information. For example, the data for EPA are appropriated amounts. In contrast, the data for Commerce are obligated amounts because their appropriations are for broader purposes than drinking water and wastewater. In other cases, the data consist of expenditures. For the loan programs of the Small Business Administration and the USDA's Rural Utilities Service, the amounts reported are the face value of the loans and loan guarantees available for the fiscal year.

Earmarks are grants for water and wastewater projects specifically designated in the appropriations process.

Depending on the level at which we were able to identify the amounts provided (or used) specifically for drinking water and wastewater infrastructure, the amounts presented in this appendix generally represent appropriated, obligated, and expended amounts as follows:

- EPA – appropriated amounts
- USDA's Rural Utilities Service – appropriated amounts except that the amounts for loans and loan guarantees represent the face value. (Because most of the loans are repaid, the actual federal outlay is significantly less than the face value.)
- HUD – obligated amounts for grants to entitlement communities and expended amounts for grants to states and designated projects
- Commerce's Economic Development Administration – obligated amounts
- Interior's Bureau of Reclamation – appropriated amounts
- Appalachian Regional Commission – obligated amounts
- Federal Emergency Management Agency - obligated amounts
- Small Business Administration – face value of the guaranteed loans
- U.S. Army Corps of Engineers – expended amounts

# Appendix II: Detailed Information on State-Sponsored Programs for Drinking Water and Wastewater Infrastructure

State	Form(s) of assistance	Targeted system(s)	Program name	Purpose
AK	Grants	DW,WW	Municipal Construction Grants	To provide partial grants and engineering assistance to larger communities for water and sewer projects.
AK	Grants	DW,WW	Village Safe Water	To improve sanitation conditions in rural and native Alaska villages through planning and construction grants and engineering/technical assistance. Alaska's Village Safe Water Program, in existence since the early 1970s, offers assistance to community systems that provide piped or hall services.
AK	Grants	DW,WW	Supplemental Housing Development Grant Program	To assist regional housing authorities in supplementing housing projects that have been approved for development with HUD Indian Housing Development Funds. Grants are limited to 20 percent of HUD's total development cost per project and can only be used for (1) the cost of on-site water and sewer facilities; (2) the construction of roads to project sites; (3) electrical distribution facilities; and (4) energy-efficient housing design features. Supplements are needed to offset the higher costs for materials in Alaska.
CA	Loans	DW	Water Conservation, Groundwater Recharge & New Local Water Supply Program	Provide assistance to local agencies in the acquisition and construction of water conservation and groundwater recharge projects, development of new local water supplies, and infrastructure and reliability projects.
CA	Bonds	DW	Safe Drinking Water Bond Law Program	To correct domestic water system deficiencies to enable systems to meet drinking water standards mandated under the California Safe Drinking Water Act.
CA	Grants	DW	Drinking Water Treatment & Research Fund	Provide funding to public water systems facing financial hardship due to the cost of treatment or source replacements of their water sources.
CA	Loans	WW	State Water Quality Control Fund	To provide construction loans for wastewater construction to assist agencies in financial hardship.
CA	Grants/loans	WW	Water Recycling Construction Program	To provide grant and loan funding to municipalities for design and construction of projects to recycle water.
CA	Grants	WW	Small Communities Grant Program	To provide grants for planning, redesigning, and constructing wastewater facilities in small communities.
CO	Loans	DW/WW	Small Water Resources Projects Program	The financing program for the small water resources projects (SWRP) provides an economical source of capital for expansion and rehabilitation of existing public water systems in Colorado. Under this program the authority provides loans that appreciably lower the costs of borrowing for those municipal governments and special districts having a population greater than 1,000 or a customer base of at least 650 taps. Loan amounts can range from \$300,000 to \$25,000,000. Individual construction loans up to \$25,000,000 do not require approval from the general assembly (as do other authority water supply loans greater than \$25,000,000). These loans are fully insured by a private bond insurance company and are issued without using the moral obligation of the state. The SWRP is funded solely by the authority.
CO	Loans	DW	Colorado Water Conservation Board Construction Fund Loan Program	To provide loans to construct or rehabilitate raw water infrastructure such as dams, diversion structures, wells, raw water pipelines, ditches, and canals. The purchase of water rights and land can be financed as part of the project.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
CO	Grants/loans	DW/WW	Energy Impact Assistance Fund	To assist political subdivisions of the state of Colorado that are socially or economically impacted by the development processing and energy conversion of minerals and mineral fuels.
CO	Grants	DW	Drinking Water Grant Program (Administered By Colorado Department of Public Health and Environment	To provide assistance for planning design and construction of eligible drinking water treatment and distribution system projects. Serving 5,000 or less population.
CO	Grants	WW	Domestic Wastewater Treatment Grant Program	Provide financial assistance to governmental agencies for planning design and construction of eligible wastewater projects. Serving 5,000 or less population.
CO	Loans	DW	Drinking Water State Direct Loan Program	To provide loans to small domestic drinking water systems before the federal law was finalized; served as an interim program.
CT	Grants	DW	Potable Water Program	To correct water supply problems in wells contaminated by industrial wastes program. The program no longer requires matching funds.
CT	Grants	DW,WW	Special Acts Of The Legislature	To provide infrastructure grants.
CT	Grants/loans	WW	Clean Water Fund	To provide grants for the removal of nitrogen from wastewater. Grants of 20, 30, and 50 percent for all, nitrogen removal and CSO, respectively.
DE	Grants/loans	DW,WW	Delaware 21st Century Infra-Structure Investment Fund	To provide low-interest loans and/or grants to wastewater and water utilities for infrastructure expansion and upgrades.
FL	Grants	DW	Water Supply Restoration	To restore or replace contaminated private drinking water wells often by installing a connection to a public water system. Transmission and distribution lines needed to bring public water system to areas not previously served are also covered. Approximately half of the annual \$4 million budget is used to install transmission and distribution lines.
ID	Grants/loans	DW	Idaho Water Resource Board—Water Resource Funding Program	To construct and financially assist the water projects, including the rehabilitation, improvement or extension of existing systems or facilities.
ID	Grants	WW	Wastewater Treatment Facility Grant Program—Idaho Dept. Of Environmental Quality	To provide financial assistance to qualifying entities for the construction of wastewater treatment facilities.
KY	Grants	DW,WW	Surplus Expenditure Plan	To assist community development projects ranging from park projects to water and sewer projects.
KY	Grants	DW,WW	State Surplus And 502 Grant Program -	To assist community development projects for water and wastewater.
KY	Grants	Legislature Directs	Community Development Projects	To address legislative directives.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
LA	Loans (from bond pool)	DW,WW	La Community Development Authority	To provide economic development, infrastructure, and environmental facilities to political subdivisions.
MA	Grants	DW	Grandfathered Drinking Water Treatment Plants	To provide debt service reimbursement to communities that constructed drinking water treatment plants before the creation of the drinking water SRF program. State provides 50 percent reimbursement of principal portion of debt service payment for a 10-year period.
MD	Grants	WW	Biological Nutrient Removal (BNR) Program	To help local governments upgrade wastewater treatment plants with BNR-advanced treatment. Funds are provided under a 50/50 cost-share agreement as part of the Chesapeake Bay nutrient reduction strategy.
MD	Grants	WW	Supplemental Assistance (Sewerage) Program	To help local governments upgrade wastewater infrastructure. Funds are provided for priority sewerage projects needed to address public health/water quality problems in financially disadvantaged communities.
MD	Grants	DW	Water Supply Program	To provide state grant funds to assist local governments in upgrading their drinking water infrastructure. Funds are provided for priority drinking water projects that address the public health problems in financially disadvantaged communities.
ME	Grants	WW	State Grant Program	To help financially stressed communities replace and upgrade wastewater treatment facilities.
ME	Grants	WW	Small Community Grant Program	To help towns replace the malfunctioning subsurface disposed systems that pollute water bodies or create a public nuisance.
MI	Grants	WW	Hardship Grants Program	To help unsewered communities to construct wastewater collection and treatment systems.
MN	Grants	WW	State Independent Grants Program	To fund municipal wastewater treatment facilities. This program is no longer in effect.
MN	Grants	WW	Combined Sewer Overflow Grants Program	To provide grants to metro area municipalities for sewer separation program. Program is no longer in effect.
MN	Grants	WW	Wastewater Infrastructure Fund	To provide supplemental grant assistance to hardship communities augmenting available CWSRF loans and USDA rural development funds.
MO	Grants/loans	WW	15 percent State Grant/Loan	To make funds available to wastewater SRF loan recipients at 15 percent of eligible costs.
MO	Grants/loans	WW	37(H) Storm Water Grants and Loans	No description given.
MO	Grants	WW	Storm Water Grants 37 (E)	No description given.
MO	Grants	WW	Special Infrastructure Grant—Phosphorus	To build phosphorus removal facilities and appurtenances in the Table Rock Lake watershed.
MO	Grants/loans	DW,WW	37(G) New Rural Water—Sewer Grants and Loans	No description given.
MO	Grants	DW,WW	Special Infrastructure Grant—State Parks	To provide water and sewer improvements at Missouri's state parks.
MO	Grants	WW	40 percent Construction Grant	To assist municipalities, counties, public water and sewer districts, political subdivisions or instrumentalities of the state in the planning, design, and construction of wastewater systems.
MO	Loans	WW	Direct Loans	To assist municipalities, counties, public water and sewer districts, political subdivisions or instrumentalities of the state in the planning, design, and construction of wastewater systems.



**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
MO	Grants	DW,WW	37 (E) Old Rural Water and Sewer Grants	To enhance the state's water quality.
MO	Grants	WW	Federal Hardship State Match	To assist disadvantaged communities with planning, designing, and building wastewater systems.
MO	Grants	WW	State Hardship	To assist disadvantaged communities with planning, designing, and building wastewater systems.
MO	Grants	WW	Industrial Development Grant	No description given.
MS	Loans	DW	Drinking Water Systems Emergency Loan Fund (DWSELF)	To make emergency loans to eligible applicants: (1) to make necessary repairs to existing drinking water systems to meet the emergency; (2) to complete construction needed to provide a permanent correction to the problems that caused the emergency; (3) to cover reasonable administration costs of the DWSRF program and/or the federal DWSRF program, and conducting activities under the local governments and rural water systems improvements revolving loan program act; and (4) to earn interest on fund accounts.
MS	Grants/loans	WW	Development Infrastructure Program	To help counties or cities finance small infrastructure projects to promote economic growth.
MS	Loans	DW,WW	Capital Improvements Revolving Loan Program (Cap)	To provide low-interest loans to counties and municipalities for capital improvements, such as water, sewer, and access roads.
MS	Loans	WW	Water Pollution Control Emergency Loan Fund	To make loans to eligible applicants for emergency projects for the purpose of making necessary repairs to existing water pollution control systems to meet the emergency.
MS	Loans	DW,WW	Mississippi Business Investment Act Program	To offer low-interest loans to counties or incorporated cities to finance improvements necessary to implement private company investments.
MT	Grants/loans	DW,WW	Renewable Resource Grant and Loan Program	To provide funding for the planning, design, and construction of renewable resource projects.
MT	Grants/loans	DW,WW	Treasure State Endowment Program	To help solve serious health and safety problems and to assist communities with the financing of public facilities projects, including the construction or repair of drinking water systems, wastewater treatment facilities, sanitary or storm sewer systems, solid waste disposal and separation systems, and bridges. Loans, though available, have never been used.
MT	Grants	DW,WW	Community Development Block Grant (CDBG) Program—Housing and Public Facilities	To help communities with a population less than 50,000 meet their greatest community development needs. All projects must principally benefit low and moderate income persons. The basic categories of local community development projects are: (a) economic development, (b) housing, (c) public facilities, (d) planning grants. Montana Department of Commerce (MDOC) administers the program. Public facilities projects can include conventional community facilities such as water, sewer, and solid waste. Projects can also include those designed to principally serve low and moderate income persons (i.e., head start centers, mental health centers). The program is a federally funded competitive grant program.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
NE	Grants	WW	Small Town Matching Grants	To provide small towns with populations of 800 or less with a grant up to 50 percent of the project cost in conjunction with a CWSRF loan.
NC	Grants	WW	Unsewered Communities Grant Program	To assist units of local government with no wastewater collection or treatment systems. Applicant must demonstrate a critical public health or environmental threat. Additional eligibility criteria apply. Funding covers 90 percent of project cost up to \$3 million.
NC	Grants/loans	DW,WW	N.C. Revolving Loan and Grant Program	To provide low-interest loans and grants to qualifying applicants to address water and wastewater infrastructure needs.
NC	Grants	DW,WW	Supplemental Grants Program	To provide up to \$400,000 for units of local government for the construction of water or wastewater projects. Applicant must demonstrate a critical public health, environmental, or economic development need. Funding can be used as the local match to other state/federal programs.
NC	Grants	DW,WW	Capacity Building Grant Program	To provide up to \$40,000 for units of local government for the preliminary planning of water and/or wastewater systems. Projects might include preliminary engineering reports, capital improvement plans, feasibility studies, sewer/water rate studies. Applicant must demonstrate a critical environmental, public health, or economic development need.
ND	Grants/loans	DW	Water Supply Development	To assist water supply systems in addressing water quantity and quality problems.
NH	Grants	WW	Wastewater State Aid Grant Program	To provide 20 percent to 30 percent grants in the form of loan subsidies for wastewater infrastructure projects.
NH	Grants	DW	State Drinking Water Filtration Grant Program	To help public water systems comply with the surface water treatment rules of the federal safe drinking water act of 1986.
NJ	Grants	WW	CSO Program	To fund planning and design of project to eliminate combined sewer overflow problems.
NJ	Grants/loans	DW,WW	Pinelands Program	To accommodate existing and future needs in the 23 designated Pinelands Regional Growth Areas.
NJ	Loans	DW	Safe Drinking Water Program (Water Supply Bond Loan Program)	To fund drinking water projects. The SRF program has replaced this program. Loans made through 2000 are the final loans from the state program.
NM	Grants	DW,WW	Special Appropriations Program	To administer and provide construction. Oversight for projects funded by legislative special appropriations.
NM	Grants	WW	Colonias Waste Water Construction Program	To provide funding for projects intended to construct or improve wastewater treatment and disposal in the Colonias communities of New Mexico.
NM	Grants/loans	DW,WW	Rural Infrastructure Program	To provide low-interest loans and limited grant funds to build water supply and wastewater systems for communities with populations less than 10,000.
NM	Grants	DW,WW	Water/Wastewater Grant Fund	To assist local entities with construction or rehabilitation water projects within a particular service area. Projects must receive legislative authorization within 3 years of NMFA board approval.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
NM	Loans	None specified	Public Project Revolving Fund	To provide low-cost, low-interest rate loans to local government entities for infrastructure and capital equipment purchases.
NV	Grants	DW	AB198 Grant Program	To provide grants to public purveyors of water to pay for the costs of capital improvements to publicly owned community water systems and publicly owned nontransient water systems, as required or made necessary by the state health board, or made necessary by the Safe Drinking Water Act. Funds are available only to communities of less than 6,000 residents.
OH	Loans	DW,WW	Village Capital Improvement Fund (VCIF)	To help villages finance preliminary engineering plans, detailed engineering plans, feasibility studies, and legal costs incurred for planning phases of wastewater and/or public drinking water facilities. VCIF is a partially interest-free loan program.
OH	Loans	DW,WW	Ohio Water and Sewer Rotary Commission	To provide no-interest loans to pay that portion of the cost of a sewer or drinking water line extension project, which otherwise would have been paid by assessments on agricultural land.
OH	Loans	DW,WW	Ohio Water Development Authority	To provide loans to local government agencies to build the wastewater systems, drinking water systems, and solid waste disposal facilities needed to comply with water pollution control standards.
OH	Grants/loans/debt service subsidies	DW,WW	Ohio Public Works Commission	To help municipal corporations, counties, townships, and regional sewer/water districts maintain operations and adequate wastewater, drinking water, and solid waste disposal facilities.
OH	Loans	DW	Drinking Water Emergency Loan Fund (DWELF)	To provide emergency loans to owners or operators of public drinking water systems for emergency remediation of a "threat of contamination"—anything that prevents a public water system from supplying adequate quantities of safe, potable water to existing users.
OK	Grants	DW,WW	Emergency Grant Program	To provide financial assistance for a wastewater or drinking water emergency, which is defined as a life, health, or property-threatening situation. There is a maximum of \$100,000 per project per applicant during any fiscal year. Each applicant is subjected to a "grant priority evaluation policy" that considers the following: nature of the emergency, water and sewer rates, monthly debt payment, local contribution, median household income, and benefit to other systems, among others.
OK	Grants	DW,WW	Contract Financial Assistance	To fund special drinking water and wastewater infrastructure projects that are approved by the legislature.
OK	Grants	DW,WW	Rural Economic Action Plan "REAP"	To assist communities of 7,000 or less with their wastewater or drinking water systems. Maximum amount is \$150,000. Applicants are subjected to a specific "REAP grant priority evaluation policy." Criteria considered include: population, water and sewer rates, indebtedness per customer, median household income, applicant's ability to finance the project, amount of grant requested, previous grant assistance, and enforcement orders.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
OK	Loans (from bonds)	DW,WW	Financial Assistance Loan Program	To assist communities with drinking water and wastewater infrastructure. Funds provided for this program come from bonds.
OR	Loans	WW	Sewer Assessment Deferral Loan Program (SADLP)	To provide financial assistance to property owners who would experience financial hardship as a result of the mandatory connection to the public sewer system. Property owners acquire loans through local communities.
OR	Grants/loans/bonds	DW/WW	Water Fund	To provide financing to construct and improve public drinking water systems and public wastewater collection systems.
OR	Grants/loans/bonds	DW/WW (and other projects)	Special Public Works Fund	To provide financial assistance to municipalities for constructing, improving, and repairing those facilities that are essential for supporting economic activity which stimulates and promotes employment opportunities in Oregon.
PA	Loans	DW,WW	DCED Infrastructure Development Program	To fund drinking, waste, and storm water system construction.
PA	Loans	DW,WW	DCED Local Government Capital Projects Loan Program	To fund drinking, waste, and storm water system construction.
PA	Loans	DW,WW	DCED PA Economic Development Financing Authority	To fund drinking, waste, and storm water system construction.
PA	Grants	WW	DEP Act 339 Sewage Treatment Plant Operation Subsidy Grants	To fund wastewater system construction.
PA	Grants/loans	DW,WW	Pennvest Construction Loan Program	To fund drinking, waste, and storm water system construction.
PA	Grants/loans	DW,WW	Pennvest Advance Funding Program	To fund drinking, waste, and storm water system construction.
RI	Loans	WW	Rhode Island Water Pollution Control Revolving Fund	To finance projects not meeting the requirements of federal programs.
SC	Loans	DW,WW	South Carolina Infrastructure Revolving Fund (SIRF)	To construct publicly owned water and sewer facilities.
SC	Grants	DW,WW	South Carolina Budget & Control Board Grant Program	To provide assistance for water and sewer related purposes.
SC	Grants	DW,WW (and other needs)	Environmental Emergency Fund	To provide assistance during environmental emergencies that require immediate and comprehensive response from the state to deter pollution and protect public health.
SD	Grants/loans/technical	DW,WW	State Water Resources Management System	To provide state financial and technical assistance to large, costly water-related projects that need significant state cost share participation and most likely require significant federal financing and federal authorization. Projects are designated for this program through a legislative process.
SD	Grants/loans	DW,WW	Consolidated Water Facilities Construction Program	To assist a wide variety of drinking water, wastewater, storm water, groundwater protection, and watershed restoration projects. Most of the assistance is in the form of grants.
TN	Loans	DW,WW	Tennessee Local Development Authority (TLDA) Loan Program	To assist local governments with their water, wastewater, and solid waste projects.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
TN	Loans	DW,WW	Utility Relocation Loan Program (URLP)	To assist cities and utility districts that must relocate utilities due to Tennessee Department of Transportation (TDOT) road projects.
TN	Grants/loans	DW,WW	Tennessee Industrial Infrastructure Program (TIIP)	To assist local governments and businesses with infrastructure improvements and job-specific training.
TX	Grants/loans	DW,WW	Economically Distressed Areas Program	To develop adequate water supply and wastewater facilities in certain areas without such facilities or where the financial resources of the residents were inadequate to meet those needs. The program can fund the construction, acquisition, or improvements to water supply and wastewater collection and treatment works, including all necessary engineering work. The program will not fund ongoing operation and maintenance expenses and applies only to areas of the state meeting the definition of an "economically distressed area," primarily in counties along the Texas/Mexico border.
TX	Loans (funds come from bonds; state partial owner)	DW,WW	State Participation Program	To encourage the optional development of major regional water supply, wastewater, or flood control projects where local interests could not afford such projects at the time the assistance is provided. The state provides the assistance by financing and owning up to 50 percent of the regional facilities until such time as sufficient growth occurs for the state's interest to be bought out by the regional participants. Funds for the program come from the sale of general obligation bonds for which the legislature has pledged to pay all or part through draws on general revenue funds while the state retains partial ownership of the facilities. Recipients of assistance are required to purchase the state's interest when they begin using any portion of the project capacity owned by the state.
TX	Loans/bonds	DW,WW	Water Development Fund	To help communities develop water supplies. The program has evolved over the years, adding additional authority to fund wastewater and flood control projects. Current development fund loans are made to political subdivisions for water supply, water pollution control, and flood control projects. Recent assistance for these programs has averaged approximately \$70 million per year. In addition, approximately \$25 million per year of these general obligation bond funds is used to supply the state match for the CWSRF and DWSRF programs.
UT	Loans	DW	Board of Water Resources	To provide low-cost financing to develop Utah's water resources.
UT	Grants/loans/interest rate buy down agreements	WW	Water Quality Project Assistance Program	To help political subdivisions of the state fund water quality projects.
UT	Grants/loans	DW/WW and other governmental needs	Permanent Community Impact Fund	To assist state agencies or subdivisions that are or may be socially or economically affected, directly or indirectly, by mineral lease development on federal lands.

**Appendix II: Detailed Information on  
State-Sponsored Programs for Drinking Water  
and Wastewater Infrastructure**

<b>State</b>	<b>Form(s) of assistance</b>	<b>Targeted system(s)</b>	<b>Program name</b>	<b>Purpose</b>
UT	Grants/loans	DW	Drinking Water Financial Assistance	To provide low-cost financing for public drinking water system infrastructure projects.
VA	Grants	WW	State Combined Sewer Overflow (CSO) Grants	To help Virginia localities meet the local share requirement of federal earmark grants.
VA	Loans/bonds	DW,WW	Virginia Resource Authority—Bond Program	To help local governments fund wastewater and drinking water projects.
VA	Grants	WW	Water Quality Improvement Fund—Point-Source Pollution Control	To provide technical and financial assistance to local governments and individuals to help them control point-source pollution, primarily nitrogen and phosphorus.
VT	Grants	DW	Vermont Water Supply Grant Program	To provide financial assistance for needed improvements to publicly owned water systems. 35percent of the grants were provided for new or improved source, storage, treatment, or transmission main facilities.
VT	Grants	WW	Vermont Pollution Abatement/Control Grant Program	To abate (1) direct discharges of untreated or improperly treated domestic wastes (35 percent state grant; 65 percent SRF); (2) combined sewer/wet weather overflow (25 percent state grant; 50 percent SRF loan; 25 percent other); (3) phosphorus removal; and (4) sludge and septage (50 percent state grant; 50 percent SRF).
WA	Loans	DW,WW	Public Works Trust Fund Construction Loan Program	To provide low-interest loans to local governments for the repair, replacement, and rehabilitation of infrastructure.
WA	Grants	DW	Referendum 38	To assist public water system utilities in upgrading existing systems and keeping pace with the increasing demands placed upon them. Program is now being phased out.
WA	Grants/loans	WW	Referendum 26	To provide financial assistance for the acquisition, construction, and improvement of public waste facilities. Program is now being phased out.
WA	Grants/loans	WW	Centennial Clean Water Fund	To assist local governments and tribes with the planning, design, acquisition, construction, and improvement of water pollution control facilities and related activities. Program will continue until 2021.
WA	Grants/loans	WW	Referendum 39	To provide for the planning, design, acquisition, construction, and improvement of public waste disposal and management facilities. Program is now being phased out.
WI	Grants/loans	WW	Clean Water Fund Program	To construct wastewater infrastructure.
WI	Grants	DW	Municipal Clean Drinking Water Grant Program	To correct violations of the drinking water standards.
WV	Grants/loans	DW,WW	Loan and Grant Program	To construct wastewater and water facilities for public utilities.
WY	Grants/loans	DW,WW	Federal Royalty Capital Construction Account Grants and Joint Powers Act Loans	To fund public service facility owned by the applicant and available for use by the general public, including water and sewer projects, storm drainage projects, street and road projects, solid waste disposal projects, acquisition of emergency vehicles public administration buildings, health care facilities, senior citizens' centers, jail and detention facilities, and facilities needed to provide services to the disabled and similar facilities as authorized by the Board.

# Appendix III: Questions in State Survey Instrument

Note: This appendix includes the material provided to survey participants including the questions and instructions for answering them.

## GAO Survey of State Funding for Drinking Water and Wastewater Infrastructure

### Introduction

The U.S. General Accounting Office (GAO) is an agency that assists the U.S. Congress in evaluating federal programs. In anticipation of analyzing a number of water infrastructure-related proposals this year, the Senate Committee on Environment and Public Works has asked GAO to identify the sources and amounts of federal and state funding for drinking water and wastewater infrastructure for the past 10 years.

To collect the amounts and sources of federal funds, we are asking federal agencies to provide this information directly to GAO. To collect information on the amounts and sources of **state funding**, we are asking all states to respond to this questionnaire. Accordingly, we are asking that you provide the amounts of funding provided by your state for drinking water and wastewater infrastructure as well as brief descriptions of any programs sponsored by your state that provide grants or loans for drinking water and wastewater infrastructure. **Please note that we are asking for the amounts of state funding; do not include the amounts of federal funding that your state has received.**

Part I of the survey contains a worksheet that collects information on state funding. Part II collects the descriptive information for each state-sponsored program.

### Instructions

When answering the questions in this questionnaire, please coordinate with the appropriate members of your staff and officials in other agencies or organizations within your state who have knowledge of **state** funding sources for drinking water and wastewater infrastructure to provide a single coordinated response for your state.

We are requesting data by state fiscal year.

Please return your completed questionnaire by **August 13, 2001** to the following address:

U.S. General Accounting Office  
ATTN: Lisa Turner  
441 G Street, NW – Room 2T23  
Washington, DC 20548-0001

If you like, we can send a copy of the worksheet in the form of an Excel spreadsheet to you via e-mail. If you would like us to send the spreadsheet to you, please send your request via e-mail to the following address:

[turnerl@gao.gov](mailto:turnerl@gao.gov)

If you have any questions about specific items in the questionnaire, call or e-mail your questions to:

- Lisa Turner at (202) 512-6559  
(e-mail address: [turnerl@gao.gov](mailto:turnerl@gao.gov)); or
- Terri Dee at (202) 512-9592  
(e-mail address: [deet@gao.gov](mailto:deet@gao.gov)).

Please provide the following information for the primary state contact for this survey.

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Phone #: ( ) \_\_\_\_\_

E-mail: \_\_\_\_\_

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U.S. General Accounting Office  
441 G Street, NW, Room 2T23  
Washington, DC 20548

**GAO Survey of State Funding for Drinking Water and  
Wastewater Infrastructure**

**Part I – Funding Levels**

1. Name of state. *(Insert name in the space provided.)*  
  
\_\_\_\_\_
  
2. When does the state fiscal year begin and end? *(Insert dates in the spaces provided.)*
  - a) State fiscal year begins \_\_\_\_\_  
*(month and day)*
  
  - b) State fiscal year ends \_\_\_\_\_  
*(month and day)*
  
3. On the following worksheet, please provide the amounts of funding **provided by your state** in your state's fiscal years 1991 through 2000 for drinking water and wastewater infrastructure by the source of the state funds. The various sources of state funds might include:
  - state matches and overmatches to federal funds,
  - state-sponsored grant and loan programs specifically for drinking water and/or wastewater infrastructure,
  - state-sponsored grant and loan programs not specifically limited to drinking water and/or wastewater infrastructure,
  - other state appropriations for specific drinking water and/or wastewater projects,
  - state bonds specifically for drinking water and/or wastewater infrastructure, and
  - other sources of state funding for drinking water and/or wastewater infrastructure.

**Tips for completing the worksheet**

1. If your state has a biennial budget cycle, split the funding between the applicable 2 years.
2. Please provide the actual amounts where feasible. Estimates are acceptable when the actual amounts cannot be determined or are no longer available.
3. For each funding source, we first ask for funding information about drinking water, then ask about wastewater, and finally ask for a combined total for the part you cannot separate into these two components.



**Appendix III: Questions in State Survey Instrument**

**Worksheet to identify the sources and amounts, if any, of state funds provided for drinking water and wastewater infrastructure during 1991 through 2000. (Please do not include federal funds on this worksheet.)**

<b>Source of State Funds</b>	
<b>State matches and overmatches to federal funds</b>	
1.	What were the amounts of your state's matches and overmatches, if any, that were appropriated, leveraged (exclude funds held in reserve for purposes other than making loans), or provided through other sources for the Drinking Water State Revolving Fund, the Clean Water State Revolving Fund, and other federal programs that require a state match and provide funding specifically for drinking water and/or wastewater infrastructure? <b>See note 1.</b>
a.	Drinking Water State Revolving Fund
	i) Appropriated
	ii) Leveraged
	iii) Other sources
b.	Clean Water State Revolving Fund
	i) Appropriated
	ii) Leveraged
	iii) Other sources
c.	Other federal programs for drinking water infrastructure requiring a state match
	i) Appropriated
	ii) Leveraged
	iii) Other sources
d.	Other federal programs for wastewater infrastructure requiring a state match
	i) Appropriated
	ii) Leveraged
	iii) Other sources
e.	Other federal programs for drinking water and wastewater infrastructure requiring a state match combined <b>See note 2.</b>
	i) Appropriated
	ii) Leveraged
	iii) Other sources

Note 1: If you cannot separate some or all of the amounts into the drinking water and wastewater components, please provide a combined total for the part that you cannot separate in the rows provided, for example, rows 1e (i), (ii), (iii); 2c, etc.

Note 2: This row should only include the amounts you cannot separate into the drinking water and wastewater components. This row should not include amounts listed in the rows immediately above it.

Note 3: For example, state programs that provide funding for parks and recreation in addition to drinking water and/or wastewater infrastructure.

**Appendix III: Questions in State Survey Instrument**

<b>Source of State Funds</b>	
<b>State-sponsored grant and loan programs specifically for drinking water and wastewater infrastructure</b>	
2.	What were the amounts, if any, that your state appropriated for state-sponsored grant programs specifically for drinking water and/or wastewater infrastructure? <b>See note 1.</b>
a.	State appropriations for drinking water grant programs
b.	State appropriations for wastewater grant programs
c.	State appropriations for drinking water and wastewater grant programs combined <b>See note 2.</b>
3.	What were the amounts, if any, of the loan commitments from state-sponsored loan programs specifically for drinking water and/or wastewater infrastructure? <i>(Please do not include Drinking Water and Clean Water State Revolving Funds.)</i> <b>See note 1.</b>
a.	Loan commitments from state-sponsored drinking water loan programs
b.	Loan commitments from state-sponsored wastewater loan programs
c.	Loan commitments from state-sponsored drinking water and wastewater loan programs combined <b>See note 2.</b>
4.	What were the amounts, if any, of subsidy costs associated with the loan commitments from the state-sponsored loan programs specifically for drinking water and/or wastewater infrastructure? <i>(This is the subsidy cost associated with the loan commitments in rows 3a, b, and c. The subsidy cost is the estimated long-term cost to the state of direct loans. It is the net present value of cash flows to and from the state and includes things such as loan disbursements, repayment of principal, recoveries or proceeds of asset sales, and payments of interest and other payments. It includes the effects of estimated defaults, prepayments, fees, penalties, and interest subsidies or other subsidies.)</i> <b>See note 1.</b>
a.	Subsidy costs associated with drinking water loan commitments
b.	Subsidy costs associated with wastewater loan commitments
c.	Subsidy costs associated with drinking water and wastewater loan commitments combined <b>See note 2.</b>

Note 1: If you cannot separate some or all of the amounts into the drinking water and wastewater components, please provide a combined total for the part that you cannot separate in the rows provided, for example, rows 1e (i), (ii), (iii); 2c; etc.

Note 2: This row should only include the amounts you cannot separate into the drinking water and wastewater components. This row should not include amounts listed in the rows immediately above it.

Note 3: For example, state programs that provide funding for parks and recreation in addition to drinking water and/or wastewater infrastructure.

**Appendix III: Questions in State Survey  
Instrument**

<b>Source of State Funds</b>	
<b>State grant and loan programs not specifically limited to drinking water and wastewater infrastructure See note 3.</b>	
5.	What were the amounts, if any, that your state obligated for drinking water and/or wastewater infrastructure from state-sponsored grant programs not specifically limited to drinking water and/or wastewater? <b>See note 1.</b>
a.	Obligations for drinking water infrastructure
b.	Obligations for wastewater infrastructure
c.	Obligations for drinking water and wastewater infrastructure combined <b>See note 2.</b>
6.	What were the amounts, if any, of the loan commitments for drinking water and/or wastewater infrastructure from state-sponsored loan programs not specifically limited to drinking water and/or wastewater? <b>See note 1.</b>
a.	Loan commitments for drinking water infrastructure
b.	Loan commitments for wastewater infrastructure
c.	Loan commitments for drinking water and wastewater infrastructure combined <b>See note 2.</b>
7.	What were the amounts, if any, of subsidy costs associated with the loan commitments for drinking water and/or wastewater from the state-sponsored loan programs not specifically limited to drinking water and wastewater? <i>(This is the subsidy cost associated with the loan commitments in rows 6a, b, and c. The subsidy cost is the estimated long-term cost to the state of direct loans. It is the net present value of cash flows to and from the state and includes things such as loan disbursements, repayment of principal, recoveries or proceeds of asset sales, and payments of interest and other payments. It includes the effects of estimated defaults, prepayments, fees, penalties, and interest subsidies or other subsidies.) See note 1.</i>
a.	Subsidy costs associated with drinking water loan commitments
b.	Subsidy costs associated with wastewater loan commitments
c.	Subsidy costs associated with drinking water and wastewater loan commitments combined <b>See note 2.</b>

Note 1: If you cannot separate some or all of the amounts into the drinking water and wastewater components, please provide a combined total for the part that you cannot separate in the rows provided, for example, rows 1e (i), (ii), (iii); 2c; etc.

Note 2: This row should only include the amounts you cannot separate into the drinking water and wastewater components. This row should not include amounts listed in the rows immediately above it.

Note 3: For example, state programs that provide funding for parks and recreation in addition to drinking water and/or wastewater infrastructure.

**Appendix III: Questions in State Survey  
Instrument**

<b>Source of State Funds</b>	
<b>Other state appropriations (not included in the entries above) for specific drinking water and wastewater projects</b>	
8.	What were the amounts, if any, of state funds designated in other state appropriations for specific drinking water and/or wastewater projects? <i>(These amounts would be referred to as "earmarks" at the federal level.) See note 1.</i>
a.	Designated funds for specific drinking water projects
b.	Designated funds for specific wastewater projects
c.	Designated funds for specific drinking water and wastewater projects combined <b>See note 2.</b>
<b>State bonds specifically for drinking water and wastewater infrastructure</b>	
9.	What were the amounts, if any, of general obligation bonds issued specifically for drinking water and/or wastewater infrastructure? <i>(Please include only funds used for making loans and exclude funds used for other purposes. Do not include any leveraged funds reported in question 1 of this worksheet.) See note 1.</i>
a.	General obligation bonds for drinking water infrastructure
b.	General obligation bonds for wastewater infrastructure
c.	General obligation bonds for drinking water and wastewater infrastructure combined <b>See note 2.</b>
10.	What were the amounts, if any, of state revenue bonds issued specifically for drinking water and/or wastewater infrastructure? <i>(Please include only funds used for making loans and exclude funds used for other purposes. Do not include any leveraged funds reported in question 1 of this worksheet.) See note 1.</i>
a.	State revenue bonds for drinking water infrastructure
b.	State revenue bonds for wastewater infrastructure
c.	State revenue bonds for drinking water and wastewater infrastructure combined <b>See note 2.</b>
<b>Other sources of state funding for drinking water and wastewater infrastructure</b>	
11.	What were the amounts, if any, from other state funding sources for drinking water and/or wastewater infrastructure that are not included in questions 1 through 10 above? <i>(This could include things like interest earned on reserve funds, debt service subsidies, subsidy costs associated with guaranteed loans, or funds from other sources.) See note 1.</i>
a.	Other amounts for drinking water infrastructure
b.	Other amounts for wastewater infrastructure
c.	Other amounts for drinking water and wastewater infrastructure combined <b>See note 2.</b>
Please describe the other sources.	

Note 1: If you cannot separate some or all of the amounts into the drinking water and wastewater components, please provide a combined total for the part that you cannot separate in the rows provided, for example, rows 1e (i), (ii), (iii); 2c; etc.

Note 2: This row should only include the amounts you cannot separate into the drinking water and wastewater components. This row should not include amounts listed in the rows immediately above it.

Note 3: For example, state programs that provide funding for parks and recreation in addition to drinking water and/or wastewater infrastructure.

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Ellen Crocker (617) 565-7469

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## Staff Acknowledgments

Key contributors to this report include Terri Dee, Les Mahagan, Diane Raynes, Laura Shumway, and Lisa Turner. Also making significant contributions were Christine Bonham, June Foster, Karen Keegan, and Jonathan McMurray.

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