

Drinking Water State Revolving Fund Program

Delivering Sustainable Public Health Protection for America



2005 ANNUAL REPORT



Message from Assistant Administrator
Benjamin H. Grumbles
Office of Water

I am pleased to present the Drinking Water State Revolving Fund's 2005 Annual Report. The DWSRF is now an \$11 billion Federal/State partnership, which is focused on protecting human health and supporting the sustainability of our nation's drinking water infrastructure. This report highlights the accomplishments and financial position of this exceptional program.

Since its inception in 1997, the DWSRF has provided assistance to over 4,300 projects improving health protection for over 100 million Americans. The program has provided nearly \$9.5 billion in assistance. About 73% of projects and 39% of assistance has been provided to small communities (serving <10,000 people). The DWSRF Program is comprised of 51 state and territorial programs, each tailored to meet the unique needs and goals of its citizens. Innovation and flexibility are hallmarks of this program, as the numerous examples in this report illustrate.

Ensuring the long term sustainability of our nation's drinking water infrastructure is a key challenge before us. The DWSRF offers multi-faceted support for meeting this challenge. Drinking water utilities have access to low interest loans; and states can provide zero interest loans, principal forgiveness, and extended repayment periods to disadvantaged communities. Through optional set-asides, states can fund programs to protect source waters and to enhance management and operations of drinking water utilities.

This report will be the first of many to come, and I look forward to sharing the accomplishments and growth that have made the Drinking Water State Revolving Fund such an important and effective program.

Sincerely,



Benjamin H. Grumbles
Assistant Administrator

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Note: All data are for states' fiscal years ending June 30, 2005, as updated through December 31, 2005. These data are reported by states to the Drinking Water National Information Management System (DWNIMS). Full state data reports, a national summary, and numerous special reports are available online at <http://www.epa.gov/safewater/dwsrf/dwnims.html>. EPA thanks our state partners for their cooperation and assistance in submitting data to the DWNIMS.



Built for Success



Congress created the Environmental Protection Agency's (EPA's) Drinking Water State Revolving Fund (DWSRF) program in 1996. The goal of Congress was to establish an innovative program that would ensure the continued provision of safe drinking water by helping public water systems (PWSs) fund infrastructure upgrades and by improving the institutional capabilities of PWSs. The DWSRF also helps states undertake activities to support their drinking water programs. In 9 years, the DWSRF programs have matured and established themselves as the premier source of public drinking water infrastructure financing.

Operating in all 50 states and Puerto Rico, the DWSRF programs have financed nearly 4,400 projects with loans totaling almost \$9.5 billion through 2005. The programs collectively have made more than \$11 billion in funds available to assist PWSs in protecting public health. Since 2000, the DWSRF has averaged more than \$1.3 billion in annual assistance to drinking water systems. No DWSRF program has ever experienced a default on a loan, which makes these programs highly regarded by financing institutions. Exhibit 1 summarizes the DWSRF's funding for investments in drinking water quality.

The DWSRF programs are founded upon the singular focus of assisting state drinking water programs and drinking water systems in meeting their responsibility to protect public

health. Since 1997, the DWSRF programs have improved public health protection for 100 million people. The DWSRF programs have achieved strong financial performance while ensuring that water systems, especially disadvantaged water systems, have access to the financing they need to meet the drinking water health-based standards from the Safe Drinking Water Act (SDWA) or to continue to meet the drinking water health-based standards from SDWA.

From public health and financial perspectives, the DWSRF programs have been a sound investment for states and the federal government. EPA and states collaborate to ensure that available funds are directed to the highest priority public health needs. Factors considered for prioritization include imminent threats to public health, failure to meet drinking water health-based standards, and disadvantaged community status. DWSRF programs have helped thousands of small and large communities receive safe drinking water by targeting funds where they are most needed. Since the program's inception, almost 73% of all DWSRF loans have been made to water systems serving fewer than 10,000 people.

The 2005 Annual Report provides an overview of this year's program accomplishments and status and highlights the program's plans for continued success.

EXHIBIT I
National Performance Summary Statement
Fund Activity - Estimated (\$)

	2004	2005
Annual Fund Activity		
Federal Capitalization Grants	757,358,798	820,296,680
State Matching Funds	271,909,038	144,558,534
New Funds Available for Assistance	1,672,551,152	1,509,403,309
Project Commitments (Executed Loan Agreements)	1,612,152,496	1,462,665,315
<i>Number of Projects Financed</i>	657	582
New Set-Aside Funds Available for Assistance	138,820,449	124,845,480
Project Disbursements	1,279,197,446	1,271,766,102
Cash Draws for Federal Capitalization Grants	709,072,148	646,985,390
Cash Draws for Set-Asides	112,214,750	104,377,322
Cumulative Fund Activity		
Federal Capitalization Grants	5,745,493,355	6,565,790,035
State Matching Funds	1,474,422,140	1,618,980,674
New Funds Available for Assistance	9,636,444,206	11,145,847,515
Project Commitments (Executed Loan Agreements)	7,980,535,959	9,443,201,274
<i>Number of Projects Financed</i>	3,796	4,378
New Set-Aside Funds Available for Assistance	924,087,844	1,048,933,324
Project Disbursements	5,789,249,821	7,061,015,923
Cash Draws for Federal Capitalization Grants	3,296,979,555	3,943,964,945
Cash Draws for Set-Asides	587,698,949	692,076,271

Source: EPA's DWSRF National Information Management System.

Cumulative Fund Activity Highlights

- Increase in Project Commitment (dollars): 18.3%
- Increase in Number of Projects: 14.1%
- Increase in Funds Available: 15.7%
- Increase in Federal Capitalization Dollars: 14.3%
- Role of Federal Funding Decreased from 59.6% to 58.9%

Basics of the DWSRF Program



Passed by Congress in 1974 and amended in 1986 and 1996, SDWA regulates the nation's public drinking water supply in order to protect public health. SDWA authorizes EPA to set national health-based standards for the presence of contaminants in drinking water. It also allows EPA, the states, and drinking water systems to work together to implement these standards. The Act originally stressed treatment as the primary means of providing safe drinking water; the 1996 Amendments greatly expanded the law's purview by recognizing the need for capacity development, source water protection, operator training, public information, and funding for water system improvements as vital to meeting SDWA's goals.

Section 1452 of the 1996 SDWA Amendments authorizes the DWSRF program to address the most pressing public health needs related to drinking water in each state. Focused on public health, the program gives states important tools, such as set-asides and special loan considerations, to address the needs of small systems and disadvantaged communities and to advance other programs authorized by the 1996 Amendments.

The federal government annually provides money that states can loan at below-market interest rates to pay for qualifying improvements to drinking water system infrastructure. Before a state can receive a capitalization grant, it must match money equal to 20% of the grant to its revolving loan fund. States can set aside up

to 31% of each year's grant allocation to pay for managing the DWSRF program and for providing technical assistance to water systems. Set-aside funds can also be used to pay for local assistance, other state programs to protect drinking water sources, and promoting drinking water system capacity (see details in Exhibit 2). States use the principal and interest payments received from loan recipients to provide more loans.

States can leverage their capitalization grants by issuing tax-exempt bonds to increase the amount of money available to meet the demand for DWSRF loans from public entities. Twenty states have issued leveraged bonds, raising \$3.9 billion since the DWSRF program's inception, which is added to the capitalization grants, state match funding, and interest to enlarge the funds available for loans in those states.

The flexibility inherent in the DWSRF programs as established by SDWA means each state can tailor its program to meet its needs and the needs of its PWSs. This flexible, state-centric approach also promotes innovative approaches to achieving SDWA's public health protection goals.

DWSRF programs are proof that the adage "Nothing succeeds like success" is true. Each year, these programs are reviewing more applications, processing more transactions, and tracking more loans and more loan repayments. In addition to coordinating with other state and federal programs, DWSRF programs

are working with and educating members of their state governing bodies. They are also meeting myriad state and federal reporting and recordkeeping requirements and identifying and targeting the needs of their systems. States deserve credit for the growing status and strength of their DWSRF programs—and for the impressive record of zero loan defaults.

While the details of each state's programs may be different, responsibility for administering the program rests with the agency assigned primary enforcement responsibility (also known as primacy) for the state's public water system supervision (PWSS) program. Often, that agency is the state public health department. In most states, this primacy agency works with state financial and environmental departments to manage the DWSRF program. Pages 8-9 show the agencies involved in administering each of the nation's 51 DWSRF programs.



EXHIBIT 2

DWSRF Assistance Eligibilities

Loans

Treatment:

- Projects to meet drinking water health-based standards for contaminants that cause acute and chronic health effects

Transmission & Distribution:

- Installation or replacement of transmission and distribution mains, pumps, and other distribution system infrastructure

Source:

- Rehabilitation of wells or development of sources to replace contaminated sources

Storage:

- Installation or improvement of eligible storage facilities

Consolidation:

- Consolidation of water systems is eligible (for instance, consolidating a system with a contaminated source or a system that is unable to maintain technical, managerial, or financial capacity)

Set-asides*

4% Administration and Technical Assistance:

- Administer the DWSRF program and provide technical assistance to public water systems

2% Small System Technical Assistance:

- Provide technical assistance to small systems serving no more than 10,000 people

10% State Program Management**:

- Administer the state PWSS program
- Administer and provide technical assistance through source water protection programs
- Develop and implement a capacity development strategy and/or operator certification program

15% Local Assistance and Other State Programs***:

- Delineate and assess source water protection areas
- Provide loans to systems to acquire land or conservation easements
- Provide loans to systems to assist in voluntary, incentive-based source water protection measures
- Make expenditures to establish and implement wellhead protection programs
- Provide technical or financial assistance to systems as part of a capacity development strategy

* These set-aside percentages are the maximums of the federal grant that can be taken, but each state has the discretion as to how much to set aside (up to the allowed amount)

** States must provide a dollar-for-dollar match for these expenditures

*** No more than 10% per activity per capitalization grant



State Agencies that Manage DWSRF Programs

EPA Region 1

Connecticut Department of Public Health
Connecticut Department of Environmental Protection
Connecticut Office of the Treasurer
Maine Department of Human Services
Maine Municipal Bond Bank
Massachusetts Water Pollution Abatement Trust
Massachusetts Division of Municipal Services
Massachusetts Division of Watershed Management/Drinking Water Program
New Hampshire Department of Environmental Services
Rhode Island Clean Water Finance Agency
Rhode Island Department of Health
Vermont Water Supply Division
Vermont Facilities Engineering Division

EPA Region 2

New Jersey Department of Environmental Protection
New Jersey Environmental Infrastructure Trust
New York State Department of Health
New York State Environmental Facilities Corporation
Puerto Rico Department of Health
Government Development Bank for Puerto Rico/Puerto Rico Infrastructure Financing Authority

EPA Region 3

Delaware Department of Health and Social Services
Delaware Department of Natural Resources and Environmental Control
Maryland Water Quality Financing Administration
Maryland Water Management Administration
Pennsylvania Infrastructure Investment Authority (PENNVEST)
Pennsylvania Department of Environmental Protection
Virginia Department of Health – Office of Drinking Water
Virginia Resources Authority
West Virginia Department of Health and Human Resources
West Virginia Water Development Authority

EPA Region 4

Alabama Department of Environmental Management
Florida Department of Environmental Protection
Georgia Environmental Facilities Authority
Georgia Environmental Protection Division
Kentucky Infrastructure Authority
Kentucky Division of Water, Drinking Water Branch,
Kentucky Environmental and Public Protection Cabinet
Mississippi State Department of Health
Mississippi Department of Environmental Quality
Mississippi State Tax Commission
North Carolina Department of Environment and Natural Resources
South Carolina Department of Health and Environmental Control
South Carolina Budget and Control Board
Tennessee Department of Environment and Conservation
Tennessee Comptroller of the Treasury

EPA Region 5

Illinois Environmental Protection Agency
Indiana Finance Authority
Indiana Department of Environmental Management
Michigan Department of Environmental Quality
Michigan Municipal Bond Authority
Minnesota Public Facilities Authority
Minnesota Department of Health
Ohio Environmental Protection Agency
Ohio Water Development Authority
Wisconsin Department of Natural Resources
Wisconsin Department of Administration

Note: Lead agency denoted in italics

EPA Region 6

Arkansas Natural Resources Commission
Arkansas Department of Health
Louisiana Department of Health and Hospitals
Louisiana Department of Environmental Quality
New Mexico Finance Authority
New Mexico Environment Department
Oklahoma Department of Environmental Quality
Oklahoma Water Resources Board
Texas Water Development Board
Texas Commission on Environmental Quality

EPA Region 7

Iowa Department of Natural Resources
Iowa Finance Authority
Kansas Department of Health and Environment
Kansas Department of Administration
Kansas Development Finance Authority
Missouri Department of Natural Resources
Nebraska Department of Environmental Quality

EPA Region 8

Colorado Water Resources and Power Development Authority
Colorado Water Quality Control Division
Colorado Department of Local Affairs – Division of Local Government
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
North Dakota Department of Health
North Dakota Public Finance Authority
South Dakota Department of Environment and Natural Resources
Utah Department of Environmental Quality – Division of Drinking Water
Wyoming Office of State Lands and Investments
Wyoming Department of Environmental Quality
Wyoming Water Development Office

Note: Lead agency denoted in italics

At the November 2005 Council of Infrastructure Finance Authorities meeting in Chicago, Illinois, the DWSRF presented its first awards for Recognition for Sustainable Public Health. This award recognizes one state in each EPA region that has an outstanding DWSRF program and has implemented innovative practices that have furthered the program's public health goals. These awards will be given biennially. The 2005 winners are:

- Region 1 – Maine
- Region 2 – New Jersey
- Region 3 – Pennsylvania
- Region 4 – Mississippi
- Region 5 – Minnesota
- Region 6 – Arkansas
- Region 7 – Kansas
- Region 8 – South Dakota
- Region 9 – Nevada
- Region 10 – Washington

EPA Region 9

Arizona Water Infrastructure Finance Authority
California Department of Health Services
Hawaii Department of Health
Hawaii Safe Drinking Water Branch
Hawaii Wastewater Branch
Nevada Division of Environmental Protection
Nevada Drinking Water State Revolving Loan Fund
Department of Conservation and Natural Resources

EPA Region 10

Alaska Department of Environmental Conservation
Alaska Department of Environmental Conservation/Division of Environmental Health
Idaho Department of Environmental Quality
Oregon Department of Human Services
Oregon Economic and Community Development Department
Oregon Department of Environmental Quality
Washington State Department of Health

Powerful Tools to Protect Public Health



Characterizing the DWSRF simply as a source of funding grossly understates the extent of its impact in protecting public health. The DWSRF is not solely—or even primarily—a banking program. Rather, the DWSRF offers states a powerful, multifaceted suite of tools designed to advance the public health objectives of SDWA.

The value of the DWSRF as a financing tool is very much in evidence in the case studies and data provided throughout this annual report. What makes the DWSRF unique is the innovative use of targeted set-asides that address some of the key underlying conditions that affect drinking water systems’ abilities to protect public health (see Exhibit 3). States elect to “set aside” those funds (from zero percent to

the maximum allowable percentage) from the federal capitalization grant for other supportive public health purposes to protect drinking water quality (see the number of systems assisted in Exhibit 4). The DWSRF set-asides provide states with the tools they need to create a more sustainable drinking water sector state-wide by improving system management, enhancing the technical skills of system operators, increasing efficiency, and improving source water protection. In effect, state DWSRF programs have the ability to address public health protection in two critical ways: they provide an accessible and affordable source of financing for necessary infrastructure improvements, and they address underlying issues that impact a system’s institutional capabilities.



The set-asides include:

Administration and Technical Assistance (4%)

Almost every state sets aside some portion of its annual DWSRF allotment to administer its DWSRF program and to provide technical assistance to PWSs.

Small System Technical Assistance (2%)

All but two states have set aside up to 2% of their annual DWSRF allotment to provide technical assistance to water systems that serve 10,000 or fewer people. Activities paid for with these funds have included planning grants to small systems, visits from circuit riders, and special small system training.

State Program Management (10%)

This set-aside allows states to use up to 10% of their annual allotment to develop and implement their capacity development and operator certification programs, administer their source water protection program (which includes providing technical assistance to prevent contamination of sources), or fund a portion of their PWSS program.

Local Assistance and Other State Programs (15%)

States may use up to 15% of their annual allotments to fund a variety of activities and assistance associated with source water protection, wellhead protection, and capacity development.

EXHIBIT 3

Cumulative DWSRF Set-aside Spending 1997-2005

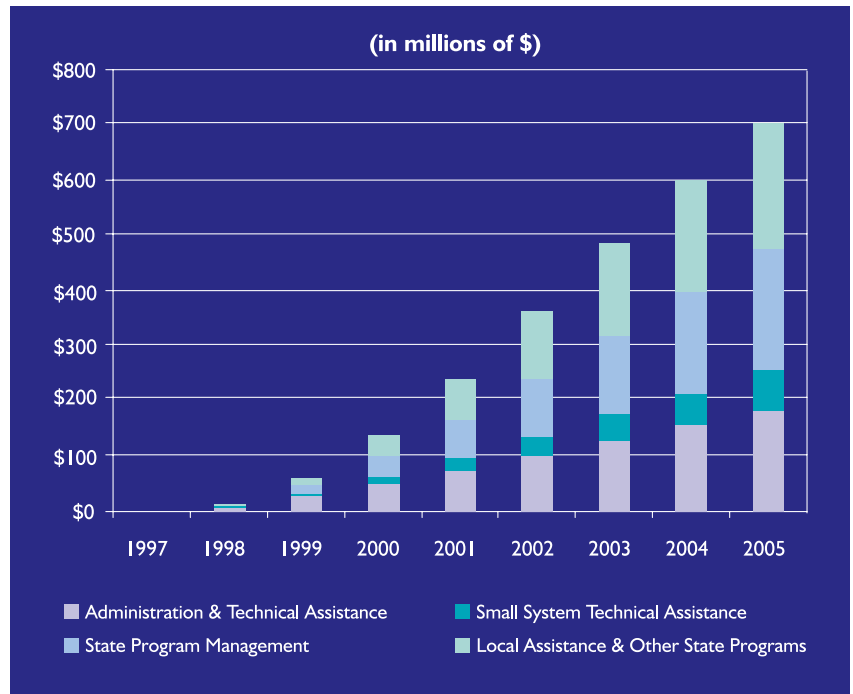
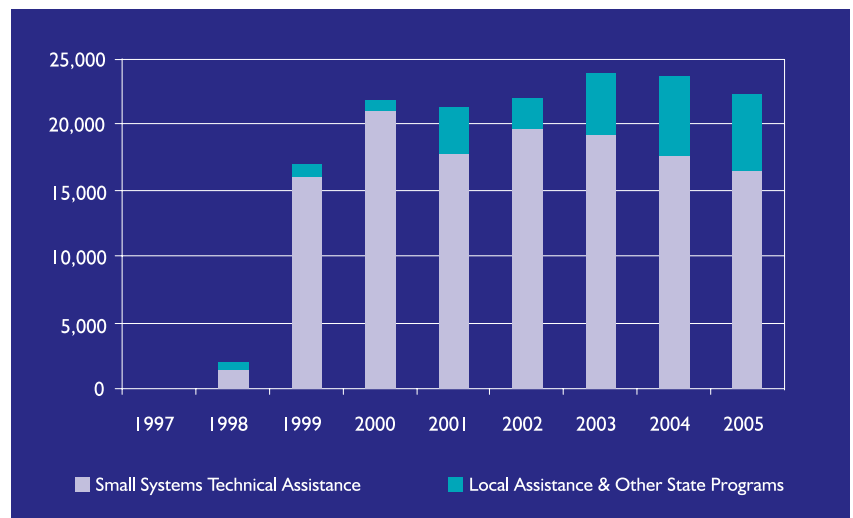


EXHIBIT 4

Number of Systems Receiving Set-aside Assistance



“The favorable interest rates of the DWSRF mean that we can do projects even in rural areas where modest income can be a barrier to needed improvements.” —Mike Duffalo, borrower, Indiana County, PA

Accountability and Effectiveness

EPA and the states work together to ensure complete program accountability and the efficient and effective use of public resources. EPA's role is to provide support and oversight. Staff members from headquarters and the regions work closely with state program staff to ensure all program requirements are met. Annual oversight in the form of program reviews ensures each program's financial integrity and performance. The Agency also provides a broad range of support to state programs.

States are eligible to receive annual capitalization grants from funds appropriated by Congress (see Exhibit 5 for details on the funding process). Each state's grant allotment is proportional to the total state need identified in the most recent

national survey and assessment of drinking water infrastructure needs. These surveys are conducted every 4 years, most recently in 2003. Before receiving a grant, a state must agree to deposit matching funds equal to 20% of its grant into the state revolving loan fund. The federal government has provided \$6.6 billion in capitalization grants since the DWSRF program's inception.

In order to receive a capitalization grant, a state must show EPA that it has the ability to manage the program and that it will comply with the statutes and regulations applicable to it. The state must agree to deposit all program funds, except funds used for set-asides, into its DWSRF and must agree to a timeline for providing assistance. The state also must agree to use generally accepted accounting principles and to conduct audits in accordance with the Single Audit Act, as required by the Office of Management and Budget. As a best management practice, EPA encourages each state to conduct independent audits of its DWSRF program to ensure the fund's financial integrity.

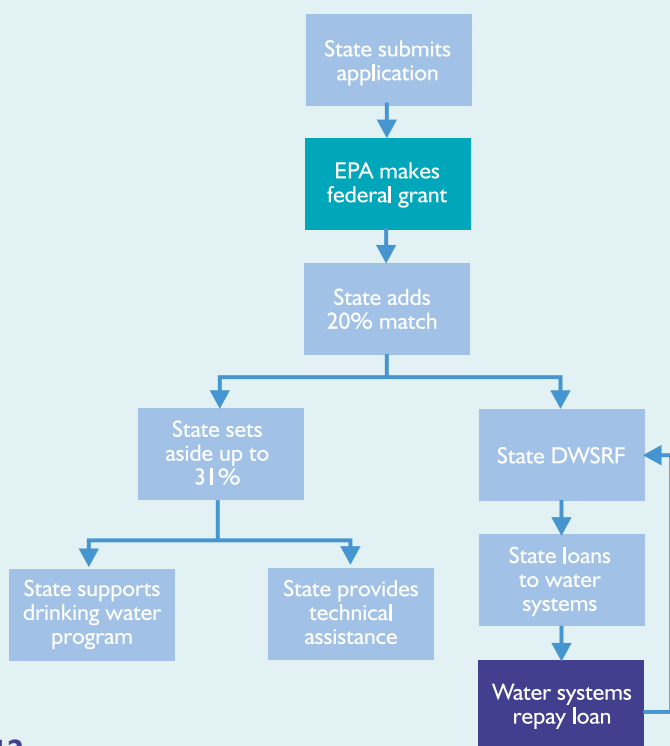
States must meet requirements related to state capacity development and operator certification programs or risk being subject to withholdings of 20% of their DWSRF grant funds. To date, all states have met these program requirements, and none has been subject to grant withholding.

Each state also is required to develop an annual Intended Use Plan (IUP) that describes how program funds will be used. The IUP must include a comprehensive list of eligible infrastructure projects and a list of the highest priority projects expected to receive funding in that year. Details of the IUP and priority list depend on how the state has designed its DWSRF program and on the criteria the state uses to rank projects. States must give priority to projects that:

- ▶ Address the most serious risks to public health.

EXHIBIT 5

DWSRF Funding Process



- ▶ Are necessary to ensure system can meet SDWA’s drinking water health-based standards.
- ▶ Assist systems most in need on a per-household basis.

In addition, some states give bonus points for other criteria such as water efficiency, security needs, consolidation, and restructuring.

The law allows states to make loans for the eligible projects of publicly owned, privately owned, and nonprofit community water systems (CWSs) and nonprofit non-community water systems. Entities that will create a new CWS to address a public health problem caused by unsafe drinking water sources also can receive assistance. There are five basic categories of eligible projects:

- ▶ **Treatment:** Projects to continue to meet drinking water health-based standards for contaminants that cause acute and chronic health effects.
- ▶ **Transmission and Distribution:** Projects to install or replace transmission and distribution mains, pumps, and other distribution system infrastructure.
- ▶ **Source:** Projects to rehabilitate wells or develop new sources to replace contaminated sources.
- ▶ **Storage:** Projects to install or improve eligible storage facilities.
- ▶ **Consolidation:** Projects to consolidate water systems are eligible (for instance, if a water system has a contaminated source or if a system is unable to maintain technical, managerial, or financial capacity).

Items specifically excluded from DWSRF funding are:

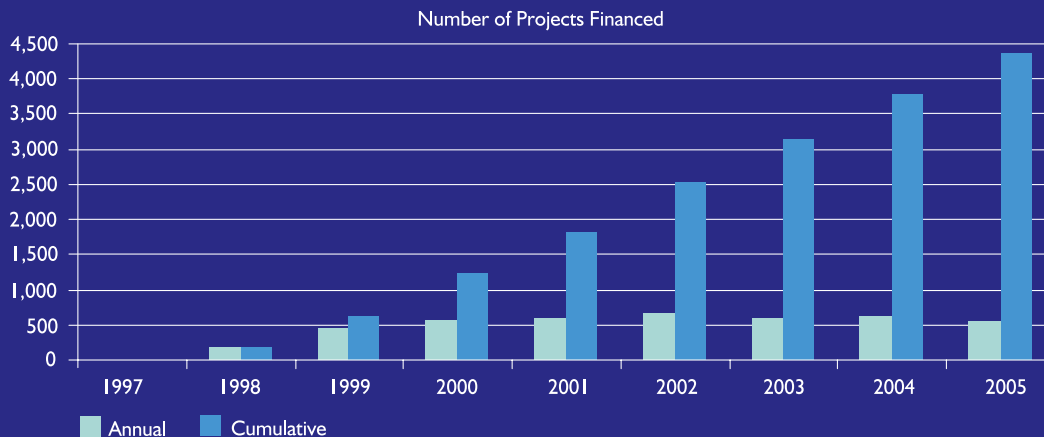
- ▶ Expenditures for monitoring, operations, and maintenance.
- ▶ Projects whose primary purpose is to facilitate growth.
- ▶ Projects to construct or rehabilitate dams and reservoirs (unless the reservoir is for finished water or part of the treatment process).
- ▶ Projects to obtain water rights (unless they are owned by a system being purchased through consolidation).
- ▶ Projects needed primarily for fire protection.

Once a state receives its grant, it can set aside up to 31% for Administration and Technical Assistance (4% maximum), Small System Technical Assistance (2%), State Program Management (10%), and Local Assistance and Other State Programs (15%). States must match funds reserved under the 10% State Program Management set-aside dollar-for-dollar.

States use their capitalization grant allotments, minus set-asides, to finance projects from the IUP. In 2005, DWSRF programs financed 582 projects totaling \$1.6 billion (see Exhibit 6). Principal and interest payments from DWSRF loan recipients flow back into the DWSRF, where they become available for new loans.

EXHIBIT 6

DWSRFs Financed 4,378 Projects: 1997-2005



2005 Focus – Defining Program Benefits



During 2005, EPA and the states worked together to refine the DWSRF programs' data classification and reporting system for projects that receive DWSRF financial assistance. As a result, program managers will be better able to define and articulate the program's many benefits.

The DWSRF was established to improve public health protection, in part, by providing financial assistance for projects that facilitate meeting drinking water health-based standards. These projects can take several forms. For example:

- ▶ A system that is failing to meet drinking water health-based standards and poses an immediate threat to public health can undertake a DWSRF project that helps the system meet all applicable standards. Paying for projects of this type is a critical part of the DWSRF program.
- ▶ A system that is meeting all drinking water health-based standards can use DWSRF financial assistance to make improvements or upgrades that enable it to continue to meet all of these standards.
- ▶ A state program can provide DWSRF financial assistance to systems that must make improvements to meet new drinking water health-based standards.

Early in the DWSRF program, states had the option of categorizing projects as “return to compliance.” While useful, this category did not provide enough detail for program managers to fully capture the purpose and benefit of each project. To address that problem, the states and EPA developed and implemented a new data classification and reporting approach in which states assign projects to one of four categories:

- ▶ Financial assistance to meet drinking water health-based standards
- ▶ Financial assistance to continue to meet drinking water health-based standards
- ▶ Financial assistance to meet new drinking water health-based standards
- ▶ Other



These categories make possible a more accurate representation of the DWSRF program, and they help states and EPA better understand—and describe—how the program is helping systems and protecting public health.

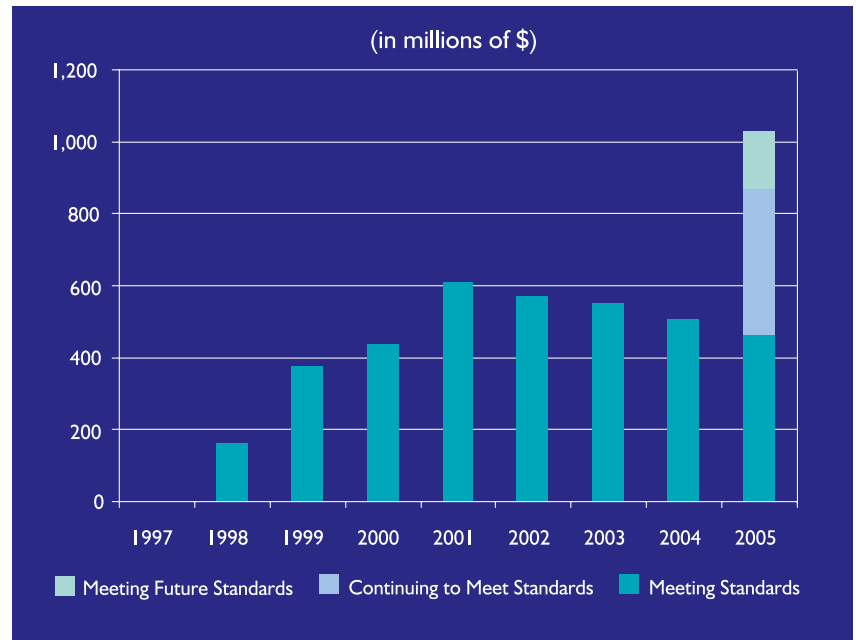
By the end of November 2005, 48 states had voluntarily provided data, using these new categories, for all loans approved in 2005 (see Exhibit 7). Twenty-five of the states had also re-categorized loans awarded throughout the history of the program. These new data provide a compelling, single-year snapshot of an innovative program making great strides in protecting public health by helping systems meet all drinking water health-based standards. Of the more than \$1.4 billion in financial assistance awarded in 2005, approximately:

- ▶ 30% will help systems meet drinking water health-based standards
- ▶ 36% will help systems continue to meet drinking water health-based standards
- ▶ 13% will help systems meet new drinking water health-based standards

The remaining 21% of the financial assistance will be used to help systems meet state drinking water health-based standards or to otherwise further SDWA’s public health protection objectives (see Exhibit 8).

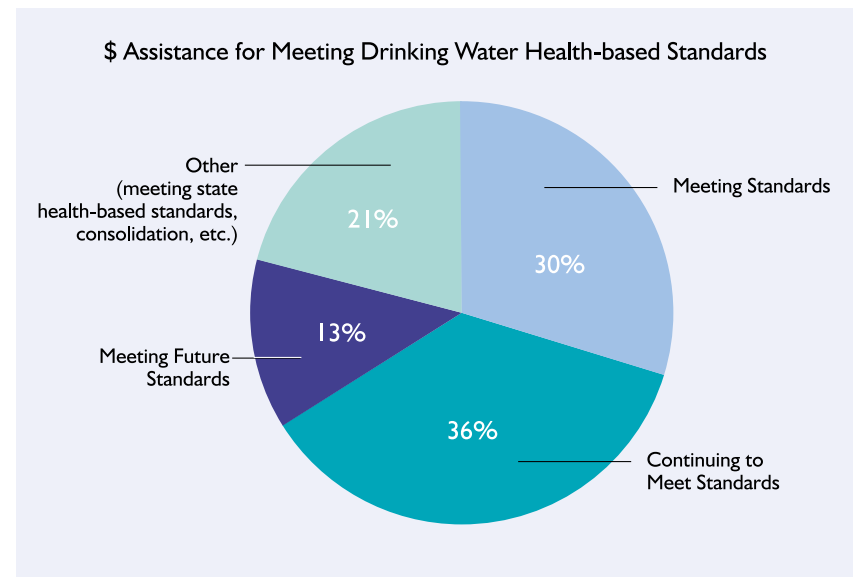
In 2006, the states and EPA will continue refining the program’s data classification and reporting system. The goal is to further improve their ability to identify how the program is helping systems meet drinking water health-based standards. As part of this effort, states will continue to look at—and reclassify if necessary—every project since the program’s inception that has received DWSRF assistance.

EXHIBIT 7 Annual DWSRF Funds Spent on Meeting Drinking Water Health-based Standards



Note: Until 2005, only categorization available was “Return to Compliance.”

EXHIBIT 8 2005 Breakdown of Purpose for Assistance to Meet Drinking Water Health-based Standards



“As a result of the [DWSRF] program, we now provide safer drinking water to over 2,000 people. We would not have gotten this far without the Drinking Water State Revolving Fund.” —Stan Bullard, borrower, Camp Verde Water System, AZ

Four Pillars of Sustainability



In September 2002, EPA released its study on the nation's infrastructure financing needs. *The Clean Water and Drinking Water Infrastructure Gap Analysis*, commonly referred to as the "Gap Report," identified a gap between projected clean water and drinking water investment needs over the twenty-year period from 2000-2019 and current levels of spending.

The report noted that, if investments in water and wastewater systems remain flat and do not increase, a "gap" will occur. Under a flat or "no revenue growth" scenario, the report estimated a drinking water capital payment gap of \$102 billion. The operations and maintenance (O&M) gap was estimated at \$161 billion for drinking water. "Revenue growth" scenarios, which assumed that spending and investments would increase by 3% per year over and above inflation, indicated that the capital and O&M gaps for drinking water dropped to \$45 billion and \$0, respectively.

After much deliberation, and taking into account input from a public forum convened by EPA's Administrator in January 2003, the Agency developed a sustainable infrastructure strategy based on the "four pillars" of better management, full-cost pricing, water efficiency, and watershed approaches. By embracing the Four Pillars, EPA recognized that the then-current financing challenges necessitated a multi-faceted approach to managing and

sustaining the nation's water infrastructure assets. It was necessary to address both the supply and the demand problems in order to better optimize available resources.

Better management, the first pillar, comprises practices such as asset management, environmental management systems, consolidation or collaboration between water systems, and public-private partnerships that offer significant savings.

The second pillar, full-cost pricing, is an important means of ensuring that sufficient resources or revenues are available to adequately maintain critical water system infrastructure. Pricing can also be a tool for encouraging efficient water use.

Efficient water use, the third pillar, provides an opportunity to avoid some capital expenditures, discourage unnecessary water use, and maintain the financial integrity of a system. Options available to promote efficient use include metering, water reuse, water-saving appliances, landscaping, and public education.

Watershed approaches, the fourth pillar, offer the benefits of systemic, integrated, and cost-effective management to protect and maintain water supply and quality through source water protection—including land acquisition and collaborative partnerships.

The Four Pillars of Sustainable Infrastructure offer tremendous opportunities for reducing the investment gap over time. They can supplement and complement the existing DWSRF program. DWSRF, in turn, is a powerful tool for EPA and states to create incentives and provide resources to help water systems implement the Four Pillars while continuing to provide critical financial support to keep drinking water affordable in communities across the country. Set-asides, which are designed to work with state Capacity Development Programs, are a fully integrated package of flexible and effective tools that states can use to educate their water system operators about sustainable infrastructure practices and

provide technical assistance with the aim of capturing financial savings and operational efficiencies.

In 2005, EPA expanded its effort to use the flexibilities and resources of the DWSRF to promote the Four Pillars approach. EPA sees DWSRF programs, in concert with other EPA-state voluntary partnership programs such as Capacity Development and Source Water Protection, continuing to play a leading role in providing drinking water systems access to affordable capital and to information on changing system management in order to meet their local infrastructure needs.

The DWSRF programs promote, and can continue to promote, the Four Pillars in many ways.

Better Management

State DWSRF programs can use their loan funds to promote better management by providing bonus points to systems on their priority lists that have implemented or will implement an asset management system and/or environmental management system. If built into a system's proposed project, the costs of devices and technologies needed to improve water system management are eligible for DWSRF financing. States can provide DWSRF loans to consolidate or regionalize drinking water systems. DWSRF programs can also use various set-asides to train, educate, and provide technical assistance to water system operators wishing to design and implement asset management, environmental management, or water system partnership programs.

Full-Cost Pricing

State DWSRF programs can promote full-cost pricing by awarding priority list points to systems that will implement full-cost pricing in order to improve their financial capacity (and to repay the loan). In addition, states can use the set-asides to develop programs, such as technical assistance and operator training, to help system operators understand and implement full-cost pricing schemes.

Water Efficiency

Many states already require water conservation plans as part of their DWSRF application process, while other states provide bonus points to systems that have implemented water efficiency measures or have built water efficiency measures into their proposed capital projects. To promote water efficiency, DWSRF loans can fund efficiency improvements such as water meters, water efficient devices, and dual pipe distribution systems. States can use their DWSRF set-aside resources to provide technical assistance and education directly to water systems. Assistance could include help performing water loss audits, detecting leaks, designing local ordinances, educating the public, and monitoring drought conditions.

Watershed Approaches

The key aspect of the watershed approaches for drinking water systems is source water protection, both for surface water sources and for ground water sources (also called wellhead protection). Again, DWSRF programs are promoting the watershed approach using both loans and set-asides. Systems can receive loans to acquire land around their source waters that will allow them to reduce and control contamination risks. In addition, systems can use loan funding to purchase capital, such as fences and security systems, to protect source waters. States have been using set-asides to help water systems map the watersheds of their source waters, identifying both threats and potentials for improving protection. States can use set-asides to help systems educate and partner with the residents and businesses in the watersheds of their source waters. There are specific wellhead protection and source water protection portions of the set-asides that allow states to provide special loans and assistance for these purposes.

Achievements in National Drinking Water Financing

COULEE DAM, WA

The town of Coulee Dam received a \$1.6 million loan from Washington's DWSRF to upgrade its unfiltered surface water supply system and meet the drinking water health-based standards of the Surface Water Treatment Rule. The town used its loan to construct a slow sand filtration plant, which will guarantee the town high-quality and safe drinking water and remove the public health risks the town previously faced.

1,100 people served

TALENT, OR

The City of Talent's drinking water sources were once described as "the worst in Oregon" due in part to a serious cryptosporidiosis outbreak in 1992. With a \$2 million loan from Oregon's DWSRF that included disadvantaged assistance, the City was able to begin purchasing treated water from the Medford Water Commission to resolve its chronic public health issues.

5,050 people served

WASILLA, AK

This small city outside of Anchorage was served by a ground water well that was high in nitrate and declining in productivity. Alaska's DWSRF awarded the City a \$3 million loan to bring a second source online. The loan covered the costs of planning, drilling the new well, installing transmission lines, adding a storage reservoir, and installing new treatment. The new well is now the City's primary source and is nitrate free.

5,000 people served

SEELEY LAKE WATER DISTRICT, MT

The Seeley Lake Water District was in significant noncompliance with the Surface Water Treatment Rule since the early 1990s and had been under an Administrative Order since 1994. The system received a \$1.3 million loan from Montana's DWSRF to construct a new surface water treatment plant and raw water intake. The completion of the new facility, serving 1,900 residents, ensured that the system met all applicable drinking water health-based standards and the Administrative Order was closed out.

1,900 people served

MOBRIDGE, SD

The Missouri River supplies Moberge's 3,500 residents with drinking water, but the City's 50-year-old water treatment plant had inadequate backwash facilities, sedimentation capability, and control equipment. South Dakota's DWSRF loaned the City \$1.32 million to upgrade its water treatment facility and ensure a reliable drinking water supply for its residents.

3,500 people served

JACKSON, NE

The Village of Jackson is an economically disadvantaged community of 230 people in northeastern Nebraska. To meet the drinking water health-based standards for radium-226, radium-228, and Gross Alpha Particle Activity, the ground water system in Jackson received a \$250,000 loan from Nebraska's DWSRF with \$125,000 of principal forgiveness. This loan was used to install a new well in a different aquifer, build a water treatment plant for iron removal, and make needed improvements to its distribution system. With this assistance, Jackson was able to afford the project.

230 people served

FORT APACHE INDIAN RESERVATION, AZ

The Fort Apache Indian Reservation is home to 14,000 members of the White Mountain Apache Tribe. To address frequent housing shortages, the White Mountain Apache Housing Authority designed the Apache Dawn Housing Project. The project received a \$3 million disadvantaged community loan from the DWSRF to finance construction of a drinking water treatment plant that will provide safe drinking water to the residents of the housing project.

14,000 people served

CLARA CITY, MN

Clara City, a town of 1,300, was subject to an enforcement action by the State's drinking water program due to elevated nitrate/nitrite levels that were first detected in 1998. The City received a \$3.1 million loan from Minnesota's DWSRF with \$500,000 of principal forgiveness to build a new well, reverse osmosis treatment plant, storage tower, and water main, which resolved the city's nitrate/nitrite issues.

1,300 people served

OSHKOSH, WI

The City of Oshkosh was served by a 100-year-old water system that was vulnerable to microbial contaminants. Wisconsin's DWSRF loaned the City \$25.6 million to build a new water treatment plant, and the 55,000 residents of Oshkosh now have a safe and reliable source of drinking water.

55,000 people served

CAPE MAY, NJ

Cape May City received its drinking water from the Cohansey Aquifer, which was being threatened by saltwater intrusion because of demand on the aquifer. The New Jersey DWSRF awarded a \$1.3 million loan to the City to install a desalination plant, which allowed the City to draw from the brackish Sand Aquifer, preventing excessive drawdown from the Cohansey Aquifer.

12,880 people served

MOUNT PLEASANT, IA

Radionuclides, such as radium, are man-made or natural elements that emit radiation. Mount Pleasant Municipal Utilities struggled with high levels of radium. The system received a \$5.9 million loan from Iowa's DWSRF to install a new treatment system that allowed the water system to meet the drinking water health-based standards for radium.

8,000 people served

INDIANA COUNTY, PA

The Indiana County Municipal Services Authority (ICMSA) operates in rural, western Pennsylvania where small, non-viable water systems consistently cause public health problems. An \$11.8 million DWSRF loan from Pennsylvania will allow ICMSA to consolidate 7 systems, 2 of which were in violation of the Surface Water Treatment Rule; bring a new surface water source online; and eliminate the public health threats that plagued this area.

7,181 people served

LAMAR COUNTY, GA

Most residents of this rural county south of Atlanta receive drinking water from private wells. In 2001, wells serving 1,300 people became contaminated with fecal coliform bacteria, causing severe public health problems. Georgia's DWSRF awarded a nearby community water system \$3.5 million in interest-free disadvantaged community loans (with \$300,000 of principal forgiveness) to install the mains, meters, and hydrants needed to extend its service to the affected residents.

1,300 people served

GUAYAMA, PR

The water system serving the city of Guayama, Puerto Rico was not meeting the drinking water health based standards in SDWA and did not have sufficient capacity to supply the area's demand. The system received a \$2.9 million loan to build two new distribution tanks with pumping stations and new distribution lines to ensure adequate supply and meet all applicable drinking water standards. The area now enjoys reliable water service and consistently safe drinking water.

5,575 people served

Achievements and Innovation through DWSRF Set-asides

HAYDEN, ID

The Rathdrum Prairie Aquifer is a sole source aquifer that serves 450,000 people in Idaho and Washington. Currently, aquifer protection is accomplished on a town-by-town basis with mixed results. To promote aquifer protection techniques, the Panhandle Health District, along with local, state, and federal partners, is building a new center that showcases best management practices. The 7-acre site will demonstrate rainwater recovery, native forest and native prairie restoration, bioretention basins, bioswales, xeriscaping, and permeable paver technology. The Idaho DWSRF contributed \$72,000 from the Local Assistance Set-aside, with a 40% local match, to the planning phase of the project.

MINNESOTA

The Minnesota Department of Health uses resources from the Local Assistance DWSRF Set-aside to provide wellhead protection assistance to systems serving fewer than 3,300 people. To date, the State has helped 150 communities develop wellhead protection plans.

NEBRASKA

Nebraska uses its DWSRF program in several ways to encourage water efficiency. To receive DWSRF funding in Nebraska, a system must have metered connections or include meter installation in the proposed project. Disadvantaged systems are eligible for additional financial assistance if they have average metered water use of less than 100 gallons per person per day. Nebraska also uses its Small System Technical Assistance Set-aside to assess the infrastructure of systems serving 10,000 or fewer persons.

NEW MEXICO

New Mexico uses its State Program Management Set-aside to supplement its operator certification program. Using these funds, the State has developed a database to track public water supply compliance with State operator certification regulations. The State also funds classroom operator training held throughout the State and has issued a contract to develop curricular material and instructor's guides for train-the-trainer workshops to improve skills of volunteer peer instructors.

INDIANA

The Indiana Department of Environmental Management is using \$400,000 from Indiana's DWSRF State Program Management Set-aside to assist systems that are at risk for failing to meet drinking water health-based standards for radionuclide and arsenic contamination. The state provides professional services, such as planning and engineering design, to help these systems identify solutions that allow them to meet applicable drinking water health-based standards and put them in position to seek DWSRF loans if necessary.

MASSACHUSETTS

The Massachusetts Water Loss Prevention Grant Program was established in 2005 with \$800,000 in resources from the state's Local Assistance DWSRF Set-aside. The program reduces water wastage that unnecessarily depletes aquifers by helping systems complete water audits, leak detection, or public education. In its first year, the program was able to help 17 communities improve their water efficiency.

NEW JERSEY

Small systems often have difficulty completing the planning and design requirements of the DWSRF loan process because of the high costs of engineering services. The New Jersey Department of Environmental Protection began using resources from its Small Systems Technical Assistance Set-aside to contract with the New Jersey Water Association to provide engineering services to small systems. Several systems have already received assistance to replace their undersized water mains and to upgrade their treatment plants.

POTS NETS, DE

The 6,150 residents of the Pots Nets coastal communities depend on the Columbia Aquifer for their drinking water. Routine compliance monitoring detected elevated mercury levels in two community wells. Worried for public health and unsure of the cause or extent of the problem, the communities turned to Delaware's DWSRF program. Using \$500,000 from the Local Assistance Set-aside, state officials assembled a team of experts to investigate the nature of the contamination. With the discovery that the contamination was limited to the two affected wells, the system was able to abandon the polluted wells and rely on its other wells in order to protect public health.

OKLAHOMA

Oklahoma uses its DWSRF Local Assistance Set-aside to help small systems develop source water protection strategies. Contractors assist communities in locating potential sources of pollution, developing contingency plans, and implementing management practices and controls to protect drinking water sources.

FLORIDA

Florida uses its 2 percent Small System Technical Assistance Set-aside for a contract with the Florida Rural Water Association (FRWA) to provide water audits and leak detection. Florida issues consumptive use permits, which limit the amount of water a utility is allowed to withdraw from any source. When a system requests an increase in its allowable water use, the water districts generally refer systems to FRWA for a water audit and leak detection. Systems have saved money by avoiding the treatment and pumping costs for water that would have been lost.

DWSRF 2005 Performance Highlights

In 2005, the DWSRF programs continued to succeed in providing water systems with access to the affordable capital needed to protect public health.

Assistance Continues to Grow

By awarding nearly \$1.5 billion in 2005, the DWSRF programs have brought their total awards to \$9.5 billion in less than 10 years (see Exhibit 9).

Funding Critical Projects

In 2005, the DWSRF programs funded drinking water projects critical to public health across the country. As shown in Exhibit 10, the majority of projects included some combination of upgrading and/or replacing drinking water treatment and distribution infrastructure, which are the key water system components for removing (or inactivating) contamination and delivering that safe water to the public. Water

systems also borrowed money to diversify and replace their water sources and to upgrade and replace their treated water storage. Less common, but still critical, was the growing number of water systems borrowing money to acquire land to protect their water sources.

Serving All Communities

The DWSRF programs continue to serve communities of all sizes across the country. Approximately 93% of all funds awarded in 2005 were to publicly owned CWSs. More than half of all loans were made to systems serving no more than 3,300 people (see Exhibit 11). These small systems are often the same ones that have the least access to capital and are the most vulnerable to financial difficulty. Most of the assistance dollars went to larger water systems serving at least 10,000 people, but that is explained by the fact that the size of these systems necessitated larger projects on average.

EXHIBIT 9

DWSRF Cumulative Assistance Reaches \$9.5 Billion in 2005

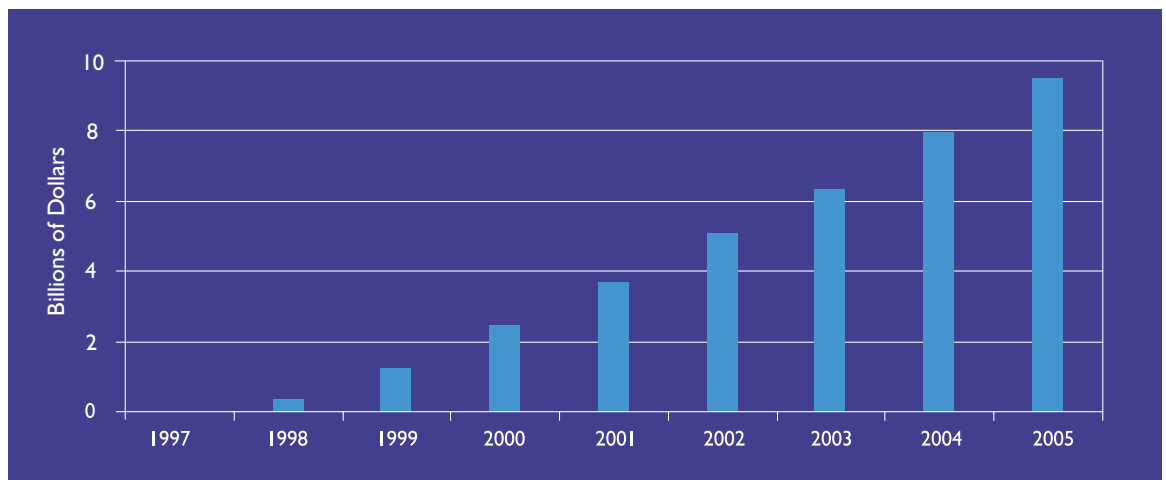


EXHIBIT 10

DWSRF Programs Fund Drinking Water Needs through 2005

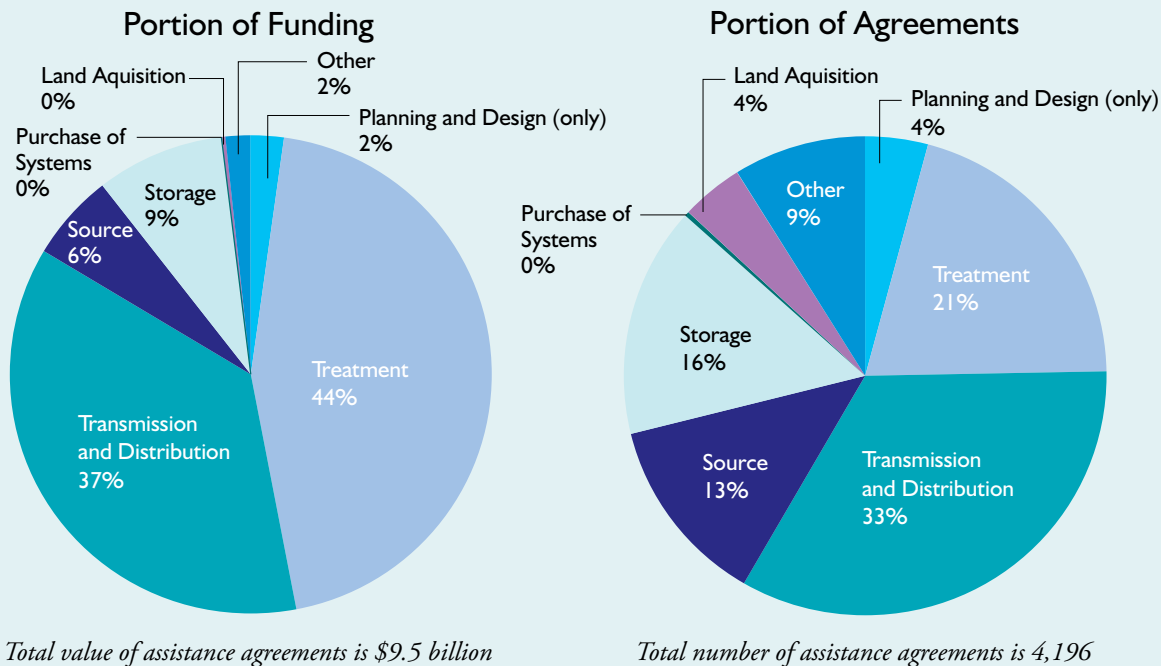


EXHIBIT 11

Communities Served by DWSRFs in 2005 (by population served)

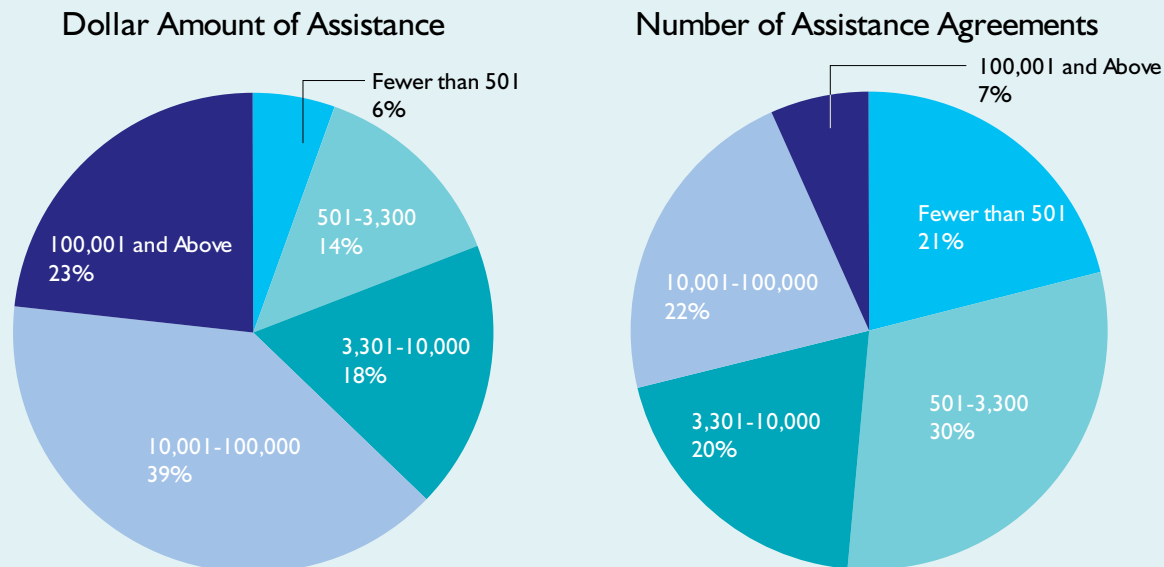
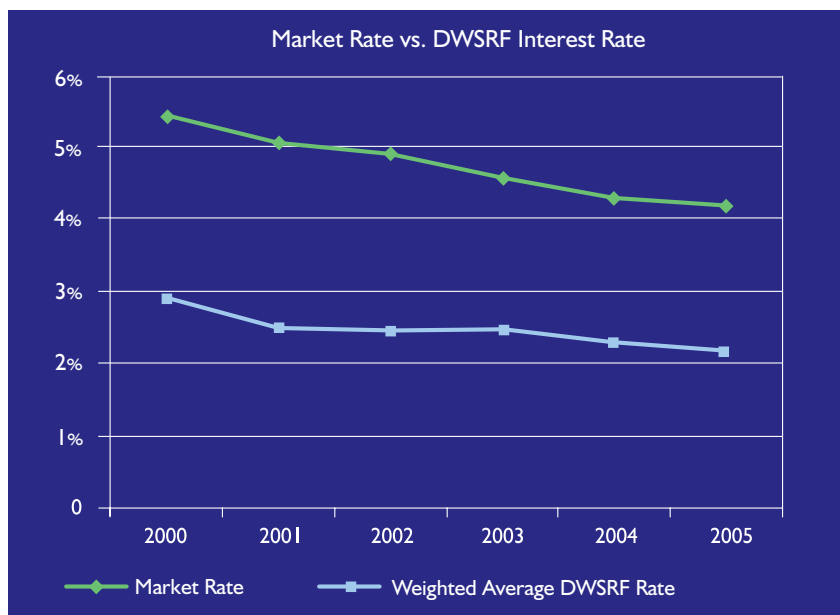


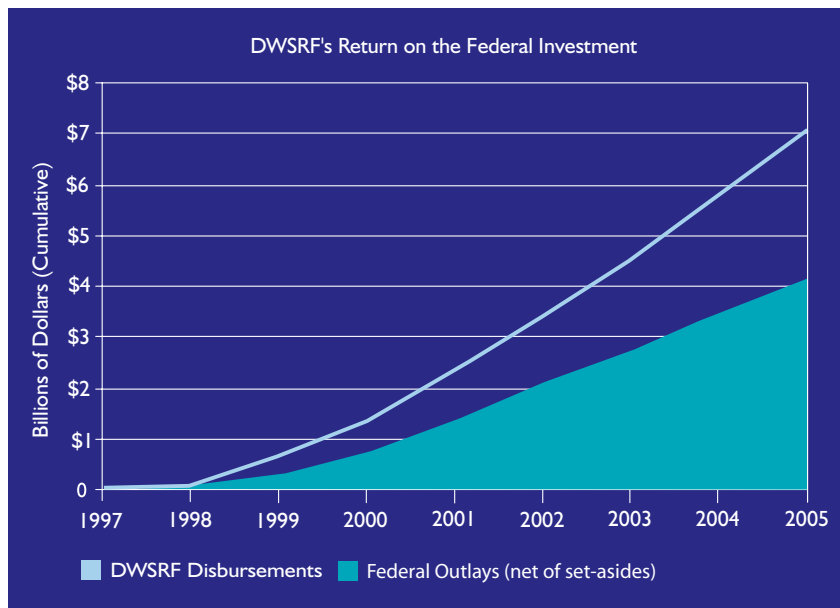
EXHIBIT 12 DWSRF Loans Save Water Systems Money



DWSRF Loans Save Communities Money

As the market interest rate on borrowing money for water infrastructure has dropped over the last 6 years, the average interest rate on the DWSRF has continued to decline (see Exhibit 12). In 2005, water systems could continue to save money by borrowing from the DWSRF programs, which had an average interest rate on 20-year loans hovering just above 2% (on average 2% lower than the market rate).

EXHIBIT 13 DWSRFs Return on the Federal Investment through 2005



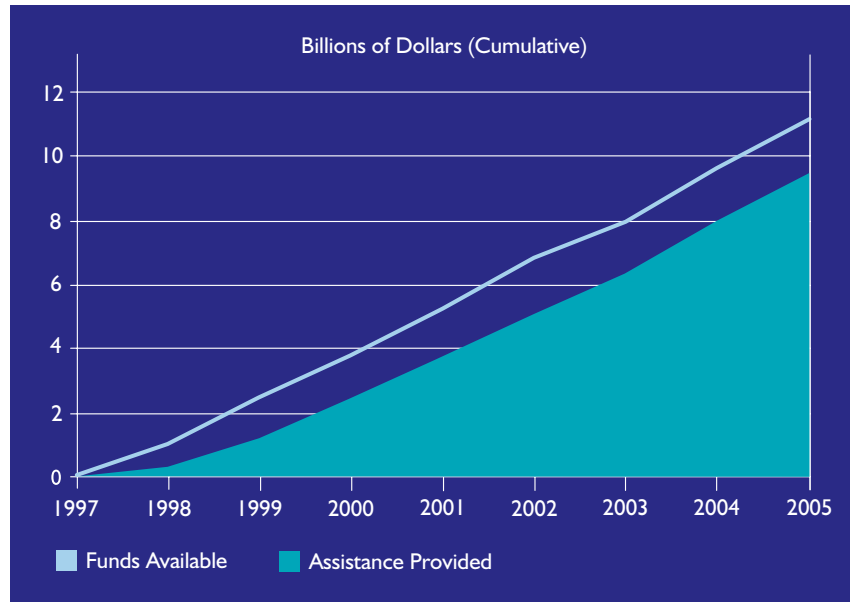
High Return on Federal Investment

Even as a relatively young program, the DWSRF continues to succeed in providing a high return on federal investments since 1997 (see Exhibit 13). The ratio of DWSRF disbursements to federal outlays, 1.7 (meaning that for every \$1 drawn from the Federal Treasury for this program, \$1.70 is available for water system assistance), is growing and will continue to grow in the future as loans are repaid and state loan funds grow. This is particularly impressive since 16% of the federal investment is used for set-asides rather than water system loans.

Available DWSRF Funds Are Quickly Used for New Project Assistance

Due to low interest rates and broad financing eligibilities, DWSRF funds continue to be in high demand (see Exhibit 14). In 2005, 85% of all available funds were committed to new projects. This efficient rate of fund utilization is one reason that the return on federal investment will continue to grow impressively over time.

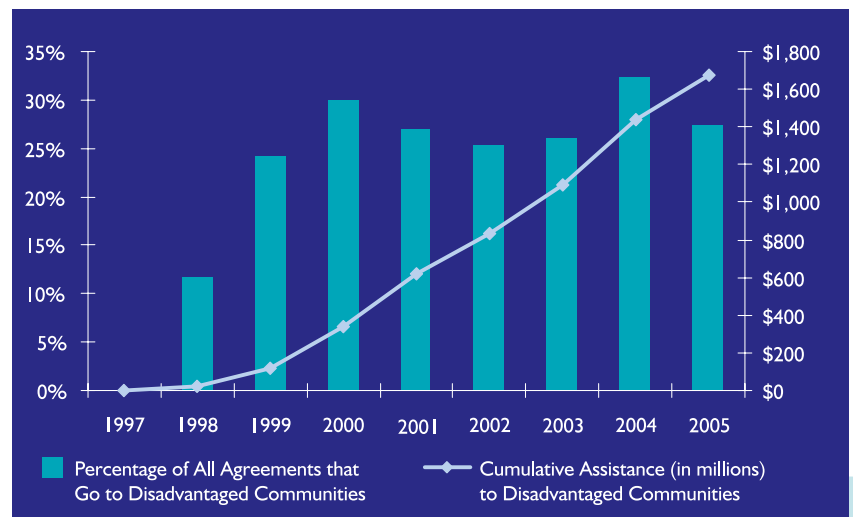
EXHIBIT 14 DWSRF Funds Committed to Projects through 2005



Communities Most in Need Benefit from the DWSRF

Since 2000, at least 28% of all loan agreements have been made with disadvantaged communities (see Exhibit 15). These communities, in particular, often have difficulty accessing capital. One of the key roles of the DWSRF is to help these communities access the affordable capital they need to provide safe drinking water to residents. The DWSRF has a number of special provisions to aid these communities, including negative interest rates, principal forgiveness, and extended loan repayment periods. Since the inception of the program, disadvantaged communities have been able to make more than \$1.6 billion in capital investments because of the DWSRF.

EXHIBIT 15 DWSRF Assistance to Disadvantaged Communities



DWSRF Program 2005 Financial Performance Overview

Forty-three DWSRF programs are independently audited. The remaining 8 programs rely on their Single Audit. The DWSRFs of the 50 states and Puerto Rico are independent entities, each producing its own financial reports and statements. EPA has produced financial statements for the DWSRF program nationally based on data reported by the states to EPA's National Drinking Water Information Management System. For the national DWSRF program (representing all 51 separate DWSRFs), EPA has provided:

- ▶ A Statement of Net Assets
- ▶ A Statement of Revenues, Expenses, and Earnings
- ▶ A Statement of Cash Flow

These statements are best viewed as non-audited, cash-flow-based financial reports. Exhibit 16 showcases some highlights of the 2005 financial statements for the DWSRF programs.

Statement of Net Assets

This statement (Exhibit 17) describes a fund's assets and liabilities as of the end of the fund's fiscal year. Assets include both financial and capital assets. Liabilities include both current and long-term liabilities. The DWSRF assets include grant funds that have been drawn from the federal treasury but do not include total grant awards.

Total assets of the loan funds were \$9.5 billion in 2005, an increase of 16% over 2004.

Outstanding loans account for 62% of the funds' assets. Cash and cash equivalents are an additional 26% of the funds' assets. The funds' liabilities consist of leverage bonds and match bonds. Outstanding leverage bonds increased by 14%, to \$3.4 billion, in 2005. Match bonds were \$285 million in 2005, an increase of 11% over 2004. Most of the \$5.8 billion in net assets are state and federal contributions.

The set-aside funds had total assets of \$6.4 billion in 2005. This is an increase of 5% over 2004. They have no liabilities.

Statement of Revenue, Expenses, and Net Earnings

This statement (Exhibit 18) describes the performance of the funds over the reporting period. Operating revenues of the loan funds increased by \$46 million between 2004 and 2005, an increase of more than 21%. Most of the increase was in interest on fund investments. Operating expenses fell \$23 million to \$126 million. Net non-operating revenue fell by nearly \$100 million because fewer federal funds were taken in 2005 compared to 2004. Total revenue



of the loan fund exceeded total expenses in 2005 by \$889 million, a decline of 3% from 2004.

The operating revenues and expenses of the set-aside funds had minor changes between 2005 and 2004. Small system technical assistance increased \$2 million, or 18%. Grants made under the set-aside programs decreased by \$7 million, or 21%. The federal contribution declined 7% to \$104 million. Revenues exceeded expenses by only \$400,000.

Statement of Cash Flows

This statement (Exhibit 19) provides a detailed accounting of the actual flow of cash into and out of the DWSRF programs. For the loan fund,

loan disbursements to be repaid totaled \$1.2 billion in 2005, a modest increase over 2004. Both cash draws from the federal capitalization grants and state contributions fell (by \$62 million and \$93 million, respectively) because fewer federal funds were taken in 2005 compared to 2004. Gross leveraged bond proceeds fell \$298 million. Overall, cash and cash equivalents increased by \$175 million as compared to an increase of \$463 million in 2004.

Total cash flows for operating expenses were \$200,000 higher in 2005 than 2004. The federal contribution was lower, while the net grants from 1452(k) set-asides were higher.

“The significance of these loans to Indian Country cannot be overstated.”

—Steve Owens, lender, AZ WIFA

EXHIBIT 16

2005 Financial Statement Highlights

Statement of Net Assets

- Total assets increased by \$1.3 billion between 2004 and 2005 (fund is growing even absent of federal grants because operating revenue exceeds operating expenses).
- DWSRF program equity (also called net assets) totals \$5.8 billion.
- Program liabilities increased by \$446.5 million, reflecting the net growth in DWSRF bonds outstanding for state matching funds and leveraged program financing.

Statement of Revenues, Expenses, and Earnings

- Total program revenues exceed expenses by \$889 million, a 3% decrease from 2004.
- Interest earnings from loans and investments totaled more than \$262.4 million.
- Administrative expenses were 10.2% of operating revenues.

Statement of Cash Flows

- Loan principal repayments to DWSRF programs were greater than \$257.5 million.
- Leveraged bond proceeds added \$502.8 million to program cash flow.

EXHIBIT 17**Statement of Net Assets (millions of \$)**

Loan Funds	2004	2005
Assets		
Cash and Cash Equivalents	2,291.3	2,466.1
Debt Service Reserve - Leveraged Bonds	859.7	1,044.6
Loans Outstanding	4,946.2	5,918.7
Unamortized Bond Issuance Expenses	43.0	46.8
Total Assets	8,140.3	9,476.2
Liabilities		
Match Bonds Outstanding	256.7	285.2
Leveraged Bonds Outstanding	3,002.3	3,420.3
Total Liabilities	3,259.0	3,705.5
Net Assets		
Federal Contributions	3,297.0	3,944.0
State Contributions	1,190.0	1,293.7
Transfers - Other SRF Funds	310.1	354.8
Other Net Assets	84.1	178.2
Total Net Assets	4,881.2	5,770.8
Total Liabilities and Net Assets	8,140.3	9,476.2

Set-Aside Funds	2004	2005
Assets		
Cash and Cash Equivalents	1.1	1.5
Loans Outstanding	4.9	4.9
Total Assets	6.1	6.4
Liabilities		
Total Liabilities	0	0
Net Assets		
Federal Contributions	587.7	692.1
Other Net Assets	(581.6)	(685.6)
Total Net Assets	6.1	6.4
Total Liabilities & Net Assets	6.1	6.4

EXHIBIT 18**Statement of Revenues, Expenses, and Earnings (millions of \$)**

Loan Funds	2004	2005
Operating Revenues		
Interest on Fund Investments	67.5	103.1
Interest on DWSRF Loans	148.5	159.2
<i>Total Operating Revenues</i>	215.9	262.3
Operating Expenses		
Bond Interest Expense	116.1	121.7
DWSRF Funds Used for Refunding	31.1	2.1
Amortized Bond Issuance Expense	1.7	2.2
<i>Total Expenses</i>	148.8	126.0
Nonoperating Revenues and Expenses		
Federal Contribution	709.1	647.0
State Contributions	196.6	103.7
Loan Forgiveness Expenses	(45.5)	(42.2)
Transfers from (to) CWSRF	(8.3)	44.7
<i>Total Nonoperating Revenues (Expenses)</i>	851.9	753.1
Increase (decrease) in Net Assets	919.0	889.5
Net Assets		
Beginning of Year	3,962.3	4,881.2
End of Year	4,881.2	5,770.8
Set-Aside Funds	2004	2005
Operating Revenues		
Interest on 1452(k) Loan Account Investments	0.01	0.02
Interest on 1452(k) Loans	0.04	0.03
<i>Total Operating Revenues</i>	0.05	0.06
Operating Expenses		
Administrative Expenses Under the 4% Set-Aside	26.9	26.8
Expenses Under the 2% Set-Aside, Small Systems Technical Assistance	11.4	13.4
Expenses Under the 10% Set-Aside, State Program Management	38.9	38.3
Grants made under the 1452(k) Set-Aside	32.3	25.6
<i>Total Expenses</i>	109.5	104.1
Nonoperating Revenues and Expenses		
Federal Contribution	112.2	104.4
<i>Total Nonoperating Revenues (Expenses)</i>	112.2	104.4
Increase (decrease) in Net Assets	2.8	0.4
Net Assets		
Beginning of Year	3.3	6.1
End of Year	6.1	6.4

EXHIBIT 19**Statement of Cash Flows (millions of \$)**

Loan Funds	2004	2005
Operating Activities		
Cash Draws from Federal Capitalization Grants	709.1	647.0
Contributions from States	196.6	103.7
Loan Disbursements to be Repaid	(1,233.7)	(1,229.5)
Loan Principal Forgiven	(45.5)	(42.2)
Loan Principal Repayments	240.0	257.1
Interest Received on Loans	148.5	159.2
<i>Total Cash Flows from Operating Activities</i>	14.9	(104.8)
Noncapital Financing Activities		
Gross Leveraged Bond Proceeds	800.7	502.8
Bond Issuance Expense	(11.4)	(6.0)
State Match Bond Proceeds	75.4	40.9
Cash Received from Transfers with CWSRF	(8.3)	44.7
Interest Paid on Leveraged and State Match Bonds	(116.1)	(121.7)
DWSRF Funds Used for Refunding	(31.1)	(2.1)
Principal Repayment of Leveraged Bonds	(80.9)	(84.9)
Principal Repayment of State Match Bonds	(13.5)	(12.3)
<i>Net Cash Provided by Noncapital Financing Activities</i>	614.8	361.4
Cash Flows from Capital and Related Financing Activities	0	0
Investing Activities		
Interest Received on Fund Investments	67.5	103.1
Deposits to Debt Service Reserve for Leveraged Bonds	(234.4)	(184.9)
<i>Net Cash Provided by Investing Activities</i>	(167.0)	(81.8)
Net Increase (Decrease) in Cash and Cash Equivalents	462.7	174.8
Beginning Balance - Cash and Cash Equivalents	1,828.6	2,291.3
Ending Balance - Cash and Cash Equivalents	2,291.3	2,466.1
Set-Aside Funds	2004	2005
Operating Activities		
Federal Contribution	112.2	104.4
1452(k) Loan Disbursements Made to Borrowers	(2.7)	(0.3)
1452(k) Loan Principal Repayments	0.2	0.4
Interest Received on 1452(k) Loans	0.0	0.0
Administrative Expenses Under the 4% Set-Aside	(26.9)	(26.8)
Expenses Under the 2% Set-Aside, Small Systems Technical Assistance	(11.4)	(13.4)
Expenses Under the 10% Set-Aside, State Program Management	(38.9)	(38.3)
Grants made under the 1452(k) Set-Aside	(32.3)	(25.6)
<i>Total Cash Flows from Operating Activities</i>	0.2	0.4
Noncapital Financing Activities		
<i>Net Cash Provided by Noncapital Financing Activities</i>	0	0
Cash Flows from Capital and Related Financing Activities	0	0
Investing Activities		
Interest Earnings on 1452(k) Loan Account Investments	0.01	0.02
<i>Net Cash Provided by Investing Activities</i>	0.0	0.0
Net Increase (Decrease) in Cash and Cash Equivalents	0.2	0.4
Beginning Balance - Cash and Cash Equivalents	0.9	1.1
Ending Balance - Cash and Cash Equivalents	1.1	1.5

Additional Innovative DWSRF Efforts

Oglethorpe County, GA

Oglethorpe County anticipates increased drinking water demand as the nearby City of Athens expands. Georgia's DWSRF has loaned \$7 million to the four incorporated towns in Oglethorpe County—Maxeys, Lexington, Arnoldsville, and Crawford—to expand and upgrade their systems. As part of these improvements, the DWSRF funded emergency connections between the towns. On July 29, 2005, Lexington experienced a massive water main break that drained the entire system and left 239 residents without water. Crawford opened the DWSRF-funded emergency connection between the two towns to allow engineers to locate and fix the break.

3,091 people served



Rock County Rural Water System, MN

The Rock County Rural Water System provides drinking water to 3,100 people from several wells that have nitrate levels exceeding federal limits. To address this issue, the water utility blends water, but this solution may not be sustainable. For a long-term solution, four technical experts, funded from a Local Assistance DWSRF Set-aside, have helped Rock County prepare a wellhead protection plan. State staff used a groundwater flow model to delineate the capture zone for the well. They determined that the contamination was from an abutting livestock operation. The water system worked with the landowner to re-direct drainage from the animal yard away from the well. As a result, nitrate levels are dropping in the wells, and public health is protected.

3,100 people served



Passaic Valley Water Commission, NJ

Passaic Valley's Little Falls Water Treatment Plant needed major upgrades. New Jersey's DWSRF awarded the system a \$70 million loan to replace its existing flocculation/sedimentation process with a new ballast flocculation system, install new ozone generators and ozone contactors, rehabilitate and replace existing chemical storage and feed systems, replace raw water pumping systems, upgrade and retrofit existing gravity filters to convert the filters to biologically active carbon filters, and install filter-to-waste piping.

300,000 people served



New Jersey

The New Jersey Department of Environmental Protection expanded its operator certification program to include all community and non-transient non-community water systems. The operator certification program is funded through the State Program Management DWSRF Set-aside.

Aqua Pennsylvania, PA

Aqua Pennsylvania, a subsidiary of the largest U.S.-based publicly traded water company, serves approximately 1.4 million people in Pennsylvania. The company consolidates small, non-viable systems that have struggled with maximum contaminant level (MCL) exceedances, boil water orders, water pressure problems, and unreliable supply issues. Aqua Pennsylvania has been awarded millions of dollars in loans from Pennsylvania's DWSRF to consolidate troubled systems and to upgrade treatment plants, install adequate storage facilities, replace aging and undersized water mains, and address other reliability and water quality issues associated with the systems it has purchased. The result has been happier, safer customers and fewer systems failing to meet drinking water health-based standards.

1,400,000 people served

DWSRF-at-a-glance

EXHIBIT 20

Funds Available for Projects (Millions of Dollars)

	2005	1997-2005
Total Funds	\$1,509.4	\$11,145.8
Federal Capitalization Grants	820.3	6,565.8
State Match	144.6	1,619.0
Net Leveraged Bonds	511.2	2,750.2
Net Loan Principal Repayments	257.1	872.2
Net Interest Earnings	103.1	499.3
Net Transfers with CWSRF	44.7	353.9
Less Set-asides	124.8	1,048.9



EXHIBIT 21

Other Key Statistics

Return of 1.7 Times the Federal Investment

2.2% Average DWSRF Interest Rate in 2005 (4.2% Market Rate)

20 States Leverage

43 States Conduct Separate Audits

\$493 Million Additional Grants and Loans Provided by Separate State Programs



EXHIBIT 22

Assistance Provided to Projects (Millions of Dollars)

	2005	1997-2005
Total, by Project Type	\$1,462.7	\$9,452.1
Planning and Design Only	31.7	74.7
Construction		
Treatment	653.8	4,129.3
Transmission & Distribution	539.1	3,116.6
Source	82.2	483.1
Storage	128.2	957.4
Purchase of Systems	2.2	100.7
Restructuring	0.0	45.8
Land Acquisition	1.7	22.2
Other	23.8	522.4
Total, by Population Served	\$1,462.7	\$9,452.1
Less than 501	81.7	424.1
501 to 3,300	199.6	1,640.8
3,301 to 10,000	262.9	1,646.9
10,001 to 100,000	577.9	3,672.8
100,001 and Above	340.6	2,067.5
# of Loans by Population Served	548	4,201
Less than 501	116	799
501 to 3,300	165	1,429
3,301 to 10,000	122	912
10,001 to 100,000	122	912
100,001 and Above	37	239

For more information about the Drinking Water State Revolving Fund, please contact:

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Office of Ground Water and Drinking Water
 May 2006
 EPA 816-R-06-003