

MEMORANDUM

SUBJECT: Clean Water State Revolving Fund 2004 Annual Report – Proven Integrity and Performance

FROM: James A. Hanlon, Director
Office of Wastewater Management

TO: Water Management Division Directors
Regions I – X

I want to inform you of the forthcoming distribution of the Clean Water State Revolving Fund (CWSRF) 2004 Annual Report to the Regional Administrators and the State Environmental Commissioners. I gave you a draft of the Annual Report at the Water Management Division Directors' meeting in March. A copy of the final report is attached.

This report was developed to provide an overview of the performance and financial status of the CWSRF. Similar to corporate reports, it highlights accomplishments, describes major management controls to ensure performance and financial integrity, and forecasts new directions and initiatives for the CWSRF.

The 2004 Annual Report will be the template for future annual reports for the CWSRF program. While its focus will change to reflect salient topics for the reporting period, the financial statements and overall organization of the report should remain the same from year to year. Each year, EPA will identify topics of interest and areas of focus.

We are also sending copies to your CWSRF coordinators for distribution to their state counterparts. If you have any comments regarding the CWSRF 2004 Annual Report or suggestions for future ones, please let me know, or have your staff contact George Ames, Chief, State Revolving Fund Branch, at 202-564-0661.

Attachment

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT • ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION • ARIZONA WATER INFRASTRUCTURE FINANCE AUTHORITY • ARKANSAS DEVELOPMENT FINANCE AUTHORITY • ARKANSAS SOIL AND WATER CONSERVATION COMMISSION • CALIFORNIA STATE WATER RESOURCES CONTROL BOARD • COLORADO DEPARTMENT OF LOCAL AFFAIRS • COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT • COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY • CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION • CONNECTICUT OFFICE OF THE TREASURER • DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL • FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION • GEORGIA ENVIRONMENTAL FACILITIES AUTHORITY • HAWAII DEPARTMENT OF HEALTH • IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY • ILLINOIS ENVIRONMENTAL PROTECTION AGENCY • INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT • INDIANA STATE BUDGET AGENCY • IOWA DEPARTMENT OF NATURAL RESOURCES • IOWA FINANCE AUTHORITY • KANSAS DEPARTMENT OF ADMINISTRATION • KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT • KANSAS DEVELOPMENT FINANCE AUTHORITY • KENTUCKY DIVISION OF WATER • KENTUCKY INFRASTRUCTURE AUTHORITY • LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY • MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION • MAINE MUNICIPAL BOND BANK • MARYLAND DEPARTMENT OF THE ENVIRONMENT • MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION • MASSACHUSETTS WATER POLLUTION ABATEMENT TRUST • MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY • MICHIGAN MUNICIPAL BOND AUTHORITY • MINNESOTA DEPARTMENT OF AGRICULTURE • MINNESOTA POLLUTION CONTROL AGENCY • MINNESOTA PUBLIC FACILITIES AUTHORITY • MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY • MISSOURI DEPARTMENT OF NATURAL RESOURCES • MISSOURI ENVIRONMENTAL IMPROVEMENT AND ENERGY RESOURCES AUTHORITY • MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY • MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION • NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY • NEBRASKA INVESTMENT FINANCE AUTHORITY • NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES • NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES • NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION • NEW JERSEY ENVIRONMENTAL INFRASTRUCTURE TRUST • NEW MEXICO ENVIRONMENT DEPARTMENT • NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION • NEW YORK STATE ENVIRONMENTAL FACILITIES CORPORATION • NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES • NORTH DAKOTA DEPARTMENT OF HEALTH • NORTH DAKOTA MUNICIPAL BOND BANK • OHIO ENVIRONMENTAL PROTECTION AGENCY • OHIO WATER DEVELOPMENT AUTHORITY • OKLAHOMA WATER RESOURCES BOARD • OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY • PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY • PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION • PUERTO RICO ENVIRONMENTAL QUALITY BOARD • PUERTO RICO INFRASTRUCTURE FINANCING AUTHORITY • RHODE ISLAND CLEAN WATER FINANCE AGENCY • RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT • SOUTH CAROLINA BUDGET AND CONTROL BOARD • SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL • SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES • TENNESSEE COMPTROLLER OF THE TREASURY • TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION • TEXAS WATER DEVELOPMENT BOARD • UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY • VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION • VERMONT MUNICIPAL BOND BANK • VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY • VIRGINIA RESOURCES AUTHORITY • WASHINGTON DEPARTMENT OF ECOLOGY • WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION • WEST VIRGINIA WATER DEVELOPMENT AUTHORITY • WISCONSIN DEPARTMENT OF ADMINISTRATION • WISCONSIN DEPARTMENT OF NATURAL RESOURCES • WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY • WYOMING OFFICE OF STATE LANDS AND INVESTMENTS

Clean Water State Revolving Fund Programs / 2004 Annual Report

PROVEN
INTEGRITY
AND
PERFORMANCE





DEDICATION

Robert Gill (1946 - 2004)

We would like to dedicate this report to the memory of Robert Gill, EPA Region 2. Bob had many accomplishments working first with Ohio’s water program and then with EPA. From the very beginning of the CWSRF program, Bob’s dedication to public service and his personal integrity helped ensure that the program would achieve the highest level of performance. He provided leadership and highly valuable guidance that is truly missed by all of his state and EPA colleagues.



CWSRF Programs – A Tradition of Integrity and Performance2

CWSRF Programs – Getting the Job Done4

The Annual CWSRF Funding Process – Structured for Effectiveness and Integrity6

2004 Focus – Measuring Environmental Results8

Innovative Financing for Water Quality Projects11

Achievements in National Clean Water Financing12

CWSRF 2004 Performance Highlights14

CWSRF Program 2004 Financial Performance Overview18

EPA’s Business Plan to Support the CWSRF Program23

Table of Contents

CWSRF Programs – A Tradition of Integrity and Performance

Congress created the Environmental Protection Agency’s Clean Water State Revolving Fund (CWSRF) program in 1987 to serve as a long-term funding source for projects that clean and protect the nation’s waters. Seventeen years of integrity and performance have proven the CWSRF’s reputation as an efficient, innovative federal-state program.

Operating in all 50 states and in Puerto Rico, the CWSRF has made nearly 15,300 loans for projects through 2004, and now has over \$50 billion in funds available for assistance. Due to continuing federal support and impressive state-level management, annual funding has increased at a compound rate of 15 percent per year. The CWSRF has averaged \$4.4 billion in annual assistance since 2000. The program has accomplished this feat without experiencing any loan losses. Given these strong financial conditions, state CWSRF programs have achieved high regard in the banking industry. The next page summarizes the CWSRF’s funding levels for investment in water quality.

The CWSRF program’s integrity stems from its unwavering commitment to address the nation’s most pressing clean water needs and to achieve strong financial performance. From an environmental perspective, the CWSRF program has

been a sound investment for states and the federal government. EPA-approved, state-level priority systems direct funds to high priority projects. When creating the priority list, each state considers applicant communities’ current regulatory compliance status, imminent public health and environmental threats, and the relative importance of the affected waterbodies. CWSRF assistance has helped thousands of communities implement important projects by targeting funding to where it is most needed. Since 1996, over 60 percent of all CWSRF loan agreements have been made to communities of fewer than 10,000 people.

This 2004 Annual Report provides an overview of this year’s CWSRF program accomplishments and status and forecasts its plans for continued success. The report also highlights the effort now underway to implement a new reporting system to better communicate the environmental results of CWSRF program assistance. Twenty-eight states are now testing this system.



The CWSRF program’s integrity stems from its unwavering commitment to address the nation’s most pressing clean water needs and to achieve strong financial performance.

Clean Water State Revolving Fund National Performance Summary Statement Fund Activity - Estimated (\$ Millions)

| | 2004 | 2003 |
|--|----------|----------|
| Annual Fund Activity | | |
| Federal Capitalization Grants | 1,092.8 | 1,251.3 |
| State Matching Funds | 241.7 | 260.0 |
| | | |
| New Funds Available for Assistance | 5,227.4 | 4,548.6 |
| Project Commitments (Executed Loan Agreements) | 4,605.9 | 4,738.3 |
| | | |
| Project Disbursements | 4,308.8 | 3,835.4 |
| Cash Draws from Federal Capitalization Grants | 1,415.3 | 1,329.6 |
| Cumulative Fund Activity | | |
| Federal Capitalization Grants | 21,896.4 | 20,803.6 |
| State Matching Funds | 4,614.6 | 4,372.9 |
| | | |
| Funds Available for Assistance | 52,052.4 | 46,825.0 |
| Project Commitments (Executed Loan Agreements) | 47,905.4 | 43,299.4 |
| | | |
| Project Disbursements | 40,705.5 | 36,396.6 |
| Cash Draws from Federal Capitalization Grants | 19,825.5 | 18,410.2 |

Source: EPA’s CWSRF National Information Management System.



CWSRF Programs – Getting the Job Done

Lasting success rises from a strong foundation. The CWSRF program's achievements build on the breadth of experience and ingenuity in the 51 state CWSRF programs.

The Clean Water Act of 1987 gave states significant flexibility to design financing programs that best meet their water quality infrastructure needs. The CWSRF is primarily a low-interest loan program, though states can and do offer a wide range of other assistance options. These are outlined in Exhibit 1. Many states also “leverage,” using their federal capitalization grants and other fund assets as security for tax-exempt bonds. Since the start of the CWSRF program, 27 states have raised \$16 billion by issuing debt, significantly expanding their ability to make low-interest loans. State programs have not only provided key funding for wastewater treatment, but have also funded important water quality projects on farms, stream cleanups at abandoned mines, and land purchases to protect drinking water sources.

STATES ORGANIZE TO MEET THE CHALLENGE

Each state has effectively organized its CWSRF program to address its financial and environmental program management objectives. In addition, state associations including the Council of Infrastructure Financing Authorities and the Association of State and Interstate Water Pollution Control Administrators serve a vital role through capacity building pro-

Exhibit 1: CWSRF Assistance Options

State Selected Options

- Loans
- Refinancing
- Bond insurance
- Guarantees
- Leveraging (Bond issuance)
- Sub-state funds

grams that train members and support their efforts to overcome state program management challenges.

As the CWSRF expands, state programs complete more work each year. Annually, states as a whole process thousands of CWSRF financial transactions for active loans, provide assistance to hundreds of loan applicants and loan recipients, develop detailed annual program plans and reports, work with state legislators and governors on program design and operation, and coordinate efforts with multiple state-level financing programs. It is through the hard work of dedicated employees that the CWSRF has reached its current status as a notable environmental finance program. The next page arrays the many organizations that dedicate resources to the mission of the CWSRF program.

STATE AGENCIES THAT MANAGE CWSRF PROGRAMS

EPA Region 1 – Boston, Massachusetts

Connecticut Department of Environmental Protection
Connecticut Office of the Treasurer
Maine Municipal Bond Bank
Maine Department of Environmental Protection
Massachusetts Water Pollution Abatement Trust
Massachusetts Department of Environmental Protection
New Hampshire Department of Environmental Services
Rhode Island Clean Water Finance Agency
Rhode Island Department of Environmental Management
Vermont Department of Environmental Conservation
Vermont Municipal Bond Bank

EPA Region 2 – New York, New York

New Jersey Department of Environmental Protection
New Jersey Environmental Infrastructure Trust
New York State Environmental Facilities Corporation
New York Department of Environmental Conservation
Puerto Rico Environmental Quality Board
Puerto Rico Infrastructure Financing Authority

EPA Region 3 – Philadelphia, Pennsylvania

Delaware Department of Natural Resources and Environmental Control
Maryland Department of the Environment
Pennsylvania Infrastructure Investment Authority
Pennsylvania Department of Environmental Protection
Virginia Department of Environmental Quality
Virginia Resources Authority
West Virginia Department of Environmental Protection
West Virginia Water Development Authority

EPA Region 4 – Atlanta, Georgia

Alabama Department of Environmental Management
Florida Department of Environmental Protection
Georgia Environmental Facilities Authority
Kentucky Infrastructure Authority
Kentucky Division of Water
Mississippi Department of Environmental Quality
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 – Chicago, Illinois

Illinois Environmental Protection Agency
Indiana Department of Environmental Management
Indiana State Budget Agency
Michigan Department of Environmental Quality
Michigan Municipal Bond Authority
Minnesota Public Facilities Authority

Minnesota Pollution Control Agency
Minnesota Department of Agriculture
Ohio Environmental Protection Agency
Ohio Water Development Authority
Wisconsin Department of Natural Resources
Wisconsin Department of Administration

EPA Region 6 – Dallas, Texas

Arkansas Soil and Water Conservation Commission
Arkansas Development Finance Authority
Louisiana Department of Environmental Quality
New Mexico Environment Department
Oklahoma Water Resources Board
Texas Water Development Board

EPA Region 7 – Kansas City, Missouri

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
Missouri Environmental Improvement and Energy Resources Authority
Nebraska Department of Environmental Quality
Nebraska Investment Finance Authority

EPA Region 8 – Denver, Colorado

Colorado Water Resources and Power Development Authority
Colorado Department of Public Health and Environment
Colorado Department of Local Affairs
Montana Department of Environmental Quality
Montana Department of Natural Resources and Conservation
North Dakota Department of Health
North Dakota Municipal Bond Bank
South Dakota Department of Environment and Natural Resources
Utah Department of Environmental Quality
Wyoming Department of Environmental Quality
Wyoming Office of State Lands and Investments

EPA Region 9 – San Francisco, California

Arizona Water Infrastructure Finance Authority
California State Water Resources Control Board
Hawaii Department of Health
Nevada Department of Conservation and Natural Resources

EPA Region 10 – Seattle, Washington

Alaska Department of Environmental Conservation
Idaho Department of Environmental Quality
Oregon Department of Environmental Quality
Washington Department of Ecology

The Annual CWSRF Funding Process – Structured for Effectiveness and Integrity

The annual funding process is consistent among all 51 constituent CWSRF programs. The approach follows the Clean Water Act and assures efficient use of CWSRF resources (Exhibit 2).

First, each state develops an Intended Use Plan (IUP). This document outlines the state's short and long-term goals and shows its compliance with federal and state requirements. Next, the IUP addresses the status and use of all available funding. Funding levels reflect available federal capitalization grants, state contributions used to match these grants, any additional state funds, repayments from existing loans, interest earnings, and, when applicable, bond proceeds. Finally, the IUP includes the list of projects that are eligible to be funded during the next fiscal year.

To create this list of eligible projects, each state uses its project priority system, which considers critical water quality factors, to rank the projects by need and impact. This system ensures that CWSRF funding is directed to the highest priority projects. Typically, state programs assign priority based on several factors including:

- Public health protection – Is the facility discharging into a public drinking water source?
- Facility permit compliance – Is the facility meeting required discharge permit requirements?
- Condition of impacted waters – Is the receiving or impacted water body meeting required state standards?

Exhibit 2: CWSRF Funding Process

1. Develop Intended Use Plan

- Identify/prioritize projects
- Revise short and long-term goals
- Show compliance with federal CWSRF requirements

2. Apply for federal funding (if available)

- Update operating agreements as needed
- Develop capitalization grant application
- Apply to EPA for award
- Receive award

3. Award CWSRF loans

- Review full loan applications
- Work with communities to document compliance
- Close on loan

4. Provide and track loan funding, monitor construction

- Review invoices and distribute funding to loan recipient for eligible costs
- Track project implementation

5. Collect repayments

- Track loan principal and interest repayment

...Cycle continues with new planning and IUP development

- Watershed protection – Will the project address pollutants that are detrimental to the local watershed or water basin?
- Community size – Will the project direct funds to small communities that find it difficult to afford such investments?

The federal government has provided capitalization grants to the CWSRF program each year since 1988, a total of nearly \$22 billion. When states apply for the federal grant funds through their Intended Use Plan, they include a list of projects that are eligible for funding.

After receiving the grant awards, the state programs enter into loan agreements with communities and work closely with them throughout construction and implementation of the funded projects. In 2004, CWSRF programs funded 1,290 projects, and since 1988, they have provided nearly 15,300 loans (see chart to right).

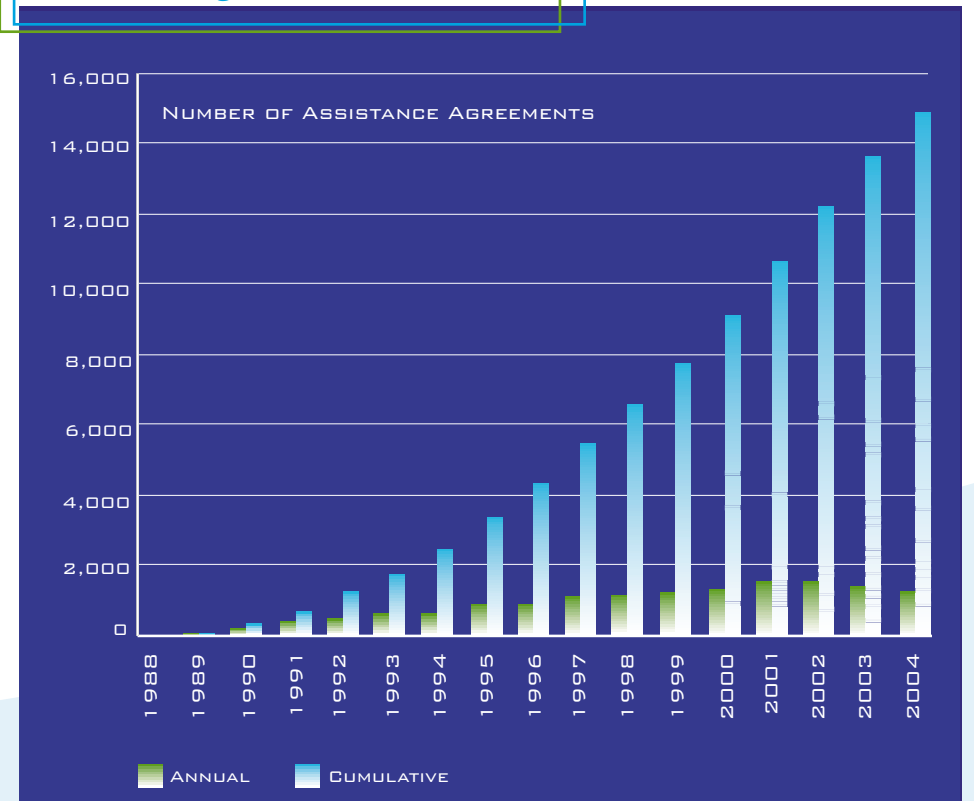
Repayments from these loans recycle back into the state programs and become available for new loans. In 2004, net principal from loan repayments alone totaled over \$1.3 billion and net interest earnings added an additional \$0.46 billion. It is clear that the CWSRF program will be a significant and continuing source of funding for important water pollution control projects.

EPA'S ROLE – PROVIDE OVERSIGHT AND SUPPORT

Federal employees in EPA's ten regional offices work side-by-side with state program managers. The regional offices review the state applications and award the federal CWSRF capitalization grants. They conduct the annual reviews of each state program as required by the Clean Water Act, then develop annual program evaluation reports. EPA's annual oversight helps states ensure ongoing fiscal integrity and strong performance for the national CWSRF program.

Beyond conducting oversight, EPA actively supports the state programs, providing a broad range of financial and programmatic training and direct technical support. The Agency acts as a clearinghouse for new ideas and effective management techniques through fact sheets, state activity reports, and other publications such as *SRF's Up*, the newsletter for clean water and drinking water state revolving fund managers and other interested parties. EPA also maintains the CWSRF National Information Management System, a database that contains state-level CWSRF information.

**CWSRFs Fund 15,300
Assistance Agreements: 1988-2004**



2004 Focus —

Measuring Environmental Results

In 2004, EPA and state programs inaugurated a new era of performance assessment for the CWSRF. Starting in 2005, 28 states will begin using a pilot set of environmental indicators to show how their CWSRF projects impact water quality and public health (see map below).

For the first time, program managers will be able to link assistance to on-the-ground results. They will know, for example, how much funding helped to protect cold water fisheries and how many projects helped to restore streams for swimming. Financing these Clean Water Act goals is at the heart of the CWSRF programs. With these environmental measures, states will demonstrate their support for water quality alongside their proven financial performance.

Together, the states and EPA developed this approach to assess environmental results. The efforts began

when a need to communicate benefits to policymakers led to increased attention on performance measurement in states and within the Agency. Georgia and Washington took the lead, designing their own systems to document program results. EPA learned from these and other efforts, including a workshop of Region 9 CWSRF managers (Arizona, California, Hawaii, and Nevada) and a state-led study in Oklahoma to evaluate environmental results through water quality monitoring.

Taking the next step, EPA began working with the Association of State and Interstate Water Pollution Control Administrators and other state representatives to assemble the pilot measures. This group designed a measurement and reporting system that is effective and that minimizes the burden on the states. The measures use existing data sources and the science behind water quality

standards and effluent discharge permits to convey project benefits. Data is readily available to state water quality and CWSRF programs. The result is a set of measures that show how CWSRF funding impacts compliance, water quality, and designated uses (Exhibit 3).

States and EPA will use this information to communicate the CWSRF

program's environmental accomplishments. Furthermore, these measures establish a tool that will let states examine, challenge, and improve their own funding decisions. Some states have already suggested that they want to know even more about the environmental impact of their CWSRF programs and will consider adding their own measures to the core set.



Twenty-eight States Piloting the New CWSRF Environmental Benefits Reporting System

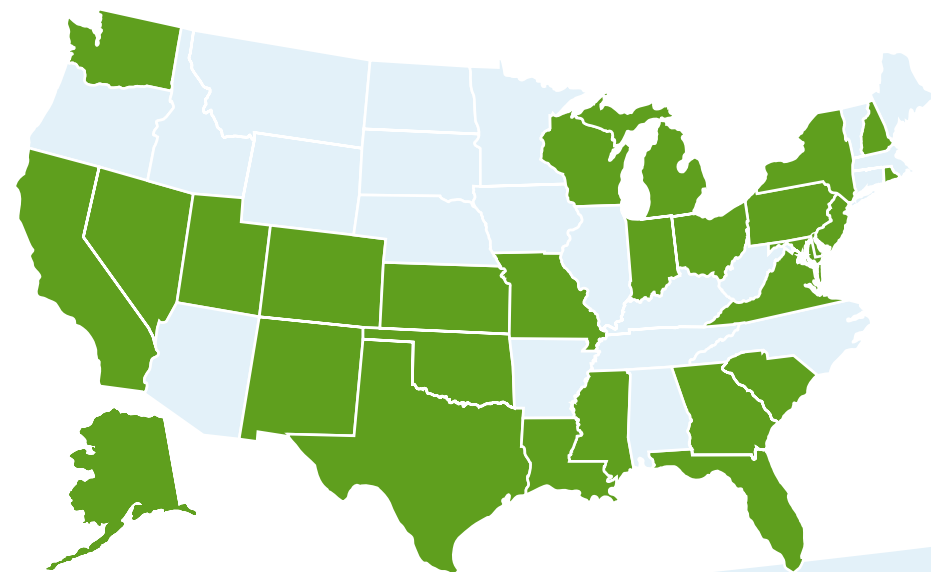


Exhibit 3: Tracking Environmental Results

For each project, the measures will capture the CWSRF's reach and water quality contribution.

Subsidy

What savings did borrowers realize through the CWSRF program?

Population Served

How many people will have improved wastewater services and better local water quality?

Wastewater Treated

How much sewage and polluted runoff were treated thanks to CWSRF financing?

Impaired Waterbodies

Where did CWSRF projects affect discharges to impaired or threatened rivers, streams, and lakes?

Strategic Watershed Planning

When do projects reduce pollutant loadings to address total maximum daily loads or watershed management plans?

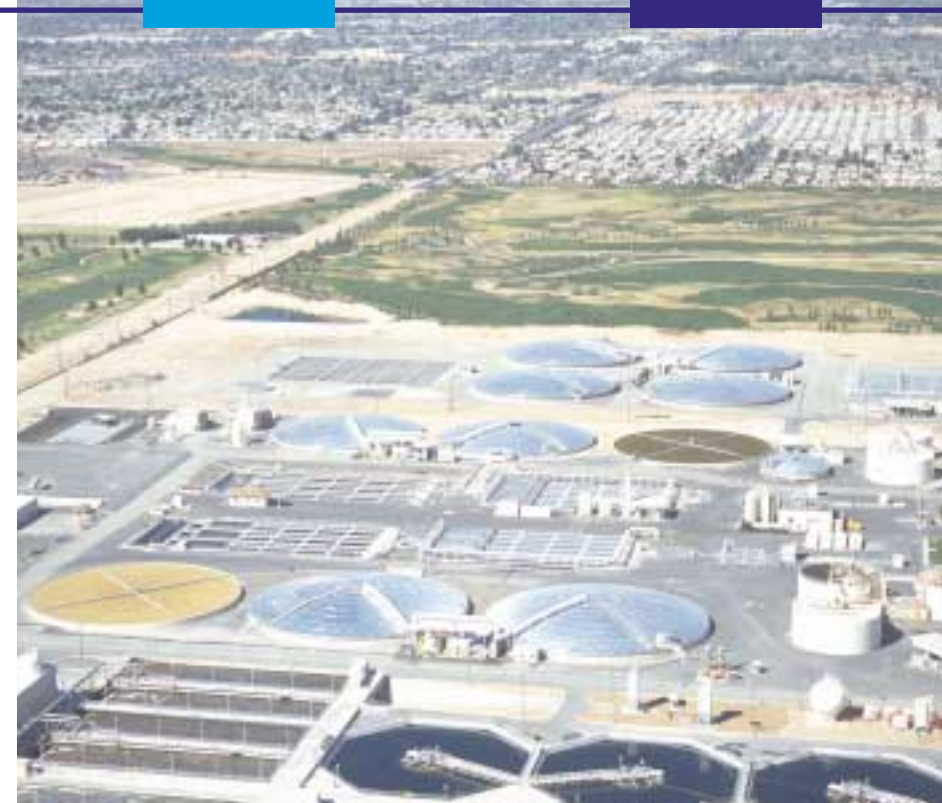
Protection and Restoration of Waterbody Uses

How much CWSRF financing helps to protect and restore swimming, fishing, and other designated uses in the nation's waterbodies?

ECONOMIC BENEFITS

The CWSRF's investment in water quality has substantial economic impacts. Tourism requires rivers and lakes to be clean and beaches to be healthy. Our nation's waterways sustain commercial and recreational fisheries that attract over 25 percent of the population. And irrigated agriculture, public water utilities, and industry depend on clean water.

But water use is growing to the point where, according to a 2003 report by the General Accounting Office, 36 states will experience freshwater shortages by 2013 in non-drought conditions. Maintaining and improving water quality is an important part of managing this valuable resource and attracting economic development. For example, microbial contamination closes hundreds of beaches and contributes to at least a half-million cases of illness a year from impure drinking water. As a



financial engine for wastewater treatment—and dramatic increases in infrastructure needs are projected for the next 20 years—the CWSRF will provide important economic benefits.

A recent independent study of the economic impact—specifically the impact on jobs—of water infrastruc-

ture funding validated CWSRF program benefits. The authors, tasked by EPA's water policy staff in the Office of Water to answer a Congressional request, used three models to gauge short-term adjustments and longer-term employment and GDP trends. The economists concluded that a sustained one billion dollar increase in debt-financed water infrastructure, such as CWSRF funding, would permanently add approximately 5,000 jobs over the next ten years. An initial increase would range from 16,000 to 22,000 jobs depending on economic conditions. Forecasts show that the majority of employment gains occur in local infrastructure projects and in water infrastructure equipment manufacturing. Overall, the study's estimates of economic benefits are conservative because the authors stop short of projecting the employment, production, and productivity impacts of valuable water quality and public health gains.

Clean Water: An Annual Economic Snapshot

- 5 billion instances of water-based recreation
- 1 billion coastal visits generate over \$50 billion
- 600,000 jobs from freshwater fishing (2001)
- \$12.5 million in shellfish landings (2003)
- \$82 million of agricultural products from irrigated farms (2002)
- 7 trillion gallons of water to industry (2000)
- 12 billion gallons of water make \$58 billion of soft drinks (2001)

State CWSRF program financing innovations have opened the doors to thousands of projects with important water quality benefits. States have taken hold of the CWSRF's flexibility to maximize the environmental impact of its funding. They continue to finance wastewater utility upgrades and rehabilitation; at over 90 percent of loan volume, municipal utility borrowers are well served. CWSRF program managers have also reached out to smaller borrowers to curtail water pollution from farms, septic systems, and urban sources. Nonpoint source loans totaled \$176 million in 2004. While this only accounts for 4 percent of total funding, it represents 26 percent of assistance agreements.

CWSRF programs have a track record of designing new financing approaches for nonpoint source projects. To rehabilitate or replace leaking septic tanks, states often set up linked-deposit programs with local banks. The banks then make affordable loans to residents, limiting costs and risks to the CWSRF. Agricultural loan programs regularly involve partnerships with conservation districts to identify effective projects. Reducing sediment, nutrient, and pesticide runoff to waterbodies usually means increasing resource efficiency on the farm. Some states also reward utilities that invest in nonpoint source projects in

conjunction with infrastructure projects by further reducing the interest rate on the CWSRF loan.

States also use CWSRF financing to purchase land to protect in-stream habitats and drinking water aquifers. They fund wetland mitigation banks, acid mine drainage cleanup, stream bank restoration projects, and an array of stormwater management practices and treatment techniques. This final category, a mix of combined and sanitary sewer overflows and nonpoint source impacts that large and small communities are struggling to contain, shows how the CWSRF responds to the nation's clean water agenda. The following two pages show examples of the range of CWSRF projects and financing approaches.



"The CWSRF has put more conservation on the ground than any grant program." Rich Baden, Executive Director, Spokane County Conservation District (WA)

Innovative Financing for Water Quality Projects

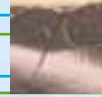
Achievements in National Clean Water Financing

PORTLAND, OREGON



\$12.4 million in CWSRF loans extended sewer lines to replace septic tanks, converted a treatment plant from chlorine gas to sodium hypochlorite to address security concerns, and funded 50 watershed revegetation projects. An innovative program of reduced interest rates encouraged the utility to support habitat restoration.

MONTANA



To reduce nutrient-laden agricultural runoff, the CWSRF program has made 175 loans to farmers and ranchers, most for center-pivot irrigation equipment, which cuts water use by half. With \$15 million loaned since 2000, demand is increasing thanks to partnerships with local conservation districts.

IOWA



The CWSRF established a special program to make loans for residential septic tank repair and replacement. Working through approximately 150 local banks, the effort has made 195 loans for over a million dollars in just two years.

KENT, OHIO



Dam modifications have gone a long way toward restoring fish habitat and migration routes in the Cuyahoga River. \$3.9 million in incentives from an innovative CWSRF program allowed several local wastewater utilities to "sponsor" the work in conjunction with infrastructure projects.

FALL RIVER, MA



\$89.5 million in CWSRF funding has helped build a 3-mile long, 20-foot diameter tunnel to control combined sewer overflows. Once operational, the tunnel will improve water quality in Mount Hope Bay.

MONMOUTH COUNTY, NEW JERSEY



A comprehensive upgrade to a wastewater plant serving 80,000 people and treating nearly 12 million gallons per day received a \$52 million CWSRF loan. New pumps, screens, aeration basins, pumping stations, sludge thickeners, biofilters, and more were operational in 2003.

STILLWATER, OKLAHOMA



A sewage treatment plant upgrade and expansion protected stream habitat and drinking water intakes. At \$14.2 million, all from the CWSRF, the project was under budget and won the American Public Works Association (Oklahoma Chapter) Environmental Project of the Year award in 2003.

BISBEE, ARIZONA



To tackle severe inflow and infiltration problems and to restore compliance at the wastewater treatment plant, the city, state, USDA Rural Development, and North American Development Bank agreed to finance \$30 million in improvements, over one third from the CWSRF program.

WILLARD, NEW MEXICO



A \$63,000 CWSRF loan leveraged over \$400,000 in federal and state funds to install decentralized treatment clusters and new septic tanks. To stem nitrate leaching to the sole drinking water source, the village of 240 people established a wastewater management utility to maintain these systems.

OWENSBORO, KENTUCKY



\$26 million in CWSRF funds installed new technology at a sputtering treatment plant and extended the collection system to eliminate 18 smaller facilities and many failing septic tanks. Regionalization minimized combined sewer overflows to protect the Ohio River.

GREENE COUNTY, PENNSYLVANIA



Billions of gallons of highly acidic, toxic mine water threatened a major tributary of the Monongahela River. A \$4.3 million CWSRF loan financed treatment and proper effluent discharge to protect drinking water supplies and recreational uses and preserved 100 local jobs.

CLAYTON COUNTY, GEORGIA



Constructed wetlands are the final step at the sewage treatment facility, cleaning the effluent so it can be reused. A \$9 million CWSRF loan supported this efficient use of natural biological processes.

CWSRF 2004 Performance Highlights

A GROWING SOURCE OF PROJECT FINANCING

In 2004, the CWSRF program funded \$4.6 billion in projects, raising cumulative assistance to nearly \$48 billion since 1988. The program funds an estimated 10 to 20 percent of the nation's annual wastewater capital projects. Municipalities, states, and other federal programs provide the remaining funding.

FUNDING CRITICAL PROJECTS

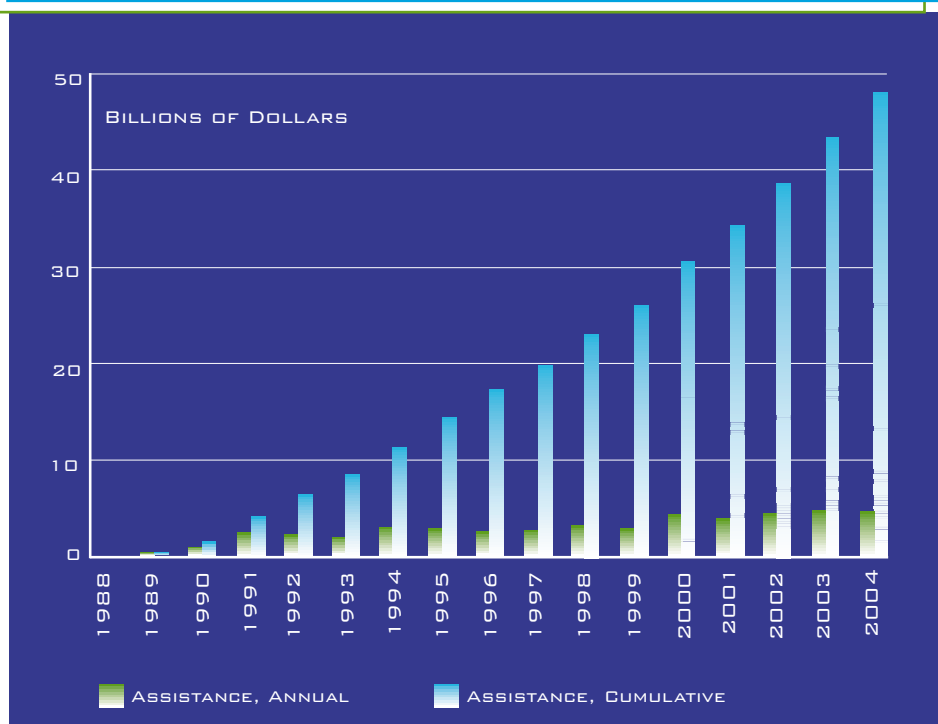
In 2004, the CWSRF continued to fund a broad range of projects. Wastewater system projects accounted for 96 percent of the total funding and 74 percent of the total number of agreements.

Funding for nonpoint source pollution control projects remains strong. Projects such as agricultural controls to reduce runoff and measures to protect drinking water sources accounted for \$176 million of total funding in 2004.

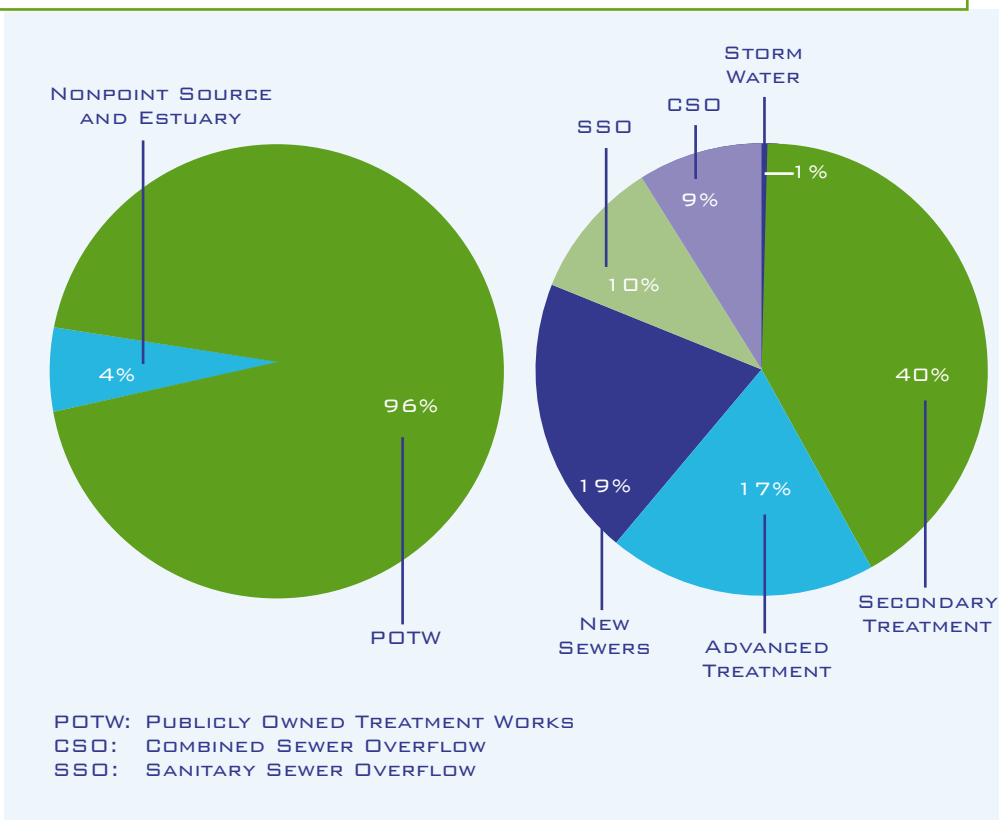
SERVING ALL COMMUNITIES

The CWSRF program has traditionally funded many small and medium sized communities. In 2004, 48 percent of all loan agreements went to communities with populations of fewer than 3,500, and 62 percent of all loans went to communities with populations below 10,000.

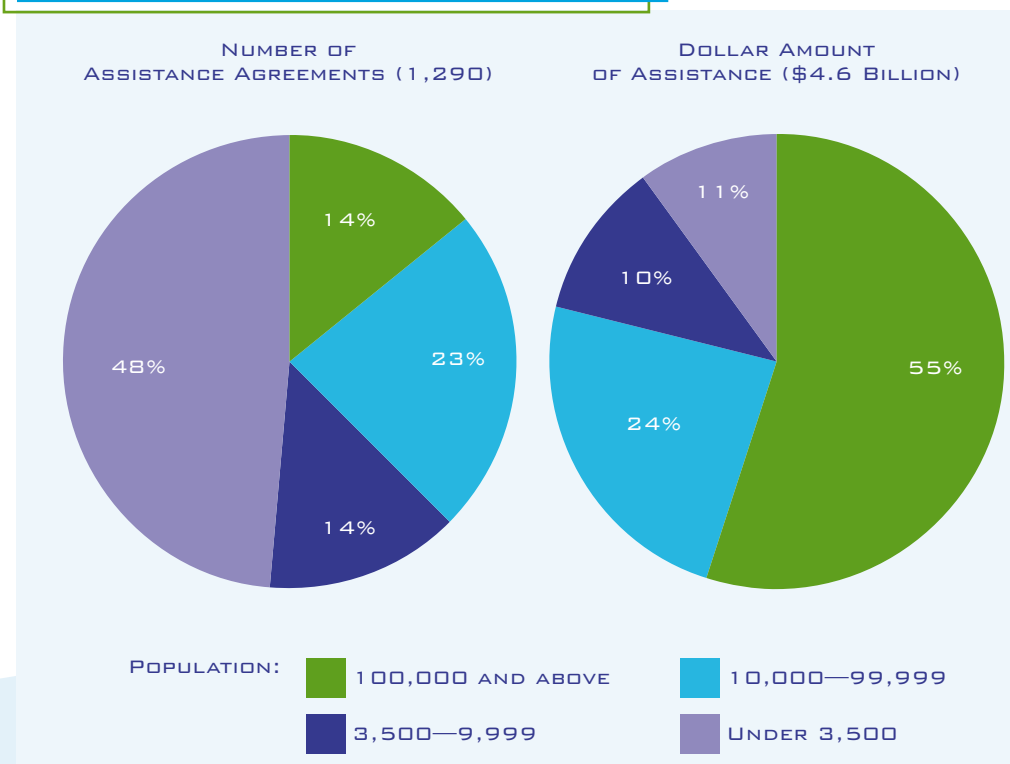
CWSRF Cumulative Assistance Reaches \$47.9 Billion in 2004



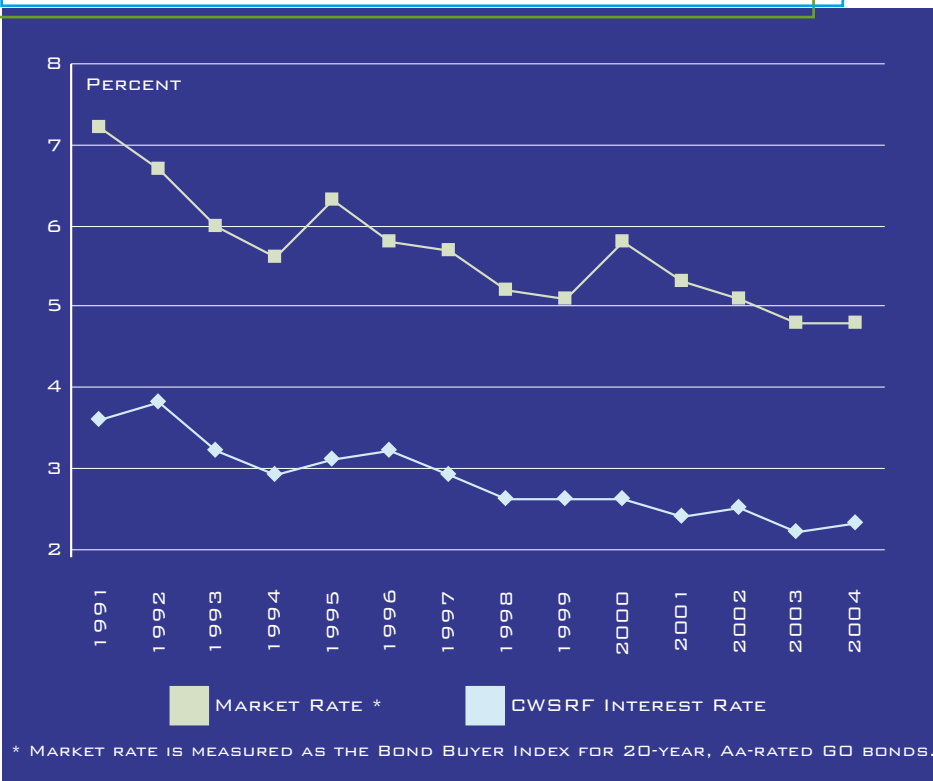
CWSRFs Fund \$47.9 Billion in Clean Water Needs through 2004



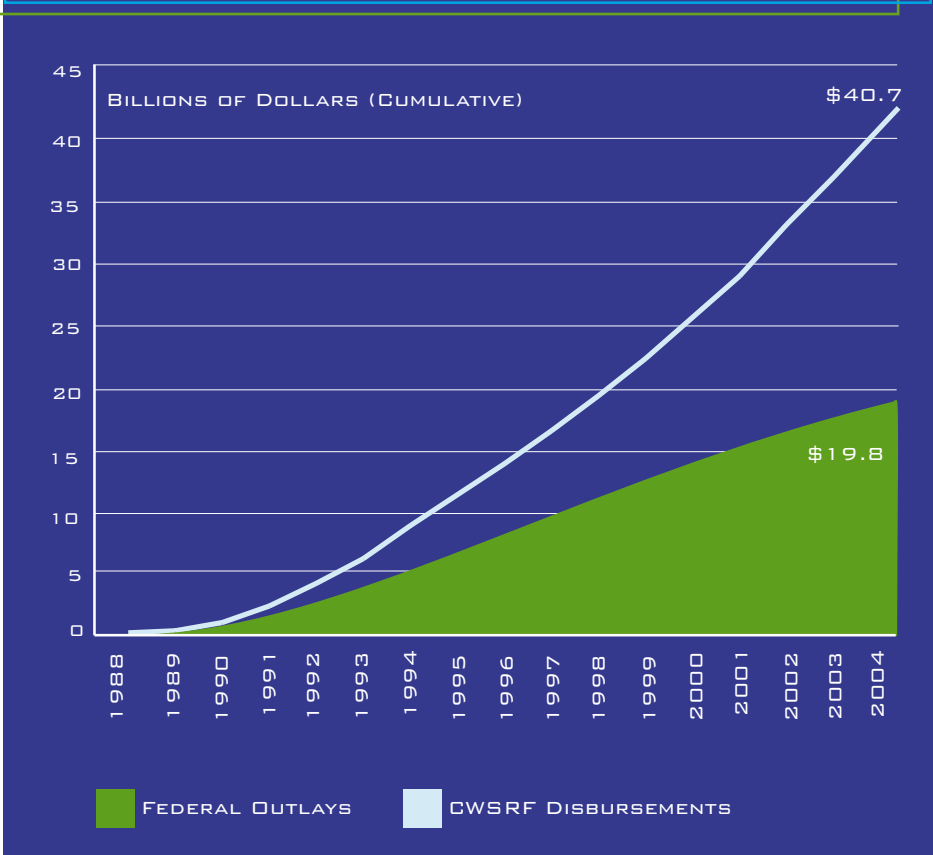
Communities Served by CWSRFs in 2004



CWSRF Loans Save Communities 20% (2004 Average)



CWSRFs Return 2.05 Times the Federal Investment in 2004



CWSRF LOANS SAVE COMMUNITIES 20 PERCENT ON AVERAGE

According to a popular municipal borrowing index, the typical municipal borrowing rate was 4.8 percent in 2004. The average CWSRF interest rate offered on loans was 2.3 percent. The average cost savings realized by CWSRF borrowers represented a 20 percent savings on financing costs.

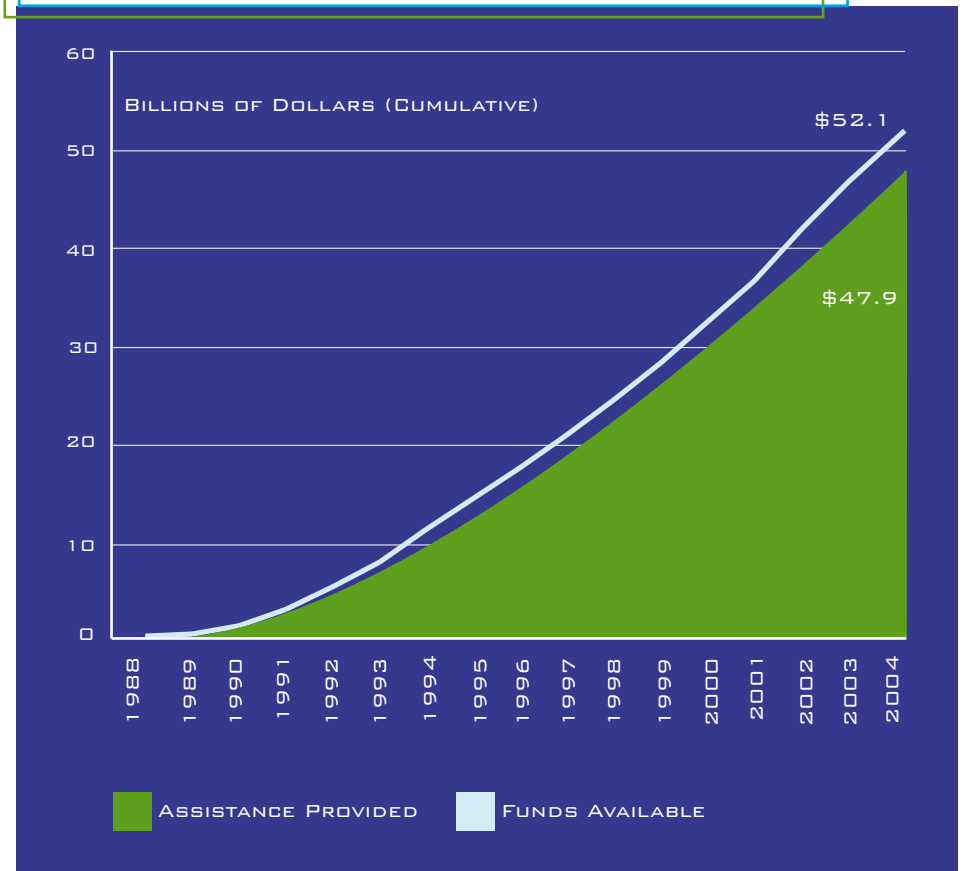
HIGH RETURN ON FEDERAL INVESTMENT

The ratio of CWSRF project disbursements (i.e., total cash out to pay invoices) compared to total federal outlays for projects (cash drawn from federal funds) is a measure of return on the federal investment to date. Currently 2.05, the rate of return on federal investment is growing and will continue to grow due to the revolving nature of the CWSRF program.

AVAILABLE CWSRF FUNDS ARE QUICKLY USED FOR NEW PROJECT ASSISTANCE

Due to low interest rates and broad financing eligibilities, CWSRF funding continues to be in high demand. In 2004, 92 percent 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.

92% of CWSRF Funds Committed to Projects in 2004



“The SRF program is one of the most cost-effective programs in government. For every dollar the federal government invests, more than two dollars is made available for environmental improvements.” John J. Duncan, Jr., U.S. representative from Tennessee, Water Resources and Environment Subcommittee Chairman

CWSRF Program

2004 Financial Performance Overview

The Clean Water Act requires the 51 state-level CWSRF programs to undergo an annual financial audit. Each state and Puerto Rico, or EPA's Office of Inspector General, conducts these audits according to the generally accepted auditing standards established by the Governmental Accounting Standards Board (GASB). GASB offers guidelines to the governmental accounting profession to determine the best fund structures for state programs such as the CWSRFs. States often define their CWSRF programs as ongoing enterprise funds under the GASB definitions of funds. The standardized financial statements used in enterprise fund reporting for CWSRF programs include the following:

Statement of Net Assets

This statement describes a fund's assets and liabilities as of the end of the fund's fiscal year. Assets include both financial assets and capital assets. Liabilities include both current and long-term liabilities. CWSRF fund assets include grant funds that have been drawn from the federal treasury to date, but do not include total grant awards. Several years ago, a new GASB rule created the statement of net assets as a replacement for the balance sheet statement. The "net asset" section of the statement of net assets replaced the "equity" section of the balance sheet.

Statement of Revenues, Expenses, and Earnings

This statement describes the performance of the CWSRF fund over the reporting period. The statement of revenues, expenses, and earnings, reports on the overall performance of the fund during the reporting period.

Statement of Cash Flows

This statement provides a detailed accounting of the actual flow of cash into and out of the CWSRF fund.

Because the 51 constituent CWSRF programs are independent state-level entities, no nationally audited CWSRF program financial reports are available. However, using EPA's CWSRF National Information Management System, national aggregate financial statements have been developed and are included below. The statements are best viewed as non-audited, cash flow-based financial reports.

2004 Financial Statement Highlights

Statement of Net Assets

- Total assets increased by \$4.3 billion.
- CWSRF program equity (also called net assets) totals \$26.5 billion.
- Program liabilities increased by \$2.2 billion, reflecting the net growth in CWSRF bonds outstanding for state matching funds and leveraged program financing.

Statement of Revenues, Expenses, and Earnings

- Total program revenues exceeded expenses by \$2.0 billion, an 11 percent increase from 2003.
- Interest earnings from loans and investments totaled more than \$1.2 billion.
- Administrative expenses were 3.5 percent of operating revenues.

Statement of Cash Flows

- Loan principal repayments to CWSRF programs were greater than \$2.0 billion.
- Leveraged bond proceeds added \$3.0 billion to program cash flow.



**Clean Water State Revolving Fund
National Performance Summary Statement
Statement of Net Assets - Estimated (\$ Millions)**

| | 2004 | 2003 |
|--|-----------------|-----------------|
| Assets | | |
| Cash and Cash Equivalents | 9,485.4 | 8,274.4 |
| Debt Service Reserve - Leveraged Bonds | 5,868.1 | 5,049.7 |
| Loans Outstanding | 29,334.3 | 27,069.8 |
| Unamortized Bond Issuance Expenses | 282.3 | 262.0 |
| <i>Total Assets</i> | <i>44,970.1</i> | <i>40,628.9</i> |
| Total Assets | 44,970.1 | 40,628.9 |
| Liabilities | | |
| Match Bonds Outstanding | 642.4 | 636.2 |
| Leveraged Bonds Outstanding | 17,863.9 | 15,667.6 |
| <i>Total Liabilities</i> | <i>18,506.3</i> | <i>16,303.8</i> |
| Net Assets | | |
| Federal Contributions | 19,825.5 | 18,410.2 |
| State Contributions | 3,545.6 | 3,362.4 |
| Transfers of Non-Federal Funds from (to) DWSRF | (286.6) | (294.9) |
| Other Net Assets | 3,379.3 | 2,847.4 |
| <i>Total Net Assets</i> | <i>26,463.8</i> | <i>24,325.1</i> |
| Total Liabilities and Net Assets | 44,970.1 | 40,628.9 |

Note: Under the new GASB 34 rules, "equity" is termed "net assets," and is defined as the difference between assets and liabilities.

Statement presents a compilation of reporting from 51 state programs and is not audited.

Source: EPA's CWSRF National Information Management System.

**Clean Water State Revolving Fund
National Performance Summary Statement
Statement of Revenues, Expenses, and Earnings - Estimated (\$ Millions)**

| | 2004 | 2003 |
|--|----------------|----------------|
| Operating Revenues | | |
| Interest on Investments | 423.8 | 428.3 |
| Interest on Loans | 830.8 | 785.5 |
| <i>Total Operating Revenues</i> | <i>1,254.6</i> | <i>1,213.8</i> |
| Operating Expenses | | |
| Bond Interest Expenses | 798.5 | 786.0 |
| Amortized Bond Issuance Expenses | 12.4 | 10.4 |
| Administrative Expenses | 43.8 | 46.6 |
| <i>Total Expenses</i> | <i>854.7</i> | <i>843.0</i> |
| Nonoperating Revenues and Expenses | | |
| Federal Contribution | 1,415.3 | 1,329.6 |
| State Contributions | 183.2 | 194.2 |
| Transfers from (to) DWSRF | 8.3 | (86.8) |
| <i>Total Nonoperating Revenues (Expenses)</i> | <i>1,606.8</i> | <i>1,437.0</i> |
| Total Operating and Nonoperating Revenues | 2,006.7 | 1,807.8 |
| Increase (Decrease) in Net Assets | 2,006.7 | 1,807.8 |
| Net Assets | | |
| Beginning of Year | 24,862.6 | 23,054.8 |
| End of Year | 26,869.3 | 24,862.6 |

Note: Statement presents a compilation of reporting from 51 state programs and is not audited.

Source: EPA's CWSRF National Information Management System.

**Clean Water State Revolving Fund
National Performance Summary Statement
Statement of Cash Flows - Estimated (\$ Millions)**

| | 2004 | 2003 |
|---|----------------|--------------|
| Cash Flows from Operating Activities | | |
| Cash Draws from Federal Capitalization Grants | 1,415.3 | 1,329.6 |
| Contributions from States | 183.2 | 194.2 |
| Loan Disbursements Made to Borrowers | (4,308.8) | (3,835.4) |
| Loan Principal Repayments | 2,044.3 | 1,666.9 |
| Administrative Expenses | (43.8) | (46.6) |
| Interest Received on Loans | 830.8 | 785.5 |
| <i>Net Cash Provided by Operating Activities</i> | 121.0 | 94.3 |
| Cash Flows from Noncapital Financing Activities | | |
| Net Leveraged Bond Proceeds | 3,061.1 | 2,039.4 |
| State Match Bond Proceeds | 58.5 | 65.8 |
| Cash Received from Transfers with DWSRF | 8.3 | (86.8) |
| Interest Paid on Leveraged and State Match Bonds | (798.5) | (786.0) |
| CWSRF Funds Used for Refunding | (31.4) | (248.7) |
| Principal Repayments of Leveraged Bonds | (734.2) | (554.8) |
| Principal Repayments of State Match Bonds | (52.3) | (58.5) |
| <i>Net Cash Provided by Noncapital Financing Activities</i> | 1,511.6 | 370.4 |
| Cash Flows from Capital and Related Financing Activities | 0.0 | 0.0 |
| Cash Flows from Investing Activities | | |
| Interest Received on Investments | 423.8 | 428.3 |
| Deposits to Debt Service Reserve for Leveraged Bonds | (818.4) | (97.8) |
| <i>Net Cash Provided by Investing Activities</i> | (394.6) | 330.5 |
| Net Increase (Decrease) in Cash and Cash Equivalents | 1,238.0 | 795.2 |
| Beginning Balance - Cash and Cash Equivalents | 8,247.4 | 7,452.2 |
| Ending Balance - Cash and Cash Equivalents | 9,485.4 | 8,247.4 |

Note: Statement presents a compilation of reporting from 51 state programs and is not audited.

Source: EPA's CWSRF National Information Management System.

To help sustain the success of the CWSRF program, EPA has adopted a comprehensive business plan that integrates and enhances key components of the proven federal-state partnership.

**TRANSPARENCY
IN OVERSIGHT**

Strong relationships between state program administrators and EPA managers have safeguarded the CWSRF programs and allowed for innovation. Program oversight has been efficient and effective. As programs become more complex and staff turnover increases, however, it becomes difficult to devote time and attention to all management areas. To improve accountability and transparency, EPA issued guidance for the annual program review process in 2004. An accompanying checklist ensures consistency nationwide and encourages better preparation for the annual review process. Starting in 2005, a series of standard internal EPA operating procedures will set baseline procedures for key program management tasks, complementing the annual review guidance and training regimen. The first will address cash transactions from the federal treasury.

TRAINING

Regional training workshops are an essential part of the CWSRF program. These sessions educate new and veteran employees, clarify legislative and policy changes, disseminate information on innovative

funding practices and solutions to common problems, and provide a forum for discussion of new initiatives. A mature CWSRF now demands a more sophisticated training approach. EPA is planning a rotating series of introductory, programmatic, and financial training sessions that will include all program administrators every other year. The annual Council of Infrastructure Financing Authorities training workshop will remain an important part of the program. To reach even more managers and to allow the content of these workshops to address the most current issues, the Agency is also developing training videos. Basic and more advanced sessions will become available over the Internet in the next year or two.

RECOGNITION

The high level of professionalism among program managers has resulted in many innovations that have made the CWSRF a model government subsidy program. For example, they can take credit for the CWSRF's invaluable national data system. To acknowledge their important work and its results, EPA will initiate awards and accreditation-like programs over the next few years. The awards program will first focus on borrowers, showcasing projects nationwide. It will expand to recognize key achievements of state programs and perhaps individuals. An accreditation-like program

**EPA's Business Plan
to Support the CWSRF Program**



for EPA regional program managers will recognize the expertise involved in managing CWSRF programs.

REDEFINING PERFORMANCE

Beyond strengthening its foundation, the CWSRF program aims to provide leadership for the future of water infrastructure finance. A focus on financial performance has made the CWSRF programs engines for water quality improvement. Until now, there has been no comprehensive effort to document these results. The state-EPA initiative to assess environmental impacts, discussed earlier, comes at a time when wastewater infrastructure needs are mounting and more detailed study of waterbodies is making increasingly efficient pollution control possible. This environmental benefits effort, integrated priority systems, and recent state innovations position the CWSRFs to make better decisions about how to finance clean water projects in the future. With increased

pressure to justify funding, an environmental accounting system will become a key aspect of a state program's communications strategy.

In 2008, the CWSRF program's twentieth anniversary, EPA will host a water infrastructure finance conference to explore these and other critical issues. The conference will bring together the financial, technical, planning, and management stakeholders who work with the CWSRF program and other water quality financing programs. Participants will focus on how to improve the performance of financing for sustainable water quality.

Through these current and upcoming projects and key partnerships with other Office of Water programs, federal agencies, and, most importantly, the state programs, EPA's CWSRF program will continue to finance America's investment in clean water.

CWSRF-at-a-Glance

Funds Available for Projects (Billions of Dollars)

| | 2004 | 1988-2004 |
|-------------------------------|-------|-----------|
| Total Funds | \$5.2 | \$52.1 |
| Federal Capitalization Grants | 1.09 | 21.9 |
| State Match | 0.24 | 4.6 |
| Net Leveraged Bonds | 2.24 | 16.0 |
| Net Loan Principal Repayments | 1.31 | 6.9 |
| Net Earnings | 0.37 | 3.8 |
| Net Transfers with DWSRF | (.01) | (.3) |
| (Less Administration) | (.04) | (.9) |

- Return of 2.05 Times the Federal Investment
- 92% of Funds Committed to Projects
- 2.3% Average CWSRF Interest Rate in 2004, 4.8% Market Rate
- 20% Average Savings over Market Rate Loans
- 27 States Leverage; 20 Issue Match Bonds
- 36 States Fund Nonpoint Source Projects
- 27 States Use Integrated Priority Systems
- 43 States Conduct Separate Audits
- 40 States Fund Separate Grant or Loan Programs

Assistance Provided to Projects (Billions)

| | 2004 | 1988-2004 |
|----------------------------------|-------|-----------|
| Total, by Project Type | \$4.6 | \$47.9 |
| Wastewater Treatment | 4.37 | 45.2 |
| Nonpoint Source | 0.18 | 1.8 |
| Estuaries | 0 | 0 |
| Unallocated | 0.06 | 0.8 |
| Total, by Population Served | \$4.6 | \$47.9 |
| < 3,500 | 0.45 | 5.0 |
| 3,500 - 9,999 | 0.51 | 6.0 |
| 10,000 - 99,999 | 1.12 | 16.3 |
| 100,000 and Above | 2.52 | 20.6 |
| # of Loans, by Population Served | 1,290 | 15,286 |
| < 3,500 | 622 | 7,157 |
| 3,500 - 9,999 | 184 | 2,417 |
| 10,000 - 99,999 | 298 | 4,005 |
| 100,000 and Above | 186 | 1,707 |

Source: EPA's CWSRF National Information Management System

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

Clean Water State Revolving Fund Branch
 U.S. Environmental Protection Agency
 1201 Constitution Avenue, NW (Mailcode 4204M)
 Washington, DC 20004
Phone: (202) 564-0752
Fax: (202) 501-2403

Internet: www.epa.gov/owm/cwfinance/cwsrf